# МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ 

 БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ КАФЕДРА ЛАТИНСКОГО ЯЗЫКАА. 3. Цисык

## ЛАТИНСКИЙ ЯЗЫК

## THE LATIN LANGUAGE


#### Abstract

Рекомендовано Учебно-методическим объединением по медицинскому образованию Республики Беларусь в качестве учебно-методического пособия для студентов учреждений высшего образования по специальности 1-79 0107 «Стоматология»




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THE LATIN LANGUAGE

## Учебно-методическое пособие

На английском языке

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## PREFACE

This manual is meant for English-speaking students studying at the Faculties of Stomatology at medical universities of the Republic of Belarus. Its structure corresponds to the syllabus presented in the State Educational Standard Plan for the subject "The Latin Language" taught in the medical universities at the Faculties of Stomatology. The manual has been composed in accordance with generally accepted patterns expressed in well-known manuals and textbooks of Latin and Fundamentals of Medical Terminology.

The manual is divided into four parts - phonetics, the anatomical part with the main grammar rules, the pharmaceutical part and the clinical one.

Every lesson, as it is generally known, has a uniform structure: checking the home task (orally and in writing), some explanation of new topic, students' work with exercises. The manual contains all necessary components for this work - grammar and terminological material, as well as exercises. In the latter, words are given in alphabetical order, and every lesson is provided with LatinEnglish and English-Latin glossaries. Such a distribution of educational material should help students in their work with exercises.

According to high school norms of studying linguistic subjects, students are to learn 30-40 new words at every lesson, although this word memorizing can be managed naturally only due to strenuous efforts to do the homework. But then, this work is constantly facilitated by lexical affinity of equivalent words in Latin and English.

The main attention is paid to the anatomical and clinical terms, as namely these terms are and will be mainly needed in daily medical practice of foreign students. That's why the pharmaceutical part of the manual is presented quite concisely. As to clinical terms, on the basis of well-known English medical dictionaries we sought to give the scientific definition of each terminological unit. Such an introduction into professional terminology jugging by the students' reaction has always been of great interest to them.

The subject "Medical Latin" is mastered and controlled chiefly in written form. So both proper spelling and grammar arrangement are of great value as spoken Latin is very simple. That's why control tests at every lesson as well as summing up are performed only in written form.

The students should bear in mind, that only systematic work on the topic and vocabulary of every lesson on their own can result in success.

## INTRODUCTION INTO THE SUBJECT

The subject you are going to study is the Latin Language. To some point, this name is relative, because nowadays there are no people speaking Latin. From the school course of world history you can remember, that many centuries ago, where nowadays Italy is, there was the Roman Empire. The Roman state which included many lands and people existed till 464 A.D. And initially, Rome was a small town, founded by an Italian tribe in 753 B.C. and Latin was its native language. Gradually, century after century, Rome became the most powerful state of the Mediterranean and Latin was widespread and acknowledged.

An event of tremendous historical importance for both Rome and the future of European culture was the Roman conquest of Greece, the motherland of European culture and science. The Greek physician Hippocrates is namely considered to be the founder of European scientific medicine. Hippocrates and other Greek physicians made a great contribution into the development of medicine, that's why Greek medicine was extremely popular and prestigious among the population of the Mediterranean area. For this reason, Greek medical terms were borrowed into Latin and came into use in different countries. So originally the European medical terminology was formed on the basis of Greek and Latin words.

In the new history of Europe, beginning with the Roman state's collapse, the Latin language was used for 1000 years as the language of state establishments, Catholic religion, education and science, especially at universities founded in the $12^{\text {th }}$ century. Every university would have a medical faculty. Diplomas and theses as well as the process of education itself were in Latin. As to medicine, Latin became the international professional language of physicians. Medical terms rooting from Latin and Greek are presented in any European language as borrowings. What's more, there exist lists of biological and medical terms, forming the so-called Nomenclatures, approved at the International Congresses of scientists - anatomical, histological, microbiological etc. Latin terms of those nomenclatures are used in education and scientific literature. That's why future doctors must study fundamentals of international medical terminology, based on Latin grammar and Latin and Greek word building elements (roots, stems and affixes).

Among modern European languages English, and, particularly, medical English, contains a great number of Latin and Latinized Greek words. It becomes evident when comparing medical glossaries of Latin and English. To prove this compare some medical terms in Latin and English.

| Latin anatomical terms | English equivalents |
| :---: | :---: |
| abdomen | abdomen |
| canalis | canal |
| cardiacus | cardiac |
| cavitas | cavity |
| lobus | lobe |
| longus | long |
| nasalis | nasal |
| tonsilla | tonsil |


| Latin pharmaceutical terms | English equivalents |
| :---: | :---: |
| Acidum aceticum | acetic acid |
| aether | ether |
| cortex | cortex |
| dilutus | diluted |
| Oleum Eucalypti | Eucaluptus oil |
| herba | herb |
| pilula | pill |
| tinctura | tincture |


| Latin clinical terms | English equivalents | Meaning |
| :---: | :---: | :---: |
| allergicus | allergic | caused by or affected with allergy |
| aneurysma | aneurism | a localized dilatation of the walls <br> of a blood vessel, usually an artery |
| cancerophobia | cancerophobia | fear of cancer |
| cholecystogramma | cholecystogram | results of gallbladder X-ray <br> examination |
| gnathoschisis | gnathoschisis | a congenital fissure in the maxilla |
| granuloma | granuloma | a tumor composed of granulation <br> tissue |
| odontalgia | odontalgia | a painful condition affecting a tooth, <br> tooth-ache |
| stomatomycosis | stomatomycosis | any morbid condition of the mouth <br> which is caused by a morbid fungus |

As we see, in clinical terminology using Latin terms is particularly preferable, because one Latin word can change the whole group of English words, expressing some pathological phenomenon.

The proximity of medical terms in Latin and English can be explained very simply: it is well known, that English medical terminology developed from Medieval Latin terminology, which had absorbed ancient Latin and Greek medical lexical units. Both Latin and ancient Greek is an inexhaustible source
for a new term building, and this process keeps on going. Everybody striving to become a doctor among them stomatologist has to master Latin and fundamentals of international medical Terminology.

The course of Latin at the Medical University you are going to study consists of 3 main parts, which correspond to the main groups of medical terminology: anatomical (and partly histological), pharmaceutical and clinical ones. This material is learned in the course of a academic term (semester); each lesson is once a week. Each new lesson includes your teacher's explanation of the topic of the lesson, but the main bulk of work for you is your home task. A specific feature of studying is written control of checking home task preparation at every lesson. Besides this regular test control, 3 written tests (for 90 minutes) are provided. The purpose of these tests is to control the knowledge of the entire material of each part of the course. There exist uniform (for all groups and teachers) rules of the control assessment and you will be acquainted with them. So, at every lesson, you will first work orally, checking the home task with your teacher, and then your knowledge will be controlled in written form (while books and notebooks are closed). The principal way to this knowledge is your own persistent work with your textbook memorizing Latin words and rules of its grammar. And, without doubt, every student can succeed in learning Latin and fundamentals of medical Terminology, if his or her efforts are steady and diligent.

## Part I PHONETIC RULES OF PRONUNCIATION

## Lesson 1 <br> ALPHABET IN LATIN. THE PRONUNCIATION OF VOWELS, CONSONANTS AND LETTER COMBINATIONS. ACCENT RULES

## § 1. Latin alphabet

The Latin alphabet includes 25 letters.

| Letters | Names | Latin Pronunciation | Latin examples and their transcription | English equivalents |
| :---: | :---: | :---: | :---: | :---: |
| A a | a [ $\Lambda$ ] | [a] | vas [v $\Lambda \mathrm{s}$ ] | vessel |
| B b | be [be] | [b] | bulbus [bú:lbus] | bulb |
| C c | tse [tse] | $\begin{aligned} & {[\mathrm{ts}]} \\ & {[\mathrm{k}]} \end{aligned}$ | coccyx [kó:ktsiks] | coccyx, coccygeal bone |
| D d | de [de] | [d] | dens [dens] | tooth |
| E e | e [e] | [e] | vertebra [vé:rtebr $\Lambda$ ] | vertebra |
| F f | ef [ef] | [f] | frontalis [fronta:lis] | frontal |
| G g | ge [ge] | [g] | genu [gé:nu] | knee |
| H h | ha [h $\Lambda$ ] | [h like English heart, here | hepar [hé:p $\wedge$ r] | liver |
| I i | i [ i] | [i] | incisura [incizú:r $\Lambda$ ] | incisure |
| j j | yot [jot] | [j] like English yes, you | jugularis [juguláris] | jugular |
| K k | ka [k $\Lambda$ ] | [k] | skeleton [ské:leton] | skeleton |
| L 1 | el [el] | 1 [as in English life, love] | cellula [tsé:llul $\Lambda$ ] | cell |
| M m | em [em] | [m] | mors [mors] | death |
| N n | en [en] | [n] | nodus [nó:dus] | node |
| O o | o [o] | [0] | coronarius [coronárius] | coronary |
| P p | pe [pe] | [p] | palpebra [pálpebr^] | eyelid |
| Q q | ku [ku] | [kv] together with vowel u and vowel a, e, i, o, u after u | Quercus [kvé:rkus] quartus [kvá:rtus] | oak fourth |
| R r | er [er] | [r] | renalis [rená:lis] | renal |
| S s | es [es] | $\begin{aligned} & {[\mathrm{s}]} \\ & {[\mathrm{z}]} \end{aligned}$ | sinus [sí:nus] incisura [intsizú:r $\Lambda$ ] | sinus, hollow incisure |
| T t | te [te] | $\begin{gathered} {[\mathrm{t}]} \\ {[\mathrm{ts}]} \end{gathered}$ | $\begin{gathered} \text { tibia [tí:bi } \Lambda \text { ] } \\ \text { articulatio } \\ \text { [artikulá:tsio] } \end{gathered}$ | tibia, shine-bone articulation, joint |


| Letters | Names | Latin <br> Pronunciation | Latin examples and <br> their transcription | English equivalents |
| :---: | :---: | :---: | :---: | :---: |
| U u | $\mathrm{u}[\mathrm{u}]$ | u | succus [sú:kkus] | juice |
| V v | $\mathrm{ve}[\mathrm{ve}]$ | v | valva [vá:lv $\Lambda$ ] | valve |
| X x | iks [iks] | ks | dexter [dé:kster] | right, right-hand |
| Y y | Ipsilon [ípsilon] | i | gyrus [gí:rus] | gyrus, convolution |
| Z z | zeta [zét $\Lambda]$ | z | zygomaticus <br> [zigomátikus] | zygomatic |

The last two letters, borrowed by Romans from Greek alphabet, are used, as a rule, in the words of Greek origin.

## § 2. Division of Latin sounds

Six letters of the alphabet (a, e, i, o, u, y) correspond to vowels and nineteen (b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, x, z) denote consonants.

## § 3. Pronunciation of vowels

Vowels in Latin, except " y ", sound practically the same, as the sounds of their names in the alphabet (see above). So, the letter "a" sounds [a], the letter $\mathbf{e}$ - sounds [e] and so on. One may add that the stressed vowel corresponds in pronunciation to a long one in English, compare:
cavitas [cá:vit $\Lambda$ s] — cavity
apertura [ $\Lambda$ pertú:r $\Lambda$ ] — aperture, opening
venosus [venó:zus] — venous
tonsilla [tonsí:11 1 ] - tonsil
The letter " $\mathbf{y}$ " (ípsilon) sounds as the Latin letter "i" (that's why the Frenchman call y "igrek", i. e. "the Greek "i"):
tympanum [tí:mpanum] - drum
All the above given examples also indicate, that Latin vowels don't practically change their sound quality in different syllables. But the vowel " $\mathbf{i}$ " placed before the vowels "a", "e", "o", "u" when making a common syllable with them, changes its sound characteristics: now it sounds similar to the English vowel " y " in the yard, yours, yourself, youthful, let's compare:
maialis [m^já:lis] - referring to May
ieiunum [jejú:num] — jejunum
major [má:jor] - greater
As in such cases the letter "i" sounds different compared to the vowel "i", the scientists in the XVI century decided to introduce a new letter $\mathbf{j}$ into the Latin alphabet, so as to substitute the vowel " $\mathbf{i}$ ": majalis, jejunum, major and so on. It is common to use the letter " j " in medical and biological terms. Let's, however, note that in the terms of the Greek origin the vowel "i" never makes
a syllable with the subsequent vowels "a", "e", "o", "u" and therefore the letter $j$ cannot be used:
iater [iá:ter] physician, commonly geriater, paediater, psychiater, phthisiater and so on - these terms will be discussed in the clinical part of our course. We can also mention the noun Iodum [ió:dum] - iodine (Latin names of chemical elements are to be written with capital letters).

## § 4. Pronunciation of two vowel combination

Two vowels following each other can form the so-called diphthong that is pronounced as a combination of two vowels pronounced in one syllable.

So au [au] is pronounced as in the English words down, sound, south, compound and so on:
auris [áuris] - ear, caudalis [kaudá:lis] - caudal, trauma [tráuma] injury, wound.

Eu [eu] has no analogue in English, so its pronunciation must be learnt by the spelling memorizing. So, we have to pronounce this vowels combination as one syllable when stressing a little its first part [éu], for example:
pneumonia [pneumoní $\Lambda$ ] - pneumonia
Eucalyptus [eukalíptus] - eucalyptus
However, you should pay attention to the letter combination "eu" at the end of words, where it doesn't make a diphthong and each vowel is pronounced separately:
sigmoideus [sigmó́:deus] — sigmoid
corpus luteum [kó:rpus lú:teum] — corpus luteum (yellow body)
Two vowels can also form a digraph, which sounds like the Latin vowel "e":
ae - [e] — costae [kó:ste] — ribs
oe - [e] — oedema [edé:m $\Lambda$ ] — swelling
If each vowel in such digraphs is to be pronounced separately, two dots are placed over the letter $\mathbf{e}$ :
aër [á:er] - air, Aloë (names of medical plants are to be written in Latin with the capital letter) [á:loe] — aloe.

## § 5. Pronunciation of consonants

Consonants $\mathbf{b}, \mathbf{d}, \mathbf{f}, \mathbf{h} \mathbf{k}, \mathbf{m}, \mathbf{n}, \mathbf{p}, \mathbf{q}, \mathbf{s}, \mathbf{t}, \mathbf{v}, \mathbf{x}$ are similar in pronouncing to English. The difference is that consonants $\mathbf{p}, \mathbf{t}, \mathbf{k}$ are not aspirated, as in English. Pronunciation of the rest consonants is to be explained.

The letter Cc before the vowels "e", "i", "y" and digraphs "ae", "oe" is pronounced as [ts], but before the vowels "a", "o", "u" and consonants (except h ) is pronounced as $[\mathrm{k}]$ :
cervicalis [tserviká:lis] - cervical
caecum [tsé:kum] - caecum
coccyx [kó:ktsiks] - coccyx, cockerel bone
The letter $\mathbf{G g}$ is always pronounced like [g] in English get, glass, disguise:
gaster [gá:ster] - stomach
genu [gé:nu] - knee
vagina [v $\Lambda$ gí: $n \Lambda]$ - vagina
The letter $\mathbf{H h}$ is pronounced approximately as the letter $\mathbf{h}$ in English:
homo [hó:mo] - man
hyoideus [hioí:deus] - sublingual
The letter Ll is pronounced in someway softer than in English and is palatalized both before vowels and consonants (as in the pronunciation of such English words as look and live):
albus [á:lbus] — white
cellula [tsé:llul $\Lambda$ ] — cell
palatinus [p $\Lambda 1 \Lambda$ tínus] - palatine
pyloricus [piló:rikus] - pyloric
The letter $\mathbf{R r}$ in Latin is pronounced always clearly and distinctly not as the English Rr [a:]
dexter [dé:xter] — right
posterior [posté:rior] — back
renalis [rená:lis] - renal
The letter Ss between two vowels is pronounced like [z], in other cases as [s]:
basis [bá:zis] — base
sinus [sí:nus] - sinus, hollow
The letter $\mathbf{T t}$ is commonly pronounced as [t] without aspiration: tinctura [tinktú:r//] — tincture. But in such a letter combination, where "I" follows " $\boldsymbol{t}$ " plus some other vowel, " $t$ " is pronounced as [ts]:
articulatio [artikulá:tsio] - joint
protuberantia [protuberá:ntsia] - protuberance
There is, however, an exception from this last rule: if before the combination ti + vowel the consonants " s " or " x " are placed, then the pronunciation of $\mathbf{t i}$ is [ti]:
digestio [digé:stio] — digestion
ostium [ó:stium] - orifice.
The letter Zz is pronounced as [z]:
zona [zó:n $\Lambda$ ] - zone
horizontalis [horizontá:lis] — horizontal
But in two cases we pronounce this letter as [ts]: influenza [influé:nts $\Lambda$ ] grippus, influenza and Zincum [tsí:nkum] — zink.

## § 6. Pronunciation of consonant combinations

Two consonants can form a digraph, which is pronounced as a consonant:
ch is pronounced as [kh]:
charta [khá:rt $\Lambda$ ] — paper
chorda [khó:rd $\Lambda$ ] — cord;
ph is pronounced as [ f ]:
lymphaticus [limfá:ticus] - lymphatic
pharynx [fá:rinks] - pharynx
rh is pronounced as [r]:
rhinorrhagia [rinoragí:a] — rhinorrhagia (nasal bleeding)
rhomboideus [romboí:deus] — rhomboid
th is pronounced as [ t :
thorax [tó:raks] - chest
labyrinthus [1^birí:ntus] — labyrinth
The combination of three consonants sch is pronounced as [skh]:
schema [skhé:m $\Lambda$ ] — scheme
ischiadicus [iskhiá:dikus] — sciatic

## § 7. Pronunciation of some letter combinations

The letter combination ngu is pronounced as [ngv], if the vowel "u" is followed by one of the vowels "a", "e", "i", "u":
lingua [li:ngv $\Lambda$ ] - tongue, language
unguentum [ungvé:ntum] - ointment
unguis [ú:ngvis] - nail
But if a consonant follows " $\mathbf{u}$ ", then ngu is pronounced as [ngu]:
angulus [á:ngulus] - angle
lingula [li:ngul $\Lambda$ ] - lingula, little tongue
The letter combination qu with a following vowel $(\mathbf{a}, \mathbf{e}, \mathbf{i}, \mathbf{0}, \mathbf{u})$ is pronounced as [kv] with a subsequent vowel:
squamosus [skvamó:zus] - squamosal
aqueductus [akvedú:tus] - aqueduct
Quercus [kvé:rkus] - oak

## § 8. Stressing rules in the words consisting of two syllables

If a word consists of two syllables, there is always only one stress: the first syllable is stressed:
cós-ta, lá-rynx, nér-vus

## § 9. Stressing rules in the polysyllabic words. Length and brevity of the second end syllable

In polysyllabic words consisting of three and more syllables, the second or third syllables from the end of the word can be stressed. The stress depends on the length or brevity of the second word end syllable: if it is long, it is stressed, if it is short, it cannot be stressed and then the third word end syllable is stressed.

The length and brevity of the second syllable and particularly in textbooks are usually marked by special signs: a short line is placed over the vowel if it is long, and a little arch - if it is short, compare:
$\overline{\mathrm{a}}-\mathrm{a}, \overline{\mathrm{e}}-\overline{\mathrm{e}}, \overline{1}-\overline{\mathrm{l}}, \overline{\mathrm{o}}-\breve{\mathrm{o}}, \overline{\mathrm{u}}-\breve{\mathrm{u}}, \ddot{\mathrm{y}}-\check{\mathrm{y}}$.
So, if we find such words as forāmen, incisūra, hepatītis etc. in the dictionary, we can instantly determine that such words have an accent on the second syllable from the end.

If in the dictionary we see such words as lamǐna, encephălon, thoracǐcus etc., we understand that the third syllable from the end must be stressed: lámina, encéphalon, thorácicus.

Now, we should ask a crucial question: do we have to consult the dictionary about the quality of the second end syllable in every case or not? Fortunately, there exist some rules helping us to determine at once the length or brevity of the second end syllable, or more simply, of the second end vowel. First of all, the suffixes containing vowels which are long or short by nature, calling the suffixes accordingly "long" or "short", can give us guidance about the length or brevity of the second end vowel.

## § 10. Long suffixes

Before listing the suffixes, one must notice, that part of these suffixes is always long or short in all kinds of terminology - anatomical, pharmaceutical, clinical. As we are going to begin with anatomical terminology and continue studying it during the firth semester, it would be proper to begin with the suffixes in anatomical terms.

| Suffixes | Examples | English equivalents | Exceptions <br> and their translation |
| :---: | :---: | :---: | :---: |
| -āl- | dentālis <br> horizontālis | dental <br> horizontal | encephălon <br> (brain) |
| - ār- | articulāris <br> mandibulāris | auricular <br> mandidular |  |
| - āt- | caudātus <br> meātus | caudate <br> passage |  |


| Suffixes | Examples | English equivalents | Exceptions <br> and their translation |
| :---: | :---: | :---: | :---: |
| $-\overline{\mathrm{i} n-}$ | palatīnus <br> vagīna | palatine <br> vagina, sheath | lamĭna (lamine), feminna <br> (women), retĭna (retina), dens <br> serotĭnus (wisdom tooth), <br> nervus trigemĭnus (trigeminal <br> nerve), termĭnus (term) |
| $-\overline{\mathrm{I} v-}$ | gingīva <br> dens incisīvus | gingiva, gum <br> incisor tooth |  |
| - ōs- | aponeurōsis <br> petrōsus | aponeurosis <br> stony |  |
| $-\bar{u} \mathrm{r}-$ | incisūra <br> sutūra | incisure, slit or notch <br> suture, line of junction |  |

## § 11. Short suffixes

| Suffixes | Examples | English equivalents | Exceptions |
| :---: | :---: | :---: | :---: |
| -iăc- | cardiăcus <br> coeliăcus | cardiac <br> coeliac | vesīca (bladder) |
| -ǐc- | gastriccus <br> tunǐca | gastric <br> tunic, coat |  |
| -ŏl- | alveŏlus <br> foveŏla | alveolus, sachet <br> (tooth) foveola |  |
| -ǔl- | clavicǔla <br> mandibǔla | clavicle <br> mandible |  |

## § 12. Suffixes with similar quality of vowel in all parts of medical terminology

As mentioned above, some suffixes can always be long or short in all parts of medical terminology, compare:

| Suffix | Anatomical terms | Pharmaceutical terms | Clinical terms |
| :---: | :---: | :---: | :---: |
| $-\bar{a} t-$ | muscŭlus levātor <br> (levator muscle) | Aqua destillāta <br> (distilled water) | Caries exacerbāta (caries <br> exacerbated) |
| - ōs- | aponeurōsis <br> (aponeurosis) | spirituōsus (spirituous) | erythrocytōsis <br> (erythrocytosis, increased <br> account of red blood cells in <br> the blood) |
| - ūr- | junctūra <br> (juncture, junction) | tinctūra <br> (tincture) | fractura <br> (fracture) |
| -ǔl- | angǔlus (angle) | Betǔla (birch) | furuncǔlus (furuncle, boil) |

## § 13. The way of accent determination when the second end vowel isn't a part of a long or a short suffix

In many words the second vowel from the word end is placed before a consonant, but this vowel is not a part of a common long or short suffix. In such cases we can determine its length or brevity controlling those peculiarities of the given word in the textbook vocabulary, compare:
forāmen (opening), orbĭta (eye-socket), skelĕton (skeleton), suprēmus (highest), tuberosǐtas (tuberosity), urēter (ureter)) and so on.

## § 14. Some rules of syllable length determining

In some cases we can determine the syllable length or brevity with the help of certain rules.

1. The syllable is long, when its vowel is placed before two or more consonants:
ligamentum (ligament)
maxilla (maxilla, upper jaw)
sinister (left)
But, when the vowel is short by nature (it is shown in the dictionary) and it is placed before two consonants, first of which being $\mathbf{b}, \mathbf{c}, \mathbf{d}, \mathbf{g}, \mathbf{p}, \mathbf{t}$ and the second is $\mathbf{l}$ or $\mathbf{r}$, this short vowel is pronounced short:
vertěbra (vertebra), cerěbrum (cerebrum), os triquětrum (triquetrum bone), multĭplex (multiple). And when this vowel is long by nature, our rule is valid: cicātrix (cicatrix, scar), psychiātri (psychiatrists), salūbris (curative).
2. The syllable is long, when it includes the diphthongs au, eu or digraphs ae, oe: amoeba (ameba), diaeta (diet), Althaea (althea).
3. The syllable is long, when its vowel is placed before the consonants x or z : reflēxus (reflex), Oryza (rise).

## § 15. The rules of syllable brevity

1. The syllable is short, when its vowel is placed before another vowel:
liněa (line), superǐor (higher, upper)
cornǔa (horns), Aluminǐum (aluminium)
There are, however, two points of exceptions from this rule:
1) in some words of Greek origin the last but one vowel was formed from the digraph ae, that's why it keeps the length of the syllable:
coccygaeus $\rightarrow$ coccygēus
peritonaeum $\rightarrow$ peritonēum

You have to memorize these exceptions:
perinēum (perineum, fork) peritonēum (peritoneum), trachēa (trachea), anconēus (anconeus muscle), coccygēus (coccygeal), esophagēus (esophageal), glutēus (gluteal), laryngēus (laryngeal), meningēus (meningeal), peronēus (peroneal, fibular), pharyngēus (pharyngeal).

2 ) in clinical terms with the ending -ia their vowel $\mathbf{i}$ and syllable with it are stressed:
dyskinesía (dyskinesia, disturbance of movement), otoscopía (otoscopy, internal examination of the ear).

Some peculiarities of this exception will be discussed in the clinical part of our course.
2. The syllable is short, when its vowel is placed before digraphs $\mathbf{c h}, \mathbf{p h}$, rh, th:
ductus choledŏchus (bile duct)
odontolǐthus (odontolith, calculus of the teeth)

## § 16. Exercises

## 1. Read the following words paying special attention to the vowel pronunciation:

forámen (opening), ligaméntum (ligament), dúctus (duct), interlobuláris (interlobular), longitudinális (longitudinal), massetéricus (masticatory, chewing), pylóricus (pyloric), synoviális (synovial), tympánicus (tympanic), siníster (left), zygomáticus (zygomatic)
2. Read the following words paying special attention to the pronunciation of the letter $c$ :
cáput (head), cervicális (cervical), cérebrum (brain), cútis (skin), Ácidum acéticum (acetic acid), síccus (dry), fácies (face, surface), coccygéus (coccygeal), coerúleus (blue), caécum (caecum), búccae (cheeks), carcinóma (cancer), sáccus lacrimális (lacrimal sac)

## 3. Read the following words paying special attention to the pronunciation

 of the letters $g$ and $q$ :nérvus hypoglóssus (hypoglossal nerve), gánglion pterygopalatínum (pterygopalatine ganglion), rámi gingiváles (gingival branches), gánglion geniculátum (geniculate ganglion), gýrus anguláris (angular gyrus), húmor aquósus (aqueous humor), aquedúctus vestíbuli (vestibular aqueduct), cósta quínta (fifth rib), márgo squamósus (squamosal border)
4. Read correctly the following words, paying special attention to the consonants $j$, s and $t$ :
ála májor (major wing), flexúra duodenojejunális (duodenojejunal flexure), júga alveolária (alveolar yokes), articulátio compósita (complex joint), óstium atrioventriculáre déxtrum (right atrioventricular orifice), incisúra juguláris
(jugular notch), segméntum basále antérius (anterior basal segment), básis óssis sácri (base of sacrum), míxtio pro potióne (mixture for drinking).

## 5. Read correctly the following words paying attention to combinations of vowels:

cóstae spúriae (false ribs), forámen caécum línguae (caecum foramen of tongue), Óleum Eucalýpti (eucalyptus oil), oedéma larýngis (edema of larynx), nérvus auriculáris (auricular nerve), aponeurósis línguae (lingual aponeurosis), céllulae haematopoëticae (hematogenic cells), glándulae oesophagéae (oesophageal glands), pneumonía mígrans (migratory pneumonia).

## 6. Read attentively the following words with vowel and consonant combinations:

nérvus ischiádicus (sciatic nerve), Strophanthínum (strophanthine), Synthomycínum (synthomycin), fébris haemorrhágica (hemorrhagic fever), ráphe pharýngis (pharyngeal raphe), ásthma bronchiále (bronchial asthma), vértebrae thorácicae (thoracic vertebrae), unguéntum ophthálmicum (ophthalmic ointment), labyrínthus ethmoidális (ethmoidal labyrinth), Methylénum coerúleum (blue methylen), rhizóma Glycyrrhízae (rhizome of licorice), Schizándra chinénsis (chinense magnolia vine), sectiónes hypothálami (sections of hypothalamus), dúctus cholédochus (common bile duct), trúncus brachiocephálicus (brachiocephalis trunk), distántia trochantérica (trochanteric distance), hemisphérium cerebélli (hemisphere of cerebellum), tubérculum pharyngéum (pharyngeal tubercle), véna saphéna (saphenous vein), cirrhósis hépatis (biliary cirrhosis typhus abdominális (abdominal typhus), nephrolithíasis chrónica (chronic nephrolithiasis), foétor ex óre seu halitósis (fetid or offensive breath or halitosis)

## 7. Determine the stress syllable, paying attention to the long and short suffixes:

incisūra ethmoidālis (ethmoidal notch), tubercŭlum jugulāre (jugular tubercle), lingŭla sphenoidālis (sphenoidal lingula), semicanālis tubae auditīvae (canal for auditory tube), meātus acustǐcus externus (external acustic meatus), lamĭna perpendiculāris (perpendicular plate), facies palatīna (palatine surface), vesīca biliāris (gallbladder), glandǔlae endocrīnae (endocrine glands), junctūrae cingŭli pelvǐci (joints of pelvic girdle), urethra masculīna (male urethra), spina scapŭlae (spine pf scapula), intestīnum tenue (small intestine), alveŏlus dentālis (tooth socket), tunǐca mucōsa linguae (mucous membrane of tongue), arcus dentālis mandibulāris (mandibular dental arcade), trigōnum submandibulāre (submandibular triangle)

## 8. Determine the stress syllable, paying attention to the natural length or brevity of the last but one vowel:

tubercǔlum anterius (anterior tubercle), incisūrae costāles (costal slits), vertěbra thorač̌ca (thoracic vertebra),ductus choledŏchus (bile duct), forāmen apǐcis radīcis dentis (apical foramen of the root of the tooth), vesīca urinaria
(urinary bladder), Oleum Ricǐni (castor oil), Sirūpus Rubi idaei (raspberry syrup), Solutio lōdi spirituōsa (iodine spirituous solution), eczĕma allergǐcum (allergic eczema), stomatītis chronǐca (chronic stomatitis), systēma condūcens cordis (conducting system of heart), apertūra thorācis inferior (lower opening of chest), muscǔlus levātor fornǐcis (muscle raising fornix), Tinctūra Valeriānae (tincture of valerian), facies anterior partis petrōsae (anterior surface of petrous part), canāles palatīni minōres (lesser palatine canals), systēma lymphoideum (lymphoid system)

## 9. Write down the terms, put the signs of length or brevity over the last but one syllable (using vocabularies if necessary) and determine in writing the accent:

ligamentum popliteum obliquum (oblique popliteal ligament), cartilago thyreoidea (thyroid cartilage), bifurcatio tracheae (bifurcation of trachea), musculus anconeus (anconeus muscle), atrium meatus medii (artrium of middle meatus), Extractum Crataegi fluidum (liquid extract of hawthorn), paralysis congenita (congenital paralysis), syndromum immunodeficientiae acquisitae (acquired immunodeficiency syndrome), tuberositas pterygoidea (pterygoid tuberosity), anaemia myelogena (myelogenous anemia), arteria circumfexa humeri anterior (anterior circumflex humeral artery), organum vasculosum laminae terminalis (vascular organ of lamina terminalis), fissura longitudinalis cerebri (longitudinal cerebral fissure), fasciculus uncinatus cerebelli (uncinate fasciculus of cerebellum), kyphosis thoracica (thoracic kyphosis), linea glutea inferior (inferior gluteal line), syndesmoses cranii (cranial syndesmoses), articulatio sacrococcygea (sacro-coccygeal joint), segmentum anterius mediale (anterior medial segment), infundibulum vesicae felleae (infundibulum of gallbladder), musculi palati mollis et faucium (muscles of soft palate and fauces), papilla duodeni major (major duodenal papilla), ostium atrioventriculare sinistrum (left atrioventricular orifice), membrana bronchopericardiaca (bronchopericardial membrane), arteria pharyngea ascendens (ascending pharyngeal artery), tuberositas deltoidea (deltoid tuberosity)

# Part II <br> ANATOMICAL TERMINOLOGY 

## Lesson 2 <br> THE STRUCTURE OF LATIN ANATOMICAL TERMS. NOUNS AND THEIR GRAMMAR CATEGORIES

## § 17. The Latin terminology in Anatomy and its structure

Anatomical terminology naming all parts of the human body is the base of medical terminology. For more than a century the so-called Terminologia Anatomica - The International Anatomical Terminology in Latin which is accepted by anatomists of the world, has existed. Latin is also the base for creating equivalent terms in other languages. The last edition of this International Anatomic Terminology appeared in 1998 and it contains 7428 terms.

The anatomical term is a word or several words used to denote a definite unit or structure of the human body. So Latin anatomical terms may consist of one, two, three, four and more words - up to 8.

One-word terms consist of one noun in singular or plural:
cor (heart), fauces (fauces)
Two-word terms may consist of:

1. A noun with an adjective in singular or plural:
crista renālis (renal crest); nodi faciāles (facial nodes)
2. Two nouns in singular or plural:
corpus vertěbrae (body of vertebra); terminatiōnes nervōrum (nerve terminals)

Three-word terms may consist of:

1. Three nouns:
ala cristae galli (ala of crista galli); lamĭna arcus vertěbrae (lamina of vertebral arch)
2. One noun plus two adjectives:
glandŭlae salivariae minōres (minor salivary glands); plexus cervicālis posterior (posterior cervical plexus)
3. Two nouns plus one adjective:
arcus anterior atlantis (anterior arch of atlas); tuberosĭtas ossis sacri (sacral tuberosity)

In multiword terms several nouns and adjectives can be presented:
fissūra horizontālis pulmōnis dextri (horizontal fissure of right lung);
proccessus uncinātus vertěbrae thoracǐcae primae (uncinate process of first thoracic vertebra)

## § 18. Grammar categories of noun

The grammar categories in Latin noun are the following:

1. Gender. 2. Number. 3. Case. 4. Declension.

There are three genders in Latin: masculine (masculīnum m); feminine (feminīnum f); neutral (neutrum $\mathbf{n}$ ).

English nouns, in contrast to Latin, have only a natural gender: nouns denoting males are masculine (boy, man), nouns denoting females are feminine (girl, women) and nouns denoting inanimate are of neutral gender (bone, vessel).

Latin nouns always have only grammar gender, which is determined by the ending, but what is more significant, by gender signs too ( $\mathrm{m}, \mathrm{f}, \mathrm{n}$ ). These gender signs are given in the dictionaries, where nouns are presented in the socalled word or dictionary form, which we shall discuss later.

As to the number, both English and Latin have two numbers - singular (singulāris) and plural (plurālis). Just like in English, the number of the noun in Latin shows whether we speak above one thing or more than one. Plural indications in English are very simple (endings -s or -es). In Latin, these indications are more numerous and are determined by the gender and declension. Plural endings will be discussed in detail in a special section.

Case as a grammar category is not presented in every language. It is absent, for example, in French, Italian and Spanish. As to English, we can speak about a "common case" and a "possessive case". In contrast to English there are six different forms of noun endings corresponding to each case. Only four case forms of Latin nouns are used in medical terms:

Nominatīvus, Nominative (answers the questions who, what)
Genetīvus, Genitive (answers the questions whose, of what)
Accusatīvus, Accusative (answers the questions whom, what)
Ablatīvus, Ablative (answers the questions by whom, with what).
The first two cases (Nominative and Genitive) are mainly used in the medical terminology, the other cases occur more rarely, they are used in anatomical and pharmaceutical terms in combination with prepositions.

## § 19. Dictionary form of nouns

It is of vital importance to always remember, that each Latin noun must be learnt in its "Dictionary form". This form consists of three components:

1. The full form of the Nominative singular.
2. The Genitive singular ending, indicating the type of declension.
3. Definition of the grammar gender (with the letters $\mathrm{m}, \mathrm{f}, \mathrm{n}$ ):

| Written form | Oral form | English equivalentf the noun |
| :--- | :---: | :---: |
| ala, ae f | ala, alae, feminīnum | wing |
| ligamentum, i n | ligamentum, ligamenti, neutrum | ligament |
| nervus, i m | nervus, nervi, masculīnum | nerve |


| Written form | Oral form | English equivalentf the noun |
| :--- | :---: | :---: |
| cancer, cri m | cancer, cancri, masculīnum | cancer |
| Eucalyptus, if | Eucalyptus, eucalypti, feminīnum | eucalyptus |
| cornu, us n | cornu, cornus, neutrum | horn |
| corpus, ŏris n | corpus, corpŏris, neutrum | body |

§ 20. The stem of the noun and the way to determine it
The stem of the noun is essential for declining and word building. It is determined by removing the Genitive ending which indicates the type of the declension:

| Dictionary form | Full form of the Genitive | Stem of noun |
| :---: | :---: | :---: |
| crista, ae f (rib) | crist-ae | crist- |
| sulcus, i m (furrow, groove, sulcus) | sulc-i | sulc- |
| cancer, cri m (cancer) | cancr-i | cancr- |
| forāmen, ǐnis n (opening) | foramĭn-is | foramĭn- |
| arcus, us m (arch) | arc-us | arc- |
| facies, ēi f (face, surface) | faci-ēi | faci- |

## $\S$ 21. Description of declensions

Nouns with the ending -ae in the Genitive singular belong to the $\mathbf{1}^{\text {th }}$ declension; they are mainly feminine:
ala, ae f - wing
crista, ae f — crest
vertěbra, ae f - vertebra
Nouns having the ending -i in the Genitive singular belong to the $2^{\text {nd }}$ declension.

Nouns of the masculine gender can have the ending -us in the Nominative (the greatest part) or -er (very limited in number):
angŭlus, i m - angle
muscŭlus, i m - muscle
nervus, i m - nerve
cancer, cri m - cancer (the full form of Genitive - cancri)
Nouns of the neutral gender have also two types: nouns with the ending form -um (the main part), and nouns with the ending form -on (they are of Greek origin), compare:
ligamentum, in- ligament
dorsum, in-back
encephălon, in-brain
colon, i n - colon, large intestine
The $3^{\text {nd }}$ declension is the most numerous one. Here are presented the nouns of all genders and with different endings in the Nominative having the ending - is in the Genitive. They are commonly divided into two groups.

The first one includes nouns having equal number of syllables in the Nominative and Genitive (so called parisyllaba):
basis, basis f (basis, is f ) - base
canālis, canālis m (canalis, is m) - canal
The second and the most numerous part of the nouns have one more syllable in the Genitive compared to the Nominative (so called imparisyllaba):
apex, apǐcis $m$ (the written dictionary form apex, 九̌cis m) - apex, top
tuberositas, tuberositālis f (tuberosǐtas, ātis f ) - tuberosity
forāmen, foramǐnis $n$ (forāmen, ǐnis $n$ ) - foramen, opening
If such nouns have only one syllable in the Nominative, then the complete form of the Genitive is:
dens, dentis $m$ - tooth
os, ossis n - bone
pars, partis $f$ - part
The $4^{\text {th }}$ declension includes nouns of the masculine and neutral gender, having the ending -us in the Genitive:
processus, processus $m$ (processus, us $m$ ) - process
ductus, ductus $m$ (ductus, us $m$ ) - duct
cornu, cornus n (cornu, us n ) - horn
The $5^{\text {th }}$ declension includes nouns, having the ending eil in the Genitive:
facies, faciēi f (facies, ēi f) - face, surface

## Attention! Remember the following:

1. Feminine nouns may occur in the $2^{\text {nd }}$ and $4^{\text {th }}$ declensions, masculine ones in the $1^{\text {th }}$ : oculista, ae $m$ (ophthalmologist), Eucalyptus, if (eucalypt), manus us f (hand).
2. Two groups of nouns of the Greek origin retain their particular form:
2.1. Feminine nouns with the ending -e in the Nominative and -es in the Genitive: raphe, es $f$ (a seam on the mild tissue).
2.2. Masculine nouns with the ending -es in the Nominative and -ae in the Genitive: diabētes, ae m (diabetes).

The endings proper to each declension in the Nominative and Genitive are presented in the table below:

| Dec- <br> lension | Gender | Ending in the <br> Nom. sing. | Examples in <br> the Nom. sing. | Ending in the <br> Gen. sing. | Examples in <br> the Gen. sing. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | -a | costa | -ae | costae |
| II | m | -us | sulcus <br> cancer <br> ligamentum <br> encephălon | -i | sulci <br> cancri <br> ligamenti <br> encephăli |
| III | n | -um <br> -on | m | different <br> different <br> different | apex <br> basis <br> foramen |
|  | n | -is | apĭcis <br> basis <br> foramĭnis |  |  |


| Dec- <br> lension | Gender | Ending in the <br> Nom. sing. | Examples in <br> the Nom. sing. | Ending in the <br> Gen. sing. | Examples in <br> the Gen. sing. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IV | m | -us <br> n | -u processus | -us | processus <br> cornus |
| V | f | -es | farnu | -es | -ēi |
| faciēi |  |  |  |  |  |

## § 22. Exercises

1. Give in written the dictionary form of the following nouns:
apex, basis, canālis, cancer, cornu, corpus, cranium, dens, encephălon, facies, ganglion, lingua, mandibǔla, nasus, nervus, orgănon, os, radix, scapǔla, sternum, sulcus, tuber, tubercǔlum, tuberosǐtas

## 2. Give in written the dictionary form of the following nouns and define

 their stem and declension:abdomen, angle, arch, base, bone, canal, crest, duct, head, horn, ligament, lower jaw, nose, opening, region, root (radix), skin, skull, surface, tongue, tooth, upper jaw
3. Write down the dictionary form of nouns, translate the terms into English:
apex linguae; angǔlus faciēi nasi; basis cranii; canālis radīcis dentis; corpus vertěbrae; facies tubercǔli costae; incisūra mandibŭlae; nervus encephăli; pars faciēi sterni; septum nasi; sulcus sinus; tuber maxillae

## 4. Give the dictionary form of each noun, translate the terms into Latin:

abdomen cavity; arch of aorta; base of mandible; body of upper jaw; canal of dental radix (radix of tooth); cancer of the skin; cavity of the nose; cervical part (part of cervix); crest of the rib head; face's bone; head of rib; nerve of the brain; nervous node of the neck; part of the process; region of skull; skin's nerve; sternal angle (angle of sternum); surface of knee; top of the horn; vertebral arch (arch of vertebra)

## § 23. Vocabulary to lesson 2

## I. Latin-English vocabulary

$$
1^{\text {st }} \text { declension }
$$

costa, ae f—rib
incisūra, ae f - incisure, slit or notch
lingua, ae f - tongue
mandibǔla, ae f - lower jaw, mandible
maxilla, ae f - upper jaw, maxilla
vertĕbra, ae f - vertebra
angǔlus, i m - angle
cancer, cri m - cancer
cranium, in - skull
encephălon in - brain
ganglion, in - nervous node
nasus, i m - nose
nervus, i m - nerve
orgănon, in - organ
septum, in - septum, dividing wall
sternum, in - sternum, breast-bone
sulcus, i m - sulcus, furrow or groove
tubercŭlum, in - tubercle, small rounded swelling $3^{\text {rd }}$ declension
apex, ǐcis m - apex, top
basis, is $f$ - base
caput, ǐtis n - head
canālis, is m - canal
corpus, ǒris n - body
dens, dentis m - tooth
os, ossis n - bone
radix, īcis f - radix, root
regio, ōnis f - region
tuber, ěris $n$ - tuber, large rounded swelling
tuberositas, ātis f - tuberosity
$4^{\text {th }}$ declension
cornu, us n - horn, horn-shaped process
processus, us $m$ - process
sinus, us $m$ - sinus, hollow curvature or cavity
$5^{\text {th }}$ declension
facies, èi f - face, surface
II. English-Latin glossary
abdomen - abdōmen, ǐnis n
aorta - aorta, ae f
angle - angŭlus, i m
apex, top - apex, ǐcis m
arch - arcus, us $m$
base - basis, is f
horn - cornu, us n
knee - genu, us n
ligament - ligamentum, in
lower jaw, mandible - mandibǔla, ae f
neck - cervix, īcis f
nerve - nervus, i m
body - corpus, ŏris n
bone - os, ossis $n$
brain - cerebrum, in
canal - canālis, is m
cancer - cancer, cri m
cavity - cavǐtas, ātis f
cervical: see neck
costal: see rib
cranial: see skull
crest - crista, ae f
dental: see tooth
duct - ductus, us $m$
ganglion, nervous node - ganglion,
in
face - facies, èi f
head - caput, ǐtis n
nose - nasus, i m
opening - forāmen, ǐnis n
part - pars, partis f
process - processus, us $m$
region - regio, ōnis f
rib - costa, ae f
root, radix — radix, īcis $f$
skin - cutis, is f
skull - cranium, i n
surface - facies, èi f
top - apex, 亿̌cis m
tongue - lingua, ae f
tooth - dens, dentis $m$
upper jaw, maxilla - maxilla, ae f
vertebra - vertěbra, ae f
vertebral: see vertebra

## Lesson 3 <br> ADJECTIVES AND THEIR DICTIONARY FORM. ADJECTIVE AND NOUN AGREEMENT

## § 24. Introductory information about adjectives in Latin

Both in English and Latin the Adjective is a word expressing the quality of a thing: long, short, nasal, simple and so on.

But in contrast to English, Latin adjectives have always grammar coordination with their nouns, that is a noun and an adjective must have the same gender, case and number. The adjective follows the noun.

According to their endings all Latin adjectives are divided into two groups.

## § 25. $1^{\text {st }}$ group of adjectives

Adjectives which have three gender endings make up the $1^{\text {st }}$ group: Masculine forms have the ending -us or -er, Feminine - -a, Neutral - -um:

| Masculine | Feminine | Neutral |
| :---: | :---: | :---: |
| longus (long) | longa | longum |
| liber (free) | liběra | liběrum |
| dexter (right) | dextra | dextrum |

The dictionary form of adjectives includes the full masculine form, endings of the feminine and the neutral ones (when answering, every gender form is pronounced!). All these forms are in the Nominative:
longus, a, um - long oral form: longus, longa, longum
liber, ěra, ěrum - free dexter, tra, trum - right
oral form: liber, liběra, liběrum oral form: dexter, dextra, dextrum

In the last two adjectives the endings of the feminine and the neutral forms are enlarged. It is common for the adjectives with the ending -er in the masculine form, because it helps us determine, whether the vowel -e in the feminine and the neutral forms is lost or not.

The gender forms of the adjectives of this group have the declension pattern in the nouns of the $1^{\text {st }}$ and $2^{\text {nd }}$ declensions: feminine forms are declined like the nouns of the first declension, masculine and neutral forms - like the nouns of the second declension. The stem of these adjectives is determined like that of the nouns:

| Gender form | Nominative | Genitive | Declension | Stem |
| :---: | :---: | :---: | :---: | :---: |
| masculine | longus | longi | second | long- |
| feminine | longa | longae | first | long- |
| neutral | longum | longi | second | long- |
| masculine | liber | liběri | second | liber- |
| feminine | liběra | liběrae | first | liber- |
| neutral | libĕrum | libĕri | second | liber- |
| masculine | dexter | dextri | second | dextr- |
| feminine | dextra | dextrae | first | dextr- |
| neutral | dextrum | dextri | second | dextr- |

As to the adjectives with the masculine form -er, it is more convenient to determine their stem from the feminine Genitive form.

## $\S$ 26. $\mathbf{2}^{\text {nd }}$ group of adjectives

This group includes adjectives, following the rules of the third declension of nouns. According to their gender endings they are divided into three subgroups. The stem of this group of adjectives is determined like in the preceding group.

The first subgroup is made up of adjectives having three gender endings: -er for masculine, -is for feminine, -e for neutral:

| Masculine form | Feminine form | Neutral form | Genitive form | Stem |
| :---: | :---: | :---: | :---: | :---: |
| acer (sharp, acute) | acris | acre | acris | acr- |
| celer (quick, fast) | celěris | celĕre | celěris | celer- |

The written dictionary form, as in the previous group, includes the full masculine form and the endings of the feminine and the neutral:
acer, cris, cre
celer, ěris, ěre
When answering orally, every gender form is pronounced in full.

The second subgroup includes adjectives with two gender endings. Masculine and feminine forms have the common ending -is, neutral the ending ee:

| Masculine and Feminine form | Neutral form | Genitive form | Stem |
| :---: | :---: | :---: | :---: |
| brevis (brief, short) | breve | brevis | brev- |
| frontālis (frontal) | frontāle | frontālis | frontal- |
| sacrālis (sacral) | sacrāle | sacrālis | sacral- |

Adjectives of this subgroup are the most numerous in every branch of medical terminology.

The dictionary form of these adjectives consists of the full masculine/ feminine forms and the ending of neutral:
brevis, e;
frontalis, e;
sacralis, e
The third subgroup is made up of adjectives with one ending, common for the three genders. There are four kinds of such common endings:

1) -ns: prominens (masculine, feminine, neutral) - prominent
2) -s : teres (masculine, feminine, neutral) - round
3) -r: par (masculine, feminine, neutral) - equal, pair
4)     - $\mathbf{x}$ : simplex (masculine, feminine, neutral) - simple

Let's look at these adjectives from the point of view of their Genitive form and their stem:

| Gender form | Nominative form | Genitive form | Stem |
| :---: | :---: | :---: | :---: |
| masculine <br> feminine <br> neutral | prominens <br> prominens <br> prominens | prominentis | prominent- |
| masculine <br> feminine <br> neutral | teres <br> teres <br> teres | terětis | teret- |
| masculine <br> feminine <br> neutral | par <br> par <br> par | paris | par- |
| masculine <br> feminine <br> neutral | simplex <br> simplex <br> simplex | simplǐcis | simplic- |

The dictionary form of these adjectives includes the Nominative form and the Genitive ending:
sapiens, entis (oral form sapiens, sapientis)
teres, ětis (oral form teres, terĕtis)
par, is (oral form par, paris)
simplex, ǐcis (oral form simplex, simplicis)

## § 27. Adjective and Noun Agreement

To agree an adjective and a noun in Latin means to say or to write these parts of speech in the same gender, number and case. To do it you should:

1) imagine or write dictionary forms of the noun and adjective;
2) correctly determine the gender, number and case of the noun;
3) place the noun in the first place of the term;
4) choose the correct grammar form of the adjective for this noun and put it in the second place (after the noun).

Let us take, e. g., the following word combinations: 1) sacral vertebra; 2) carotid tubercle; 3) palatine groove

First of all, let us write down the dictionary form of every word:
sacral - sacrālis, e; carotid - carotǐcus, a, um; tubercle - tubercŭlum, i n; palatine - palatīnus, a, um; groove - sulcus, i m; vertebra - vertĕbra, ae f

Now, let us make up the procedure of agreement:

1) vertěbra: gender - feminine, number - singular, case - Nominative.

So in the dictionary form of adjective we choose the form sacralis and agree it in this way with the noun vertebra: vertebra sacralis
2) tubercŭlum: gender - neutral, singular, Nominative.

That's why we choose the adjective form caroticum and make up the term tuberculum caroticum.
3) sulcus: masculine, singular, Nominative.

So for this noun we need the adjective form palatīnus. Writing down it after the noun sulcus we get as a result the term sulcus palatīnus.

If we have to agree two adjectives with one noun, the order of agreement is the following. The adjective indicating the main space location of the object (cardiăcus, a, um cardiac; cervicālis, e cervical, gastrĭcus, a, um gastric and so on) is placed after the noun: right gastric artery - arteria gastrica dextra, deep lymph vessel - vas lymphatǐcum profundum.

One should be able not only to agree adjectives and nouns in the Nominative, but also make up the Genitive form from this Nominative construction. So, let's make the Genitive forms of the above mentioned Nominative forms:

1) vertĕbra sacrālis: from the dictionary form we already know the Genitive form and write it down: vertebrae. Now, we have to determine the Genitive form of sacralis. As we have seen above, this adjective belongs to the third declension, that's why the Genitive form should have the ending -is, that is sacralis, which finally makes in the Genitive the word combination vertebrae sacralis.
2) tubercŭlum carotǐcum: both the noun and the adjective belong to the second declension, that's why they have to receive the ending -i in the Genitive form - tuberculi carotici.
3) sulcus palatīnus: sulcus, as it is evident from the dictionary form, belongs to the second declension, the ending -us in the adjective palatinus tells us that this form belongs to the second declension and so we can determine the Genitive form as palatīni. The whole term in Genitive form is sulci palatini.

## § 28. The comparative degree

To form the compative degree, it is necessary to find the stem of the positive degree and add the suffix -ior for the masculine and feminine forms and -ius for the neutral form:

| Positive form | Stem | Comparative <br> masculine and <br> feminine form | Comparative <br> neutral form | Translation |
| :---: | :---: | :---: | :---: | :---: |
| longus, a, um (long) <br> simplex, ǐcis (simple) | long- <br> simplic- | longior <br> simplicior | longius <br> simplicius | longer <br> more simple |

The full dictionary form of the masculine and the feminine has the ending -ior, while the neutral form has -ius:
longior, ius (written dictionary form)
longior, longius (oral form)
simplicior, ius (written dictionary form)
simplicior, simplicius (oral form)
Adjectives in the comparative degree have the same pattern of declension as nouns of the third declension. Their distinctive feature is the ending - $\overline{\mathbf{o}} \mathrm{ris}$ in the Genitive:

| Nominative form of Comparative | Genitive form of Comparative | Stem |
| :---: | :---: | :---: |
| longior $(\mathrm{m}, \mathrm{f})$ <br> longius $(\mathrm{n})$ | longiōris | longior- |
| simplicior <br> simplicius | simpliciōris | simplicior- |

The grammar agreement of the Comparative form with nouns follows the common rules:

| Positive degree |  | Comparative degree |  |
| :---: | :---: | :---: | :---: |
| m | m | m | m |
| processus | longus | processus | longior |
| n | n | n | n |
| ligamentum | longum | ligamentum | longius |
| f | f | f | f |
| radix | longa | radix | longior |
| n | n | n | n |
| ganglion | simplex | ganglion | simplicius |

## § 29. Comparative forms in Anatomical Terminology

In anatomical (and histological) terminology only limited forms of adjectives in the Comparative degree are used. First of all, comparative forms of the adjectives great (large) and little (small) are used:

| Positive degree <br> of Latin adjective | English <br> equivalents | Comparative form <br> of Latin adjectives | English anatomical <br> equivalents |
| :---: | :---: | :---: | :---: |
| magnus, a, um | great, large | maior (major) <br> maius (majus) | greater, larger, <br> major |
| parvus, a, um | little, small | minor, minus | lesser, smaller, minor |

In the forms minor, minus we don't see the full endings -ior, -ius, but that is a distinctive feature of these forms to remember.

In anatomical terminology four adjectives in the comparative form are also used, although from the point of view of English, not every of such forms express comparison:

| Latin masculine <br> and feminine form | Latin neural form | Latin dictionary <br> form | English anatomical <br> equivalent |
| :---: | :---: | :---: | :---: |
| anterior | anterius | anterior, ius | anterior |
| posterior | posterius | posterior, ius | posterior |
| superior | superius | superior, ius | upper, superior |
| inferior | inferius | inferior, ius | lower, inferior |

Thus, only 6 adjectives in the form of comparative degree are used in Latin anatomical terminology:

| Latin dictionary form | Genitive form | Stem |
| :---: | :---: | :---: |
| anterior, ius | anteriōris | anterior- |
| posterior, ius | posteriōris | posterior- |
| superior, ius | superiōris | superior- |
| inferior, ius | inferiōris | inferior- |
| major, ius | majōris | major- |
| minor, us | minōris | minor- |

We should note that the stem of the adjectives in the comparative degree coincides with the Nominative masculine and feminine forms ending with -ior.

The Genitive singular form in the comparative degree is formed by adding the ending -is to the stem.

It is necessary to remember, that Latin adjectives in the comparative degree are always placed last in the multiword term:
facies articularis superior - superior articular surface
musculus obliquus capitis inferius - inferior oblique muscle of head

## § 30. The superlative degree

Commonly, the superlative degree is formed by adding the suffix -issǐmand gender endings -us, -a, -um to the stem of the positive degree:

| Positive degree | Stem | Superlative degree | English equivalent |
| :---: | :---: | :---: | :---: |
| latus, a, um (broad, <br> vast, wide) | lat- | latissĭmus, a, um | the broadest (vastest, <br> widest), latissimus <br> (in Anatomy) |
| longus, a, um (long) | long- | longissǐmus, a, um | the longest |
| subtǐlis, e (fine) | subtil- | subtilissǐmus, a, um | the finest |

Some forms of superlative degree are formed by special way:

| Initial form | Superlative degree | English anatomical equivalent |
| :---: | :---: | :---: |
| magnus, a, um (great) | maxı̌mus, a, um | the greatest, maximus |
| parvus, a, um (little, small) | minǐmus, a, um | the least, minimus |

The dictionary form of adjectives in the superlative degree is similar to adjectives of the first group with the endings -us, -a, um. They are declined also like the adjectives of the first group and their stem is determined similarly.

## § 31. Peculiarities of the use of the comparison degrees of the adjectives magnus, a, um and parvus, a, um in Latin anatomical terminology

Now some notes about the use of Latin degree comparison forms that you should remember.

1. Forms magnus / parvus are used, if a solitary anatomical structure is indicated:
forāmen (occipitāle) magnum - foramen (occipital) magnum
arteria pancreatǐca magna - greater pancreatic artery
vena magna cerěbri - great cerebral vein
nervus aureculāris magnus - great auricular nerve
muscŭlus adductor magnus - adductor magnus muscle
nucleus magnus - large nucleus
2. Forms major / minor are used, if dimensions of two similar and placed next to each other anatomical structures are compared:
ala major / ala minor - greater wing / lesser wing
pelvis major / pelvis minor - greater pelvis / lesser pelvis
nervus petrōsus major / nervus petrosus minor - greater petrosal nerve / lesser petrosal nerve
muscǔlus pectorālis major / muscŭlus pectorālis minor - pectoral major muscle / pectoral minor muscle
musculus teres major / musculus teres minor - teres major muscle / teres minor muscle

## § 32. Exercises

## 1. Give orally the dictionary form of the following adjectives:

articulāris, composǐtum, dextrum, frontālis, impar, interna, liběrum, nasāle, palatīna, sapiens, simplex, teres, thoracǐcum, minor, anterius, minus, superior

## 2. Correspond the following adjectives with the nouns:

atriculatio, ōnis f (composǐtus, a, um; sinister, tra, trum; simplex, ǐcis);
caput, ittis n (minor, us; longus, a, um; brevis, e)
cornu, us n (occipitālis, e; hyoideus, a, um; superior, ius)
facies, ēi f (costālis, e; posterior, ius; dexter, tra, trum)
ganglion, in (impar, ăris; sublinguālis, e; superior, ius);
ligamentum, in (teres, ětis; brevis, e; minor, us);
margo, ǐnis m (dexter, tra, trum; liber, ěra, ěrum; nasālis, e);
musculus, i m (teres, ětis; major, jus; latissĭmus, a, um);
nervus, i m (hypoglossus, a, um; occipitālis, e);
processus, us m (articularis, e; palatīnus, a, um; brevis, e)
3. Make up grammatical agreement of the adjectives with the nouns in Latin:
arch (dental, venous, left); artery (deep, lingual, right); bone (short, palatine, hyoid); canal (long, short, sacral); crest (lacrimal, external); duct (hepatic, sublingual); head (upper, lower); joint (complex, simple); process (palatine, costal); region (cervical, mastoid); tubercle (carotid, lateral); vein (deep, sacral); vertebra (prominent, thoracic); vessel (left, lymphatic)

## 4. Give the dictionary form of each word and translate the following terms into Latin in Nominative and Genitive cases:

articular surface; costal arch; deep lymphatic vessel; frontal crest; lateral vein; anterior ethmoidal opening; left hepatic duct; long ligament; medial root; labial artery; occipital angle; oval opening; palatine process; superficial vein; vertebral column; lesser wing; lower lip; greater petrosal nerve; teres minor muscle

## 5. Write down the dictionary form and translate into English:

arcus anterior atlantis; concha nasālis suprēma; crista tuberculi majoris; facies anterior partis petrōsae; fossa cranii anterior; labium faciēi inferius; muscǔlus longissǐmus capǐtis; musculus palpebrae superiōris; pars liběra membri superiōris; sulcus sinus petrōsi inferiōris;

## § 33. Vocabulary to lesson 3

## I. Latin-English vocabulary

$1^{\text {st }}$ declension
arteria, ae f - artery
concha, ae f - concha, shell
fossa, ae f - fossa, little hole
palpebra, ae f - eyelid

$$
2^{\text {nd }} \text { declension }
$$

labium, in - lip
ligamentum, in - ligament
membrum, in - limb
muscǔlus, i m - muscle

$$
3^{\text {rd }} \text { declension }
$$

articulatio, ōnis f - joint
atlas, antis $m$ - atlas (the first cervical vertebra)
margo, ǐnis $m$ - margin, border
pars, partis f - part

$$
4^{\text {th }} \text { declension }
$$

arcus, us $m$ - arch
$1^{\text {st }}$ group of adjectives including forms of the superlative degree
composǐtus, a, um - complex
dexter, tra, trum - right
hyoideus, a .um - hyoid, sublingual (bone)
hypoglossus, a, um - hypoglossal, sublingual (nerve)
latissimus, a, um - latissimus (muscle), the broadest
liber, ěra, ěrum - free
longus, a, um - long
magnus, a, um - large (vein), magnus (m. adductor), great (nerve)
mastoideus, a, um - mastoid
palatīnus, a, um - palatine
petrōsus, a, um - petrosal
sacer, cra, crum - sacral (bone)
sinister, tra, trum - left
suprēmus, a, um - supreme
Adjectives in the form of comparative degree
anterior, ius - anterior
inferior, ius - inferior, lawer
major, ius - major, greater
minor, minus - minor, lesser
posterior, ius - posterior
superior, ius - superior, upper

## $2^{\text {nd }}$ group of adjectives

alāris, e - alar
articulāris, e - articular
brevis, e - short
communǐcans, ntis - communicating
costālis, e - costal
frontālis, e - frontal
impar, ăris - impar, unpaired
nasālis, e - nasal
occipitālis, e - occipital
sacrālis, e - sacral
simplex, ǐcis - simple
sublinguālis, e - sublingual (excepting nerve and bone)
teres, ětis - round (excepting foramen)

## II. English-Latin glossary

arch - arcus, us m artery - arteria, ae f
articular - articulāris, e
back - dorsum, in
carotid - carotǐcus, a, um
cervical - cervicālis, e
column - columna, ae f
complex - composǐtus, a, um
costal - costālis, e
crest - crista, ae f
deep - profundus, a, um
dental - dentālis, e
dorsi (= of the back) - dorsum, in
external - externus, a, um
hepatic - hepatǐcus, a, um
hyoid - hyoideus, a, um (os)
joint - articulatio, ōnis f
lacrimal - lacrimālis, e
lateral - laterālis, e
lawer - inferior, ius
left - sinister, tra, trum
lesser - minor, us
lingual - linguālis, e
long - longus, a, um
lymphatic - lymphatǐcus, a, um
mastoid - mastoideus, a, um
medial - mediālis, e
occipital - occipitālis, e
oval — ovālis, e
palatine - palatīnus, a, um
petrosal - petrōsus, a, um
prominent - promĭnens, entis
pterygoid - pterygoideus, a, um
right - dexter, tra, trum
sacrālis, e (exept os) - sacral
short - brevis, e
simple - simplex, ǐcis
sublingual - sublingualis, e (except for
os and nervus)
superficial - superficiālis e
superior - superior, ius
upper - superior, ius
vein - vena, ae f
venous - venōsus, a, um
vertebral - vertebrālis, e
vessel - vas, vasis n
wing - ala, ae f

## Lesson 4 <br> NOMINATIVE PLURAL OF NOUNS AND ADJECTIVES

## § 34. Nominative Plural Endings of Nouns and Adjectives

The Nominative Plural forms for both Nouns and Adjectives are formed by adding the Nominative Plural endings to their stem. These endings, particularly in the $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ declensions, depend on the gender and declension of Nouns and Adjectives, as shown in this table:

| Declension | Gender | Nominative Singular | Stem | Nominative Plural endings | Nominative Plural Form |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vertebra thoracica | vertebr- <br> thoracic- | -ae | vertebrae thoracicae |
|  | m | sulcus dexter | sulc-dextr- | -i | sulci dextri |
| II | n | septum latum ganglion otĭcum | $\begin{gathered} \text { sept- } \\ \text { lat- } \\ \text { gangli- } \\ \text { otic- } \end{gathered}$ | -a | septa lata ganglia otǐca |
| III | m | homo sapiens | homin-sapient- | -es | homĭnes sapientes |
|  | f | pars commūnis | part-commun- | es | partes commūnes |
|  | n | $\begin{gathered} \text { rete } \\ \text { mirabîle } \end{gathered}$ | mirabil- | -ia | retia mirabilia |
|  |  | foramen anterius | foramin-anterior- | -a | foramĭna anteriōra |
| IV | m | processus | process- | -us | processus |
|  | n | cornu | corn- | -ua | cornua |
| V | f | facies | faci- | -es | facies |

As we can observe, only neutral nouns of the $3^{\text {rd }}$ declension have two variants. The following rules of their ending differentiation are to be memorized.

1. Neutral nouns with the endings -al, -ar, -e in the Nominative Singular get the ending -ia:
animal (Engl. animal) - animalia (Nom. plur.)
pulvīnar (Engl. pillow, anatom. pulvinar) - pulvīnaria (Nom. plur.)
rete (Engl. net, network, anatom. network) - retia (Nom. plur.)
2. Neutral Adjectives of the $3^{\text {rd }}$ declension except Adjectives in the comparative form get the ending -ia:

| Dictionary form | Neutral form | Stem | Nominative Plural form |
| :---: | :---: | :---: | :---: |
| acer, cris, cre | acre | acr- | acria |
| celer, ěris, ěre | celěre | celěr- | celeria |


| Dictionary form | Neutral form | Stem | Nominative Plural form |
| :---: | :---: | :---: | :---: |
| frontālis, e | frontāle | frontāl- | frontālia |
| brevis, e | breve | brev- | brevia |
| prominens, ntis | prominens | prominent- | prominentia |
| impar, ăris | impar | impar- | imparia |
| simplex, ĭcis | simplex | simplĭc- | simplĭcia |

Nouns which don't belong to the first point of the shown above rule as well as Adjectives in the Comparative form get the ending -a in the Nominative Plural:
foramen superius (sing.) - foramĭna superiōra (plur.)
caput minus (sing.) - capĭta minōra (plur.)

## § 35. Abbreviations of Nominative Plural forms used in Anatomical Terms

A certain number of Nouns in the Anatomical terms is used in the shortened forms. You have to memorize these abbreviations:

| Singular form |  | Plural form |  |
| :---: | :---: | :---: | :---: |
| Full form | Abbreviation | Full form | Abbreviation |
| arteria | A. | arteriae | Aa. |
| bursa | B. | bursae | Bb. |
| forāmen | F. | foramĭna | Forr. |
| ganglion | Gangl. | ganglia | Gangll. |
| glandŭla | Gl. | glandŭlae | Gll. |
| ligamentum | Lig. | ligamenta | Ligg. |
| muscŭlus | M. | muscŭli | Mm. |
| nervus | N. | nervi | Nn. |
| nucleus | Nucl. | nuclei | Nucll. |
| ramus | R. | rami | Rr. |
| vagīna | Vag. | vagīnae | Vagg. |
| vena | V. | venae | Vv. |

## § 36. Exercises

## 1. Write down the dictionary form, translate each word combination into

 Latin and then make up the Nominative Plural:alveolar arch; cervical surface; coccygeal horn; deciduous tooth; greater palatine canal; impar ganglion; inferior nuchal line; jugular foramen; posterior tubercle; sphenoid process; superior nasal meatus; temporal fossa; tympanic cavity; third molar tooth or wisdom tooth; zygomatic bone

## 2. Write down the dictionary form and translate into English:

Aa. ciliāres posteriōres breves; cartilagĭnes laryngis; Forr. palatīna minōra; Gangll. pelvĭca; Gll. thyroideae accessoriae; labia oris; Ligg. collateralia;
Mm. rotatōres cervīcis; Nn. labiāles anteriōres; nomĭna anatomǐca; Nucll. vestibulāres; orgăna ocŭli accessoria; ossa cranii; partes corpŏris humāni; plicae palatīnae transversae; radīces craniāles; Rr. dorsāles linguae; regiōnes membri superiōris; Vv. temporāles profundae; dentes incisīvi

## 3. Write down the dictionary form and translate into Latin:

auditory ossicles; blood vessels of retina; borders of the nail; cavities of the body; costal notches; cranial nerves and sutures; dental alveoli; eyebrows and eyelashes; general terms; incisive canals; lesser palatine foramina; minor salivary glands; incisor and canine teeth; planes, lines and regions; true and false ribs

## § 37. Vocabulary to lesson 9

## I. Latin-English dictionary

$$
1^{\text {st }} \text { declension }
$$

glandŭla, ae f-gland
papilla, ae f - papilla plica, ae f - fold
sutūra, ae f - suture
$2^{\text {nd }}$ declension
jugum, i n - yoke
orgănum, in - organ
ramus, i m-branch
rectum, in-rectum

$$
3^{\text {rd }} \text { declension }
$$

impressio, ōnis f — impression
nomen, ǐnis n - name
m. (muscŭlus i m) - rotator muscle
rotātor, ōris m
Adjectives of the $1^{\text {st }}$ group
anatomĭcus, a, um - anatomical
digitātus, a, um - digitate
humānus, a, um - human
incisīvus, a, um (dens) - incīsor (tooth)
otĭcus, a, um - otic
Adjectives of the $2^{\text {nd }}$ group
acessorius, a, um - accessory
alveolāris, e - alveolar
cerebrālis, e - cerebral
collaterālis, e - collateral
craniālis, e - cranial
dorsālis, e - dorsal
genitālis, e - genital
vestibulāris, e - vestibular

## II. English-Latin glossary

auditory - auditorius, a, um
blood - sanguineus, a, um
brachial - brachiālis, e
branch - ramus, i m
canine - canīnus, a, um
common - commūnis, e
cord - fascicŭlus, i m
costal - costālis, e
deciduous - deciduus, a, um
eyebrow - supercilium, in
eyelash - cilium, i n
false - spurius, a, um
fibular (= peroneal) - fibulāris
(= peronēus, a, um)
fold - plica, ae f
fossa - fossa, ae f
general - generālis, e
girdle - cingŭlum, i n
impar - impar, ăris
incisive - incisīvus, a, um
jugular- jugulāris, e
line - linea, ae f
mirabile - mirabîlis, e molar (tooth) - molāris, e (dens)
muscular - musculāris, e
nail - unguis, is m
notch - incisūra, ae f
nuchal - nuchālis, e
ossicle - ossicŭlum, i n
permanent - permănens, ntis
plane - planum, in
proper - proprius, a, um
retina - retīna, ae f
salivary - salivarius, a. um
suture - sutūra, ae f
term - termĭnus, i m
third - tertius, a, um
true - verus, a, um
trunk - truncus, i m
wisdom - sapientia, ae f
zygomatic - zygomatǐcus, a, um

## Lesson 5 <br> GENITIVE PLURAL OF NOUNS AND ADJECTIVES

## § 38. Genitive Plural Endings of Nouns and Adjectives

Both Nouns and Adjectives get the Genitive Plural forms by adding the Genitive Plural endings to their stem, depending mostly on Noun and adjective Declension, as one may see in the following table:

| Declension | Gender | Nominative <br> Singular | Stems | Genitive <br> Plural endings | Genitive Plural <br> Forms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vertěbra <br> thoracǐca | vertebr- <br> thoracic- | -ārum | vertebrārum <br> thoracicārum |

\begin{tabular}{|c|c|c|c|c|c|}
\hline Declension \& Gender \& Nominative Singular \& Stems \& \begin{tabular}{l}
Genitive \\
Plural endings
\end{tabular} \& Genitive Plural Forms \\
\hline II \& m
n \& sulcus dexter ganglion otǐcum \& \begin{tabular}{l}
sulc- \\
dextr- \\
gangl- \\
otic-
\end{tabular} \& -ōrum \& sulcōrum dextrōrum gangliōrum oticōrum \\
\hline \multirow[t]{7}{*}{III} \& m
f

n \& canālis brevis dens permanens pars laterālis vertebrāle os simplex rete articulāre \& canal-brev-dent-permanent-part-lateral-vertebral-oss-simplic-ret-articular- \& -ium \& canalium brevium dentium permanentium partium lateralium vertebralium ossium simplicium retium articularium <br>
\hline \& \multirow[t]{2}{*}{m} \& margo \& margin- \& \multirow{6}{*}{-um} \& marginum <br>
\hline \& \& anterior \& anterior- \& \& anteriōrum <br>
\hline \& \multirow[t]{2}{*}{f} \& articulatio \& articulation- \& \& articulatiōnum <br>
\hline \& \& inferior \& inferior- \& \& inferiōrum <br>
\hline \& \multirow[t]{2}{*}{n} \& forāmen \& foramin- \& \& foramĭnum <br>
\hline \& \& majus \& major- \& \& majōrum <br>
\hline \multirow[b]{2}{*}{IV} \& m \& arcus \& arc- \& \multirow[b]{2}{*}{-uum} \& arcuum <br>
\hline \& n \& cornu \& corn- \& \& cornuum <br>
\hline V \& f \& facies \& faci- \& -ērum \& faciērum <br>
\hline
\end{tabular}

As we can see, masculine, feminine and neutral nouns and adjectives of the third declension have two variants of the endings.

The ending -ium is added to the stems of:

1. Parisyllaba, i. e. the Masculine and Feminine Nouns which have equal number of syllables in the Nominative and Genitive: canālis, is m canal; basis, is f base.
2. Masculine, feminine and neutral nouns, if their stem ends with two consonants: dens, dentis m tooth; pars, partis f part; os, ossis n bone.
3. Neutral nouns with the endings -al, -ar, ee in the Nominative Singular: anĭmal, ālis n animal; calcar, āris n calcar (spur); rete, is n net, network.
4. Masculine, feminine and neutral adjectives in the positive degree, see in the table above the adjectives articulāris, e articular; brevis, e short; laterālis, e lateral; permanens, ntis permanent; simplex, ǐcis simple.

The ending -um is added to the stems of:

1. All nouns which don't belong to the three first groups of the explained above rules, see, e. g., in the table the nouns margo, inis m border; articulatio, ōnis foint; forāmen, ĭnis n opening.
2. Masculine, feminine and neutral adjectives in the comparative degree, see in the table the adjectives anterior, ius anterior; inferior, ius upper; major, jus major, larger, greater.

Some Latin nouns are used only in the Plural and their dictionary forms are accordingly represented in the Nominative and Genitive Plural: fauces, faucium f fauces; species, èrum (speciērum) f species.

Attention! The noun vas, vasis n in the Singular belongs to the third Declension, but in the Plural - to the second one, compare: nervi vasis nerves of a vessel, but nervi vasōrum - nerves of the vessels.

## § 39. Exercises

## 1. Write down the dictionary form of each word and make up Nominative Singular and Genitive Plural forms of each word combination:

anterior tubercle; costal process; floating rib; greater wing; internal base; left spur; greater opening; lesser sublingual duct; longitudinal ligament; long root; permanent tooth; posterior surface; respiratory region; right crest; sacral horn; short muscle; simple joint; venous network; vertebral canal
2. Write down the dictionary form of each word and translate into

## English:

ligamenta ossiculōrum auditoriōrum; medulla ossium flava et rubra; muscŭli arrectōres pilōrum; muscŭli palati et faucium; nervi vasōrum lymphaticōrum; ostia venārum pulmonalium; plexus cavernōsi conchārum; processus accessorius vertebrārum lumbalium; situs viscęrum inversus; vagīnae fibrōsae digitōrum manus

## 3. Give the dictionary form and translate into Latin:

arteries of lower limbs; dividing walls of the frontal sinuses; heads of the true, false and floating ribs; muscles of auditory ossicles; muscles of soft palate and faucium; nerves and vessels of the vessels; nodules of semilunar cusps; sinuses of the venae cavae (venae cavae - Gen. Plur.!); surface of the canine teeth; tubercles of thoracic vertebrae (thoracic vertebrae - Gen. plur.!)

## § 40. Vocabulary to lesson 10

## I. Latin-English vocabulary

Nouns of the $1^{\text {st }}$ declension
medulla, ae f - medulla
vagīna, ae f - vagina, sheath
Nouns of the $2^{\text {nd }}$ declension
ossicǔlum, in - ossicle
ostium, in - opening
palātum, i n - palate
pilus, i m - hair
Nouns of the $3^{\text {rd }}$ declension
m . arrector, oris m - arrector (muscle)
viscus, ěris n; usually Plur. viscěra, um n - viscera, inner organs fauces, ium f (Plur.) - fauces

Nouns of the $4^{\text {th }}$ declension
manus, us f - hand
Adjectives of the $1^{\text {st }}$ group
auditorius, a, um - auditory
cavernōsus, a, um - cavernous
fibrōsus, a, um - fibrous, a, um
flavus, a, um - yellow
inversus, a, um - inverse
ruber, bra, brum - red
Adjectives of the $2^{\text {nd }}$ group
lumbālis, e — lumbal
pulmonālis, e - pulmonary

## II. English-Latin glossary

cusp — valvŭla, ae f
extensor (unbending muscle) - m. extensor, ōris m
floating - fluctuans, ntis
limb - membrum, in
nodule - nodŭlus, in
ossicle - ossicŭlum, i n
palate - palātum, in
permanent - permănens, ntis
respiratory - respiratorius, a um
semilunar - semilunāris, e
soft - mollis, e
spur - calcar, āris n
stomach — gaster, tris f
true - verus, a, um
wall - paries, ětis $m$

## Lesson 6 <br> THE ACCUSATIVE SINGULAR AND PLURAL OF THE NOUNS AND ADJECTIVES. PREPOSITIONS USED WITH THE ACCUSATIVE

## § 41. Accusative singular and plural endings

The Latin case Accusative reflects the direct object by answering the questions «Whom? What?». In this function it corresponds to the Russian case called «Винительный» or in German to the case Akkusativ.

Nouns Masculine and Feminine as well as Adjectives get the Accusative forms by adding the corresponding endings to their stem, as one nay see in the table below. Neutral Nouns and Adjectives have no special Accusative endings: Accusative Singular form corresponds to the form of the Nominative Singular and the Accusative Plural form - to the form of the Nominative Plural:

| $\begin{aligned} & \text { Dec- } \\ & \text { len- } \\ & \text { sion } \end{aligned}$ | Gender | Nominative singular | $\begin{gathered} \text { Acc. } \\ \text { sing } \\ \text { ending } \end{gathered}$ | Accusative singular form | Acc. pl. ending | Accusative plural form |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vena cava | -am | venam cavam | -as | venas cavas |
| II | m | ramus dexter sulcus palatīnus | -um | ramum dextrum sulcum palatīnum | -OS | ramos dextros sulcos palatīnos |
|  | n | ganglion otǐcum septum longum | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | ganglion otĭcum septum longum | $\begin{aligned} & =\text { Nom. } \\ & \text { pl. }(-\mathrm{a}) \end{aligned}$ | ganglia otĭca septa longa |
| III | m | margo anterior <br> canālis nutriens | -em | margǐnem anteriōrem; canālem nutrientem | -es | margǐnes anteriōres; canāles nutrientes |
|  | f | pars laterālis basis simplex pelvis major | $\begin{aligned} & \text {-em } \\ & (-\mathrm{im}) \end{aligned}$ | partem laterālem basim simplĭcem pelvim majōrem | -es | partes laterāles bases simplĭces pelves majōres |
|  |  | rete capillāre crus posterius | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | rete capillāre crus posterius | $\begin{gathered} =\text { Nom. pl. } \\ (-\mathrm{a},-\mathrm{ia}) \end{gathered}$ | retia capillaria crura posteriōra |
| IV | m | processus | -um | processum | -us | processus |
|  | n | cornu | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | cornu | $\begin{aligned} & \text { = Nom. } \\ & \text { pl. (-ua) } \end{aligned}$ | cornua |
| V | f | facies | -em | faciem | -es | facies |

Some ending variants are seen in the third declension. Nouns in the Accusative singular can get endings -im or -em. The ending -im should have:

1. Nouns with the ending -sis in the Nominative singular:
basis, is f (base) - basim
dosis, is f (dose) - dosim
2. Nouns pelvis, is f (pelvis) - pelvim; febris, is f (fever) - febrim; tussis, is f (cough) - tussim

There are two ending variants in the Genitive plural, too. The ending -ium get:

1. Nouns Parisyllaba of Masculine and Feminine gender:
basis, sis f - basium
canālis, is $m$ - canalium
2. Nouns of the Neutral gender with endings -al, -ar, -e in Nominative singular:
anĭmal, âlis n (animal) - animalium
calcar, āris n (spur) - calcarium
rete, is n (net, network) - retium
3. Nouns of Masculine, Feminine and Neutral gender the stem of which ends with two consonants:
dens, dentis m (tooth) - dentium
pars, partis f (part) - partiumos
os, ossis n (bone) - ossium
4. Adjectives of the third declension of the all gender form being in the positive form:
brevis, e (short) - brevium
permănens, ntis (permanent) - permanentium
simplex, ícis (simple) - simplicium
Nouns not belonging to the first three points as well as Adjectives in the Comparative form get the ending -um:
pes, pedis m (leg) - pedum
articulatio, ōnis f (joint) - articulatiōnum
forāmen, ǐnis n (opening) - foramĭnum anterior, ius (anterior) anteriōrum

## § 42. Prepositions used with the Accusative

| Prepo- <br> sition | Meaning | Examples | Translation |
| :---: | :---: | :---: | :---: |
| ad | 1) to, toward <br> 2) for <br> 3) during, in | ad nervum trigemĭnum <br> ad usum externum <br> ad morbum hypertonicum | to the trigeminal nerve <br> for the external use <br> in the hypertonic disease |
| ante | before, <br> in front of | ante operatiōnem <br> ante pulmōnem dextrum | before the operation <br> in front of the right lung |
| circum | (a)round | circum liēnem | around the spleen |
| contra | for | contra febrim | for the fever |
| in | in, into, on <br> (to the question <br> «where to?»), <br> Russian «куда?») | in oesophăgum <br> in partem dextram <br> in canālem longum | into the oesophagus <br> on the right part <br> in the long canal |


| Prepo- <br> sition | Meaning | Examples | Translation |
| :---: | :---: | :---: | :---: |
| infra | below, under | infra cor | below (under) the heart |
| inter | among, between | inter vasa manus <br> inter duo ossa | among the vessels <br> of the hand <br> between two bones |
| intra | inside | intra thorācem | inside the thorax |
| per | 1) through, via <br> 2) by (means of) | per canālem opť̆cum <br> per ligamenta | through (via) the optic <br> canal <br> by (means of) <br> the ligaments |
| post | after, <br> behind | post operationem <br> post costam | after the operation <br> behind the rib |
| sub | under <br> (at the question <br> «where to?», <br> Russian «куда?») | sub scapŭlam dextram <br> sub ganglion <br> submandibulāre | under the right shoulder <br> blade <br> under the submandibular <br> ganglion |
| super, <br> supra <br> above | super (supra) marginem <br> sinistrum <br> supra (super) labium <br> superius | above the left margin <br> above the upper lip |  |

§ 43. Prefixes formed from the Prepositions used with the Accusative

| Prefix and its variants | Meaning | Example | Translation |
| :---: | :---: | :---: | :---: |
|  | addition, movement nearer | adǐtus, us $m$ accessorius, a, um affěrens, ntis appendix, ǐcis f | adǐtus, entrance accessory afferent appendix |
| ante- | precedence in space or time | antebrachiālis, e antenatālis, e | antebrachial antenatal |
| circum- | disposition around some object | circumferentia, ae f | circuference |
| in- (im-) | 1) mowing inward <br> 2) denial of any quality | infundubŭlum, i n impressio, ōnis f impar, ăris innominātus, a, um | infundubulum impression impar, unpaired, odd innominate |
| infra- | disposition lower some object | infraorbitālis, e | infraorbital |
| inter- | disposition between some objects | interdentālis, e | inerdental |
| intra- | disposition inside some object | intraarticulāris, e | intraarticular |


| Prefix and <br> its variants | Meaning | Example | Translation |
| :---: | :---: | :---: | :---: |
| per- | preservation in space or <br> time | permănens, ntis | permanent |
| post-, <br> retro- | disposition behind <br> something in space or <br> time | postcentrālis, e <br> postoperatīus, a, um <br> retromolāris, e | postcentral <br> postoperative <br> retromolar |
| sub- | disposition under some <br> object | submandibulāris, e | submandibular |
| super, <br> supra | disposition over some <br> object | superficiālis, e <br> supratonsillāris, e | superficial <br> supratonsillar |

## § 44. Exercises

1. Give the dictionary form of each word; make up forms of the Nominative singular, Accusative singular and plural:
anterior margin; ascending artery; external base; frontal surface; greater pelvis; hepatic duct; left lung; lesser horn; lymphatic vessel; nasal bone; right part; respiratory system; short nerve; vertebral canal
2. Give the dictionary form of each word, translate into English:
ad corōnam dentis; ante et post operationem; ante labia; circum ocŭlum sinistrum; in canālem dentis incisivi; in radīcem longam; inter ossa; intra venam faciālem; sub gingivam; per os; per pelvim minōrem; per rectum; sub linguam;
3. Give the dictionary form of each word, translate into Latin:
above the left eye; after death; among the incisors; before and after tooth extraction; between pulp and dentine; by means of the long canal; for cough; for internal (external) use; into the deep vein; inside the sublingual artery; on the superior surface of the tooth; round the mouth; through the upper lip; under the lingual surface; via the common carotid artery

## 4. Give the dictionary form of each word, translate into Latin:

accessory cusp; postsulcal part; supratonsillar fossa; interalveolar septa; infraorbital canal; minor sublingual ducts; superficial part; retromandibular vein; cardiac impression; infrahyoid muscles; innominate substance

## § 45. Vocabulary to lesson 11

## I. Latin-English dictionary

Prepositions used with the Accusative
ad -1 ) to; 2) for; 3) during
ante - before (time), in front of (space)
circum - around, round
contra - against
in (to the question "where to?", Russian «куда?») — in, into, on infra - below, under
inter - among, between (two objects)
intra - inside
per — through, via 2) by ( means of)
post - after (time), behind (place)
sub (to the question "where to?", Russian «куда?») — under
super, supra - above, over
Other words
adǐtus, us m - aditus
antrum, i n - antrum, cave
auricularis, e - auriculare
difficiclis, e - difficult
flavus, a, um - yellow
medulla, ae f - medulla
oblongātus, a, um - oblongata (medulla)

## II. English-Latin Dictionary

Prepositions
above - super, supra
after - post
among (more than two objects) - inter
around - circum
before - ante
behind - post
between (two objects) - inter
by (means of) - per
during - ad
for - ad
in - in (to the question "where to?")
in front of - ante
inside - intra
into - in (to the question "where to?")
on - in (to the question "where to?")
round - see around
to - ad
through - per
under - infra, sub (to the question "where to?")
Other words
ascending - ascendens, ntis
childebirth — partus, us m
cough - tussis, is f
death - mors, mortis $f$
leg - pes, pedis $m$
operation - operatio, ōnis f
postsulcal - postsulcalis, e
supratonsillar - supratonsillaris, e
use - usus, us m

## Lesson 7

## ABLATIVE SINGULAR AND PLURAL OF THE NOUNS AND ADJECTIVES. PREPOSITIONS USED WITH THE ABLATIVE

## § 46. Ablative and its formation

Ablative is the Latin case reflecting different circumstances and conditions which characterize the indirect object (mood of the action, time, place, reason and so one).

Both Nouns and Adjectives get the Ablative forms by adding the corresponding endings to their stems, as one may see in the table below:

| Dec-lention | Gender | Nominative singular | Abl sing. ending | Ablative singular form | Abl. plur. ending | Ablative plural form |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vena cava | -ā | vena cava | -is | venis cavis |
| II | m | ramus dexter sulcus palatīnus | -0 | ramo dextro sulco palatīno | -is | ramis dextris sulcis palatīnis |
|  | n | ganglion otĭcum septum longum |  | ganglio otĭco septo longo |  | gangliis otĭcis septis longis |
| III | m | margo anterior canālis nutriens | -e (i) | $\begin{gathered} \text { marǧ̆ne } \\ \text { anteriōre } \\ \text { canāle nutrienti } \end{gathered}$ | -ǐbus | marginǐbus anterioríbus canalǐbus nutrientǐbus |
|  | f | pars laterālis basis simplex |  | parte laterāli <br> basi simplĭci |  | partîbus lateralĭbus basǐbus simplicǐbus |
|  | n | rete capillāre crus posterius |  | reti capillāri crure posteriōre |  | retĭbus capillarǐbus crurĭbus posteriorĭbus |
| IV | m | processus | -u | processu | -ĭbus | processǐbus |
|  | n | cornu | -u | cornu |  | cornîbus |
| V | f | facies | -e | facie | -ēbus | faciēbus |

Some ending variants are seen in the third declension. Nouns and adjectives in the Ablative singular can get endings ee or -i.

The ending - $\mathbf{i}$ is added to the stem of:

1. Neutral Nouns with endings -al, -ar, -e in the Nominative singular (we have already mentioned about these nouns in the previous lessons): anĭmal, ālis n - animāli; calcar, āris n - calcāri; rete, is n - reti.
2. Feminine Nouns:
pelvis, is f (pelvis) - pelvi;
febris, is $f$ (fever) - febri;
tussis, is f (cough) - tussi.
3. Feminine Nouns with ending -sis: basis, is $f$ (base) - basi.
4. Masculine, Feminine and Neutral Adjectives in the positive degree as well as Participles: brevis, e (short) - brevi; capillāris, e (capillary) - capillāri; simplex, ĭcis (simple) - simplĭci; fluctuans, ntis (floating) - fluctuanti.

The ending ee is added to the stem of:

1. All nouns which don't belong to the three first groups of the explained above rules, - see, for example, in the table the nouns canālis, margo, pars, crus.
2. Masculine, Feminine and Neutral Adjectives in the comparative degree, - see in the table the adjective anterior, ius and posterior, ius.

## § 47. Propositions with the Ablative

| Proposition | Meaning | Examples | Translation |
| :---: | :---: | :---: | :---: |
| a, ab (before a vowel) | from | a sulco rhināli ab axe optǐco | from rhinal sulcus from optical axis |
| cum | with | cum nervo faciāli cum febri continua | with facial nerve with continued fever |
| de | 1) about <br> 2) from | de ossǐbus cranii de gingiva | about the skull bones from the gingiva (gum) |
| e (ex) | 1) from (about the movement from within) <br> 2) of, from (about material) | e canāle sacrāli e cavitāte abdomǐnis ex fructibus Rosae e fibris elastǐcis | from the sacral canal from the abdomen cavity of dog-rose fruits from elastic fibers |
| in | (to the question «where?») in, on | in cavitāte pleurāli in facie unguis | in the pleural cavity on the nail surface |
| pro | 1) for <br> 2) before | pro reti venōso guttae pro ocŭlis pro lingua | for venous network drops for eyes before the tongue |
| sine | without | sine pancreăte accessorio sine dentïbus serotĩnis | without accessory pancreas <br> without wisdom teeth |
| sub | (to the question «where?») under | sub cute capǐtis sub narcōsi locāli | under the skin of head under a local anesthesia |

§ 48. Prefixes formed from the Prepositions used with the Ablative

| Prefix and <br> its variants | Meaning | Example | Translation |
| :---: | :---: | :---: | :---: |
| a-, ab- | mowing away | (muscŭlus) abductor, ōris m | abductor (muscle) |
| com-, (col-, <br> con-, cor-) | 1) movement <br> together <br> 2) junction | composĭtus, a, um <br> collaterālis, e <br> connectīvus, a, um <br> m. constrictor, ōris m | complex <br> collateral <br> connective <br> constrictor |
| de- | 1) movement <br> downward <br> 2) removing | deciduus, a, um <br> m. depressor, ōris m <br> depulpatio, ōnis f | deciduous (tooth) <br> depressor <br> depulpation |
| e- (ef-, ex-) | movement out | effërens, ntis <br> (muscŭlus) extensor, ōris m | efferent <br> extensor (muscle) |
| pre-, pro- | disposition before <br> something in space <br> or time | premolāris, e (dens) <br> processus, us m <br> promĭnens, ntis | premolar (tooth) <br> process <br> prominemt |

## § 49. Exercises

1. Give the dictionary form of each word, make up the forms of Ablative singular and plural:
1) floating rib; 2) right region; 3 ) short nerve; 4) sacral horn; 5) inner base; 6) left canal; 7) long spur; 8) lymphatic vessel; 9) simple joint; 10) bony tissue; 11) continued fever; 12) canine tooth; 13) lesser pelvis; 14) accessory pancreas
2. Give the dictionary form of each word; translate from Latin into the English:
1) glandŭlae sine ductíbus; 2) in regionǐbus membri superiōris; 3) sub muscǔlis facialĭbus; 4) pro reti venōso; 5) cum febri continua; 6) sub tunĭca musculāri; 7) a crista capǐtis costae; 8) sanguis ex vena pro analy̆si; 9) ab angŭlo inferior; 10) de termĭnis generalïbus

## 3. Give the dictionary form of each word; translate from English into

 the Latin:1) from the surface of knee; 2) in the thoracic vein; 3) under a local (general) anesthesia; 4) for external use; 5) about the abdominal muscles; 6) with a wandering kidney; 7) without upper incisors; 8) for nervous system; 9) from the head to the feet
4. Give the dictionary form of each word, translate into English:
1) dentes decidui; 2) vasa efferentia; 3) articulatio composita; 4) muscŭlus depressor supercilii; 5) ramus communǐcans cum nervo faciali; 6) nervi abducentes; 7) processus prominens

## § 50. Vocabulary to the lesson 12

## Latin-English dictionary

Prepositions with Ablative
$\mathrm{a}, \mathrm{ab}$ - from
cum - with
de - about, of
e, ex - from, of
in (to the question "where?") - in, on
pro - for
sine - without
sub (to the question "where?) - under
Other words
abdūcens, ntis - abducent
connectīvus, a, um - connective
continuus, a, um - continued
faciālis, e - facial
generālis, e - general
humānus, a, um - human
musculāris, e - muscular
promĭnens, entis - prominent
scapŭla, ae f - scapula
structūra, ae f - sructure
termĭnus, i m - term
tunĭca, ae f - layer, coat

## English-Latin Dictionary

anesthesia - aesthesia, ae f
continued - continuus, a, um
general - generālis, e
local - locālis, e
medicine - medicamentum, in
tissue - textus, us $m$
wandering - migrans, ntis
§ 51. Summary table of declensions and case endings

| Declension | I | II |  | III |  | IV |  | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | f | m | n | mf | n | m | n | f |
| Nom. sing. | -a | -us <br> -er | -um <br> -on | different |  | -us | -u | -es |


| Declension | I |  | II | III |  | IV |  | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gen. sing. | -ae |  | -i | -is |  | -us |  | -ēi |
| Acc. sing. | -am | -um | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | $\begin{aligned} & \hline-\mathrm{em} \\ & (-\mathrm{im}) \end{aligned}$ | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | -um | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | -em |
| Abl. sing. | -ā | -O |  | -e (-i) |  | -u |  | -e |
| Nom. plur. | -ae | -i | -a | -es | -a (-ia) | -uS | -ua | -es |
| Gen. plur. | -ārum | -ōrum |  | -um (-ium) |  | -uum |  | -ērum |
| Acc. plur. | -as | -OS | $\begin{gathered} =\text { Nom. } \\ \text { plur. } \end{gathered}$ | -es | $=$ Nom. plur. | -us | $\begin{gathered} \text { = Nom. } \\ \text { plur. } \end{gathered}$ | -es |
| Abl. plur. | -is | -is |  | -ibbus |  | -ibus |  | -ēbus |

## § 52. Model (sample) of the final test in anatomical terminology

1. Give the dictionary form of each word, translate the terms into English:
1) paries anterior gastris; 2) frenulum labii inferioris; 3) rr. dorsales linguae; 4) ligamenta ossiculōrum auditoriōrum; 5) organa oculi accessoria
2. Give the dictionary form of each word, translate the terms into Latin:
1) deep lingual artery; 2) teres minor muscle; 3) surface of incisor tooth; 4) planes, lines and regions; 5) heads of the true, false and floating ribs
3. Give the dictionary form of each word, translate the terms into Latin:
1) by means of the long canal; 2) through the skin; 3 ) withot wisdom teeth; 4) to the hard palate

To cope with this final test you have to review (revise) thoroughly every home task, because all the terms of this test have been taken from your exercises. But the most effective way to success is your thorough learning and preparation for every lesson during the time of your studies.

## LATIN-ENGLISH VOCABULARY

## A

$\mathbf{a}, \mathbf{a b}$ (Abl) from
accessorius, a, um accessory
acustĭcus, a, um auditory
ad (Acc.) 1) to; 2) for; 3) during
adhesio, $\overline{\text { onis }} \mathbf{f}$ adhesion
adipōsus, a, um fat
adĭtus, us $\mathbf{m}$ aditus
ala, ae $f$ wing
alāris, e alar
alveolāris, e alveolar
ampullāris, e ampullary analy̆sis, is $f$ analysis anatomǐcus, a, um anatomical
angŭlus, i m angle
ante (Acc.) 1) before (time);
2) in front of (place)
antebrachium, in antebrachium, forearm
anterior, ius anterior
antihělix, ǐcis f; anthělix, ǐcis f
antihelix (anthelix)
antitrăgus, $\mathbf{i} \mathbf{m}$ antitragus
antrum, in antrum, cave
apex, ǐcis $m$ apex, top
apparātus, us $\mathbf{m}$ apparatus
appendix, ǐcis $\mathbf{f}$ appendix
arachnoideus, a um arachnoid
arbor, ǒris $f$ tree
arbor vitae arbor vitae
arcus, us $m$ arch
arteria, ae $\mathbf{f}$ artery
arteriōsus, a um arterial
articulāris, e articular
articulatio, ōnis f joint
atlas, $\mathbf{n t i s} \mathbf{m}$ atlas (the first cervical vertebra)
auditorius, a, um auditory
auricŭla, ae f auricle
auricularis, e auricular
auris, is $\mathbf{f}$ ear
axis, is $\mathbf{m}$ axis

## B

basis, is $\mathbf{f}$ base
biliāris, e (= felleus, a, um) gall (+ noun)
bipennātus, a, um bipennate
biventer, tra, trum two-bellied
brevis, e short
bulbus, i m (ocŭli) eyeball

## C

cadāver, ĕris n cadaver (dead body)
calicǔlus, i m (gustatorius) bud
canālis, is $\mathbf{m}$ canal
cancer, cri m cancer
canīnus, a um (dens) canine (tooth)
capsŭla, ae f capsule
caput, ǐtis $n$ head
cardiăcus, a, um cardiac
carotĭcus, a, um carotid
cartilāgo, ǐnis f cartilage
cauda, ae $\mathbf{f}$ tail
cavernōsus, a, um cavernous
cavǐtas, ātis f cavity
celer, ěris, ěre rapid, quick (pulse)
cerebellum, i n cerebellum
cerebrālis, e cerebral
cervicālis, e cervical
cervix, ìcis f cervix
ciliāris, e ciliary
circum (Acc.) around, round
circumferentiālis, e circumferential
circumferentia, ae f circumference
coccygēus, a, um coccygeal
coccyx, ygis $m$ coccyx, coccygeal
bone
cochleāris, e cochlear
collaterālis, e collateral
communǐcans, ntis communicative
compositus, a, um complex
concha, ae f concha (shell-shaped hole)
connectīvus, a, um connective continuus, a, um continued contra (Acc.) against, for (cough)
cor, cordis $n$ heart
cornu, us n horn, horn-shaped process
corpus, ǒris $n$ body
cortex, ǐcis m cortex (crust)
costa, ae f rib
costālis, e costal
craniālis, e cranial
cranium, i n skull
crista, ae f crest
crus, cruris n 1) shank, leg;
2) crus, limb (of auditory ossicle);
3) bundle (of myocardium)
cum (Abl.) with
cutis, is $\mathbf{f}$ skin

## D

de (Abl.) about, of
deciduus, a, um deciduous
dens, dentis $\mathbf{m}$ tooth
dens canīnus canine tooth
dens deciduus deciduous tooth
dens incisīvus incisor tooth
dens molāris molar tooth
dens permănens permanent tooth
dens premolāris premolar tooth
dens sapientiae wisdom tooth
dentālis, e dental
dexter, tra, trum right
diaměter, tri f diameter
diaphragma, ătis $n$ diaphragm
diencephălon, i n diencephalon
difficillis, e difficult
digastrǐcus, a um digastric
digitātus, a, um digitate
digǐtus, i m finger, toe
distālis, e distal
dorsālis, e dorsal
ductus, us $\mathbf{m}$ duct
duodēnum, i n duodenum
dura mater dura mater
(the outermost meninx
of the brain)
durus, a, um solid

## E

e, ex (Abl.) from, of
eminentia, ae feminence
encephălon i n brain
endocrīnus, a, um endocrine
et and
epitympanǐcus, a, um epitympanic
externus, a, um external
extracapsulāris extracapsular

## F

faciālis, e facial
facies, èi f face, surface
fascia, ae f fascia
fascia lata fascia lata
fauces, ium $f$ fauces
febris, is $\mathbf{f}$ fever
felleus, a, um (= biliaris, e) gall (+ noun)
femĭna, ae $f$ woman
femur, ŏris $\mathbf{n}$ femur, thigh (bone)
fibra, ae f fibre
fibrōsus, a, um fibrous
flavus, a, um yellow
forāmen, ĭnis $\mathbf{n}$ opening
fossa, ae $\mathbf{f}$ fossa (little hole)
frontālis, e frontal

## G

ganglion, i n nervous node
gaster, tris f stomach
gemma, ae $f$ bud
generālis, e general
genitālis, e genital
gingīva, ae f gingiva, gum
glandŭla, ae f gland
glomus, ěris $\mathbf{n}$ a cluster of blood vessels, glomus
gustatorius, a, um taste (+ noun)

## H

hemispherium, in hemisphere
hepar, ătis $n$ liver
hepaticus, a, um
homo, ǐnis $m$ man
humānus, a, um human
hyoideus, a, um hyoid, sublingual (bone)
hypochondriăcus, a, um hypochondriac
hypogastriccus, a, um hypogastric
hypoglossus, a, um hypoglossal, sublingual (nerve)

## I

iliăcus, a, um iliac
impar, ăris impar, unpaired
impressio, ōnis f impression
imus, a, um imus (ima), the lowest
in (Acc., when answering the question "where to?", Russian «куда?») in, into, on
in (Abl., when answering the question "where?", Russian «где?») in, on
incertus, a, um incerta (zona)
incisīvus, a, um (dens) incisor
incisūra, ae fincisure, slit or notch
inferior, ius inferior
infra (Acc.) below, under
inter (Acc.) among, between (two objects)
interclaviculāris, e interclavicular intercostālis, e intercostal
interlobāris, e interlobar
intermandibulāris, e
intermandibular
internus, a, um internal
interosseus, a, um interosseal, interosseous
interpedunculāris, $\mathbf{e}$ interpeduncular interthalamiccus, a, um interthalamic intervertebrälis, e intervertebral intra (Acc.) inside, in intraglandulāris, e intraglandular intrajugulāris, e intrajugular intraoccipitālis, e intraoccipital inversus, a, um inverse iris, ídis $\mathbf{f}$ iris (central part of the eye)

## J

jugum, in yoke

## L

labium, in lip
lamella, ae f lamella
larynx, yngis m larynx
latus, a, um broad
liber, ěra, ěrum free
ligamentum, in ligament
lingua, ae $f$ tongue
longissimus, a, um the longest
longitudinālis, e longitudinal
longus, a, um long
lumbālis, e lumbar
lymphaticcus, a, um lymphatic

## M

magnus, a, um large (vein), magnus
(m. adductor), great (nerve)
major, jus major, greater, larger
mandibǔla, ae f lower jaw, mandible
manus, us $f$ hand
margo, ǐnis $\mathbf{m}$ margin, border
massēter, ēris $\mathbf{m}$ see below
m. masseter
mastoideus, a, um mastoid
mater, tris $\mathbf{f}$ mater (cerebral coat)
maxilla, ae f maxilla, upper jaw
meātus, us meatus (passage)
medulla, ae f medulla
membrum, in limb
mesencephalĭcus, a, um mesencephalic
mesencephălon, i n mesencephalon
mesocōlon, i n mesocolon
metacarpālis, e metacarpal
metatarsus, i m metatarsus
minor, us minor, lesser, smaller
minimus, a, um the least, minimus
molāris, e (dens) molar (tooth)
musculāris, e muscular
muscǔlus, i m muscle
$\mathbf{m}$. adductor, $\overline{\mathbf{o}}$ ris $\mathbf{m}$ adductor (bringing muscle)
$\mathbf{m}$. arrector, $\overline{\mathbf{o} r i s} \mathbf{~ m}$ arrector (muscle elevating hair)
m. levātor, ōris m levator (elevating muscle)
m. massēter, ēris masseter
m. pronātor, $\overline{\text { ōris }} \mathbf{m}$ pronator (muscle turning the forearm)
m. rotātor, $\overline{\text { ōris }} \mathbf{m}$ rotātor
m. sphincter, ēris $\mathbf{m}$ sphincter (compressing muscle)
m. tensor, ōris m tensor (straining muscle)

## N

nasālis, e nasal
nasus, i m nose
nervus, i m nerve
nucleus, $\mathbf{i} \mathbf{m}$ nucleus
nomen, ĭnis $\mathbf{n}$ name

## 0

oblongātus, a, um rather long occipitālis, e occipital
ocŭlus, i m eye
operatio, ōnis f operation
orbĭta, ae $f$ orbit
orgănon, i n organ
os, oris $n$ mouth
os, ossis $n$ bone
osseus, a, um bony
ossicŭlum, i n ossicle
ostium, i n opening, orifice
otǐcus, a, um otic

## P

palatīnus, a, um palatine
palātum, i n palate
palpěbra, ae feyelid
pancreaticcus, a, um pancreatic
parapharyngeālis, e parapharyngeal
paraventriculohypophysiālis, e
paraventriculohypophysial
paravesicālis, e paravesical
paries, ĕtis $m$ wall
parotideus, a, um parotid
pars, partis f part
partus, us m childbirth, delivery
parvus, a, um little, small
pecten, ĭnis m pecten (crest)
pelvĭcus, a, um pelvic
pelvis, is $\mathbf{f}$ pelvis
per (Acc.) 1) through, via; 2) by (means of)
periventriculāris, e periventricular
permănens, entis (dens) permanent (tooth)
pes, pedis $\mathbf{m}$ foot
petrōsus, a, um stony
phalanx, ngis $f$ phalanx
pius, a, um (mater) pia (mater)
pilus, i m hair
planta, ae f sole
plexus, us m plexus (network, chiefly of veins or nerves)
plica, ae f fold
porta, ae $\mathbf{f}$ porta (gate of the liver)
post (Acc.) after (time), behind
(place)
posterior, ius posterior
premolāris, e (dens) premolar
(tooth)
preoccipitālis, e preoccipital
pro (Abl.) for
processus, us $\mathbf{m}$ process
profundus, a, um deep
proprius, a, um proper
pubes, is $\mathbf{f}$ pubis
pulmo, ōnis m lung
pulmonālis, e pulmonary
pulsus, us $\mathbf{m}$ pulse
pupilla, ae $f$ pupil
pyrămis, ĭdis f pyramid

## Q

quadrātus, a, um square, quadrate (muscle), quadratus (pronator)

## R

radix, īcis $\mathbf{f}$ radix, root
ramus, i m branch
recessus, us $\mathbf{m}$ recess
rectum, in rectum
regio, ōnis f region
ren, renis $m$ kidney
renālis, e renal
respiratorius, a, um respiratory
rete, is $\mathbf{n} 1$ ) rete (mirabile);
2) network (dorsal venous of hand)
retromandibulāris, e retromandibular
retropharyngēus, a, um
retropharyngeal
rima, ae f fissure, opening
ruber, bra, brum red

## S

sacrālis, e sacral
sanguis, ǐnis mblood
saphēnus, a, um saphenous
sapiens, ntis intelligent, clever
sapientia, ae $\mathbf{f}$ wisdom
scapǔla, ae f scapula, shoulder blade
sectio, ōnis f section
segmentum, in segment
semicirculāris, e semicircular
semilunāris, e semilunar
septum, in septum, dividing wall
seu or
simplex, ǐcis simple
sine (Abl.) without
sinister, tra, trum left
sinus, us m sinus, hollow curvature or cavity
situs, us $\mathbf{m}$ site
spatium, in space
spina, ae $f$ spine
spinālis, e spina
splanchnicus, a, um splanchnic
squama, ae f squamous part, scales
sternum, in sternum, breastbone
structūra, ae f structure
sub (Acc.,when answering
the question "where to?",
Russian «куда?»; Abl., when answering the question "where?", Russian «где?») under
sublinguälis e sublingual (except for nerve and bone)
submandibulāris, e submandibular
submucōsus, a, um submucous
substantia, ae f substance
sulcus, i m sulcus, furrow or groove
super, supra (Acc.) above, over
superficiālis, e superficial
superior, ius superior
supraorbital supraorbitālis, e
suprapleurālis, e suprapleural
suprarenālis, e suprarenal
suprēmus, a, um supreme,
the highest
sutūra, ae f suture
symphy̆sis, is $f$ symphysis
synchondrōsis, is $\mathbf{f}$ synchondrosis
syndesmōsis, is $\mathbf{f}$ syndesmosis
systēma, ătis $\mathbf{n}$ system

## T

temporālis, e temporal
teres, ĕtis round (except for foramen)
terminatio, ōnis f ending
terminnus, im term
textus, us $\mathbf{m}$ tissue
thoracǐcus, a, um thoracic
thorax, ācis $\mathbf{m}$ thorax, chest
thyr(e)oideus, a, um thyroid
tractus, us $\mathbf{m}$ tract
tragus, im tragus
transverses, a, um transverse
trigōnum, in trigone
tuber, ěris $\mathbf{n}$ tuber, large rounded swelling
tubercŭlum, in tubercle, small rounded swelling
tuberositas, ātis $\mathbf{f}$ tuberosity
tumor, ōris $\mathbf{m}$ tumor (swelling, growth)
tunĭca, ae f 1) layer, coat;
2) membrane
tympanĭcus, a, um tympanic

## U

unguis, is m nail
utěrus, i m uterus

## V

vagīna, ae f(of muscle) vagina, sheath
vas, vasis $\mathbf{n}$ vessel
vena, ae $f$ vein
venōsus, a, um venous
venter, tris $\mathbf{m}$ belly (of the muscle)
vermiformis, e vermiform
vertĕbra, ae $\mathbf{f}$ vertebra
vertebrālis, e vertebral
vesica, ae f bladder
vestibulāris, $\mathbf{e}$ vestibular
vestibǔlum, $\mathbf{i}$ n vestibule
vir, im man
viscus, ĕris n; usually Plur. viscĕra,
um $\mathbf{n}$ viscera, inner organs
vita, ae flife
vomer, ěris $\mathbf{m}$ vomer

## ENGLISH-LATIN VOCABULARY

## A

abdomen abdōmen, ǐnis n abdominal abdominālis, e about de (Abl.)
above super, supra (Acc.)
accessory accessorius, a, um
adductor (muscŭlus) adductor, ōris m
after post (Acc.)
among (more than two objects) inter (Acc.)
anesthesia anaesthesia, ae f
angle angŭlus, i m
anterior anterior, ius
aorta aorta, ae f
apex, top apex, ǐcis m
arch arcus, us $m$
around circum (Acc.)
artery arteria, ae $f$
articular articulāris, e
ascending ascendens, ntis
auricular auricularis, e
atlas atlas, antis $m$
auditory auditorius, a, um

## B

back dorsum, in
base basis, is $f$
before ante (Acc.)
behind post (Acc.)
between (two objects) inter (Acc.)
blood sanguis, ĭnis m
body corpus, orris n
bone os, ossis $n$
bony osseus, a, um
border margo, innis m
brachial brachiālis, e
brain cerĕbrum, in
branch ramus, i m
breast mamma, ae f
broadest latissǐmus, a, um
bronchial bronchiālis, e bursa (pouch, sac) bursa, ae f
by (means of) per (Acc.)

## C

canal canālis, is m
cancer, cri m cancer
canine (tooth) canīnus, a, um (dens)
cardiac cardiăcus, a, um
carotid carotǐcus, a, um
cartilage cartilāgo, innis f
cava, cavae cavus, a, um
cavity cavitas, ātis f
cell cellŭla, ae f
central centrälis, e
cerebellum cerebellum, In
cervical cervicālis, e
cervix cervix, īcis f
chiasm chiasma, ătis n
childbirth partus, us m
ciliary ciliāris, e
coccygeal coccygēus, a, um
colon colon, in
column columna, ae f
common commūnis, e
complex compositus, a, um
conjoint conjunctīvus, a, um
constrictor (compressing muscle)
muscǔlus constrictor, öris m
continued continuus, a, um
cord fascicŭlus, i m
costal costālis, e
cough tussis, is $f$
cranial craniālis, e
crest crista, ae f
crus crus, cruris n
culmen culmen, inis n
curvature curvatūra, ae f
cusp valvŭla, ae f

## D

death mors, mortis $f$
deep profundus, a, um
dental dentālis, e
depressor (lowing muscle) musculus
depressor, ōris m
diaphragm diaphragma, ătis $n$
digitus, digiti digitus, i m
distal distālis, e
dividing divídens, entis
division divisio, ōnis f
dorsal dorsālis, e
duct ductus, us $m$
during ad (Acc.)

## E

ear auris, is $f$
endocrine endocrīnus, a, um
epigastric epigastrǐcus, a, um
ethmoidal ethmoidālis, e
extensor (unbending muscle)
musculus extensor, ōris m
external externus, a um
eyebrow supercilium, in
eyelash cilium, in

## F

face facies, èi $f$
false falsus, a, um
falx falx, falcis $f$
fascia fascia, ae f
fauces fauces, ium f (plur.)
fever febris, is $f$
fibrous fibrōsus, a, um
fibular (= peroneal) fibulāris (= peronēus, a, um)
fissure fissūra, ae $f$
flexor (bending muscle) musculus
flexor, ōris m
floating fluctuans, ntis
fold plica, ae f
foot pes, pedis $m$
for ad (Acc.), pro (Abl.)
forāmen, innis $\mathbf{n}$ opening
forearm antebrachium, in
forest silvestris, e
forhead sincǐput, ǐtis n
fornix fornix, ǐcis m
forth quartus, a, um
fossa fossa, ae f
free liber, ěra, ěrum
from a, ab( Abl.); e, ex (Abl)
frontal frontālis, e
G
gallbladder vesīca fellea (= vesīca biliāris)
ganglion, a cluster of nervous cells ganglion, in
gastric gastrǐcus, a, um
general generālis, e
girdle cingŭlum, in
gland glandŭla, ae f
gluteal glutēus, a, um
great magnus, a, um
greater major, jus
groove sulcus, im

## H

hallux hallux, ūcis m
hand manus, us $f$
head caput, ǐtis n
heart cor, cordis $n$
hepatic hepatĭcus, a, um
highest suprēmus, a, um
horn cornu, us n
hyoid hyoideus, a, um

## I

ima imus, a, um
impar impar, ăris
in in (Acc.,when answering the question "where to?"; Abl., when answering the question "where?")
incisive incisīvus, a, um
incisor incisīvus, a um
incus incus, ūdis $f$
index (index finger) index, ǐcis $m$
inferior inferior, ius
infrahyoid infrahyoideus, a, um
infraorbital infraorbitālis, e in front of ante (Acc.)
inguinal inguinalis, e inner internus, a, um innominate innominātus, a, um inside intra (Acc.) intelligent sapiens, entis interclavicular interclaviculāris, e intercostal intercostālis, e interlobar interlobāris, e intermandibular intermandibulāris, e internal internus, a, um interosseal interosseus, a, um interosseous interosseus, a, um into in ( Acc., when answering the question "where to?")
intraglandular intraglandulāris, e iris iris, ĭdis f

## J

joint articulatio, ōnis f
jugular jugulāris, e

## K

kidney ren, renis m
knee genu, us n

## L

lacrimal lacrimālis, e
lactiferous lactifěrus, a, um
large magnus, a, um
larynx larynx, ngis m
lateral laterālis, e
latissimus latissǐmus, a um
left sinister, tra, trum
leg pes, pedis $m$
lesser minor, us
ligament ligamentum, in
limb membrum, in
line linea, ae f
lingual linguālis, e
lip labium, i n
liver hepar, ătis $n$
local locālis, e
long longus, a, um
longest longissĭmus, a, um
longitudinal longitudinālis, e
lower inferior, ius
lower jaw, mandible mandibǔla, ae f
lung pulmo, ōnis m
lymphatic lymphatĭcus, a, um

## M

magnus, magnum magnus, a, um
major major, jus
man homo, ǐnis m
mandible mandibǔla, ae f
margin margo, ǐnis m
mastoid mastoideus, a, um
meatus meātus, us $m$
medial mediālis, e
medicine medicamentum, in
membrane membrāna, ae f
membranous membranaceus, a, um
middle medius, a, um
minimus minǐmus, a, um
minor minor, us
mirabile mirabǐlis, e
mobile mobǐlis, e
molar molāris, e
molar tooth dens molaris
mouth os, oris n
muscular musculāris, e
muscle muscŭlus, i m

## N

nail unguis, is m
nasal nasālis, e
neck cervix, īcis f
nerve nervus, i m
nerve node ganglion, in
nervous nervōsus, a, um
network rete, is $n$
node nodus, i m
nodule nodŭlus, i m
nose nasus, i m
notch incisūra, ae f
nuchal nuchālis, e
nucleus nucleus, i m

## 0

occipital occipitālis, e occiput occĭput, ǐtis n
on in (Acc. to the question "where
to?", Abl. to the question "where?")
opening forāmen, ǐnis n
operation operatio, ōnis f
optic optĭcus, a, um
ossicle ossicŭlum, i n
oval ovālis, e

## P

palate palātum, in
palatine palatīnus, a, um
palatini (veli) palatīnus, a, um
pancreas pancreas, ătis $n$ pancreatis pancreas, ătis $n$ parapharyngeal parapharyngeālis, e paravesical paravesicālis, e
parenchyma parenchy̆ma, ătis n parietal parietālis, e
part pars, partis $f$
pectoral pectorālis, e
pelvis pelvis, is f
pelvic pelvĭcus, a, um
permanent permănens, ntis
peroneal peronēus, a, um
petrosal petrōsus, a, um
phalanx phalanx, ngis f
pharynx pharynx, ngis m
plane planum, in
plant planta, ae f
plexus plexus, us $m$
pollex, pollicis (thumb) pollex,
ĭcis m
posterior posterior, ius
preoccipital preoccipitālis, e
process processus, us $m$
prominent prominnens, ntis
proper proprius, a, um
pterygoid pterygoideus, a, um
pulvinar pulvīnar, āris n
pyramide pyrămis, ǐdis f

## R

radix radix, īcis f
rectum rectum, in
region regio, ōnis $f$
renal renālis, e
respiratory respiratorius, a um
rete rete, is $n$
retina retĭna, ae f
retromandibular retromandibulāris, e
rhomboid rhomboideus, a, um
rib costa, ae f
right dexter, tra, trum
ring-shaped (= anular ) anulāris, e
root, radix radix, īcis f
rotator (rotating muscle) musculus
rotātor, ōris $m$
round see around

## S

sacral sacrālis, e
salivary salivarius, a. um
saphenous saphēnus. a, um
segment segmentum, in
semilunar semilunāris, e
septum septum, in
short brevis, e
sinus sinus, us $m$
simple simplex, ǐcis
skin cutis, is $f$
skull cranium, in
small parvus, a, um
smaller minor, us
soft mollis, e
sole planta, ae f
space spatium, in
sphenoidal sphenoidālis, e
splanchnic splanchnǐcus, a, um
spleen lien, ēnis m
spur calcar, āris n
squamous squamōsus, a, um
sternal sternālis, e
sternum sternum, in
stomach gaster, tris f
stony petrōsus, a, um
stroma stroma, ătis n
sublingual sublinguālis, e
submandibular submandibulāris, e
superficial superficiālis, e
superior, upper superior, ius
supraorbital supraorbitālis, e
suprapleural suprapleurālis, e
supratonsillar supratonsillarise, e
surface facies, èi f
suture sutūra, ae f
system systēma, ătis n

## T

tail cauda, ae f
tegmen tegmen, ĭnis n
temporal temporālis, e
tendon tendo, ǐnis m
tensor (straining muscle) musculus tensor, ōris m
term termĭnus, i m
thalamus thalămus, i m
thigh femur, ŏris n
third tertius, a, um
thoracic thoracĭcus, a, um
thorax thorax, ācis m
through per (Acc.)
thyroid thyr(e)oideus, a, um
tissue textus, us m
to ad (Acc.)
tongue lingua, ae f
tooth dens, dentis $m$
top apex, ǐcis m
transverse transversus, a, um
tree arbor, ŏris f
trochanter trochanter, ēris m
true verus, a, um
trunk truncus, i m
tympanic tympanĭcus, a, um

## U

under infra (Acc.); sub (Acc. to
the question "where to?", Abl. to
the question "where ?")
upper superior, ius
upper jaw, maxilla maxilla, ae $f$
ureter urēter, ēris m
use usus, us m

## V

vein vena, ae f
velum (curtain) velum, in
vena (vein) vena, ae f
venae see vena
venous venōsus, a, um
ventricle vertricŭlus, i m
vertebra vertĕbra, ae $f$
vertebral vertebrālis, e
vessel vas, vasis $n$
vomer vomer, ěris $m$

## W

wall paries, ětis $m$
wandering migrans, ntis
wisdom sapientia, ae f

## Z

zygomatic zygomatǐcus, a, um

# Part III <br> PHARMACEUTICAL TERMINOLOGY 

## Lesson 8 <br> INTRODUCTION TO THE LATIN PHARMACEUTICAL TERMINOLOGY

## § 53. General information on the Latin pharmaceutical Terminology

The words pharmacist, pharmaceutical, pharmacy etc have in their origin the ancient Greek word pharmacon that is drug, medicine. Historically, the names of drugs and their component parts as well as the names of drug forms and some other pharmaceutical terms, especially in medical prescriptions, are given in Latin. Nowadays, the use of Latin in the pharmaceutical practice of every country depends on national tradition and other factors. Namely, the tradition of using Latin both in the drugs names and medical prescriptions lasts in Russia, Republic of Belarus, Ukraine and some other European countries.

To the Latin pharmaceutical terms belong:

1. Names of drugs: AmidopyrInum (amidopyrin), Corvalōlum (corvalol), Streptocīdum (streptocid).
2. Names of medical plants: Belladonna (belladonna), Digitalis (foxglove), Quercus (oak).
3. Names of chemical elements: Kalium (potassium), Oxygenium (oxygen), Sulfur (sulphur).
4. Adjectives: Mentha piperIta (pepper mint), Species antiasthmaticae (antiasthmatic species), Suppositoria vaginalia (vaginal suppositories).
5. Names of the drug forms: Unguentum TetracycIIni (ointment of tetracycline), Tabulettae Myelosāni (tablets of myelosan), Tinctūra Menthae (tincture of mint).
6. Names of the parts of medical plants: Tinctūra radīcis Valeriānae (tincture of valerian root), Herba Valeriānae (herb of valerian), Flores Chamomillae (flowers of matricary).
7. Supplementary nouns and adjectives (mainly in medical prescriptions): dosis (dose), numĕrus (number), talis (such).

Now let us systematize the use of capital and small letters in the Latin pharmaceutical terms.

The capital letter is used:

1. In the names of drugs: Codeīnum (codeine), Furacilīnum (furacilin), Validōlum (validol).
2. In the names of medical plants: Calendŭla (calendula), Eucalyptus (eucalyptus), Frangŭla (buckhorn).
3. In the names of chemical elements: Ferrum (iron), Oxygenium (oxygen), Zincum (zinc).

Attention! Nouns of these three groups are written with capital letter in the dictionary form too: Codeīnum, in; Calendŭla, ae f; Ferrum, in.
4. As the first letter of the names of the drug form, if this name is the first in the multiword term: Linimentum Streptocīdi (liniment of streptocid), Species antiasthmatǐcae (antiasthmatic species), Tinctūra Valeriānae (tincture of valerian).
5. As the first letter of the names of the plant component, if this name is the first in the multiword term: Herba Valeriānae (herb of valerian), Flores Chamomillae (flowers of matricary), Folia Menthae piperïtae (mint pepper leaves).

The small letter is used:

1. In adjectives both in the structure of the term and in the dictionary form: Mentha piperīta (piper mint) - piperītus, a, um;

Acĭdum acetylsalicylĭcum (acetylsalicylic acid) - acetylsalicylĭcus, a, um.
2. In the drug form names or the plant component names being not the first in the term structure as well as in the dictionary form of these names:

Acǐdum acetylsalicylǐcum in tabulettis (acetylsalicylic acid in tablets tabuletta, ae f; acetylsalicylĭcus, a, um.

Decoctum cortĭcis Quercus (decoction of oak bark) - cortex, ĭcis m; decoctum, in.
3. If the drug form name or the plant component name is used without drug names:
unguenta et linimenta (ointments and liniments); solutio ad usum externum (solution for external use); pulvěres composĭti (compound powders); folia et flores (leaves and flowers); radix et rhizōma (root and rhizome)
4. In constructions with a preposition indicating prescription, order of drug use or way of storage:

Solutio Furacilīni ad usum externum (solution of furacilin for external use); Tabulettae contra tussim (tablets for cough); Thea medicinālis pro infantĭbus (medicinal tea for children); Mixtio pro inhalationĭbus in vitro nigro (mixture for inhalating in dark phial)

Some other peculiarities of using capital or small letter in pharmaceutical terms will be further described in the subsequent parts of this textbook.

## § 54. The drug form names

Every drug is produced in a physical form most adequate for use. Traditionally, three main forms are used: solid, semisolid and liquid.

## Solid forms

Dragées (dragée, a French word which is used without latinization in Plural and hasn't any Latin dictionary form) - drops

Granǔla (granǔlum, i n) - granules of different form, containing drugs Pilŭlae (pilŭla, ae f) - pills, small balls with drug
Pulvěres (pulvis, ĕris $\mathbf{m}$ ) - powders
Species (species, ērum f, only Plural form) - species, mixture of different parts of medicinal plants

Tabulettae (tabuletta, ae f) - tablets
Theae (thea, ae f) - teas
Semisolid forms
Emplastra (emplastrum, in) - plasters
Pastae (pasta, ae f) - pastes, thick ointments
Suppositoria (suppositorium, in) - suppositories
Unguenta (unguentum, in) - ointments

## Liquid forms

Decocta (decoctum, in) - decoctions
Emulsa (emulsum, in) - emulsions
Extracta (extractum, in n) - extracts
Guttae (gutta, ae f) - drops (of liquids)
Infūsa (infūsum, in) - infusions
Linimenta (linimentum, in) - liniments
Mixtūrae (mixtūra, ae f) - mixtures
Mucilagǐnes (mucilāgo, ǐnis f) - mucilages, liquids containing mucous substances
Olea (oleum, i n) - oils
Sirūpi (sirūpus, i m) - syrups
Solutiōnes (solutio, ōnis f) - solutions
Tinctūrae (tinctūra, ae f) - tinctures
Some other drug forms
Aërosōla (aërosōlum, in n) - aerosols
Capsŭlae (capsǔla, ae f) - capsules
Lamellae (= Membranŭlae) ophthalmícae (lamella, ae f; membranŭla, ae $f)$ - ophthalmic films with drug

## § 55. Components of medical plants

cortex, ǐcis m - cortex, bark
flos, floris m - flower
folium, in - leaf
fructus, us $m$ - fruit
herba, ae f - herb
radix, īcis $f$ - root
rhizōma, ătis n - rhizome
semen, innis n - seed

## § 56. Medicinal plants in the pharmaceutical terms

The medicinal plant names are mostly nouns of the $1^{\text {th }}$ declension:
Chamovilla, ae f - matricary
Frangŭla, ae f - buckhorn
Some names are nouns of the $2^{\text {th }}$ declension:
Leonūrus, i m - motherwort
Millefolium, in - milfoil
Less numerous are nouns of the $3^{\text {th }}$ declension:
Digitālis, is f - foxglove
Adonis, ǐdis $\mathrm{m}, \mathrm{f}$ - adonis
Very rarely nouns of the $4^{\text {th }}$ declension are used: Quercus, us f - oak
One should remember that names of trees are always feminine:
Eucalyptus, if - eucalypt
Quercus, us f - oak
Some plant names consist of a noun and an adjective:
Mentha piperīta - pepper mint
Adonis vernālis - spring adonis
The medical plant names occur:

1. In the names of liquid drug forms: Tinctūra Valeriānae - tincture of valerian; Decoctum corticis Quercus - decoction of oak bark.
2. In the labels of different packages containing the components of medical plants: Folia Urtīcae - leaves of nettle; Semen Lini - seed of flax.
3. As a component of the medical prescription:

Recĭpe: Extracti Aloës fluĭdi 1 ml

- Take: Liquid extract of aloe 1 ml .

Recĭpe : Cortǐcis Crataegi 30, 0

- Take: Cortex of hawthorn 30,0 .

As we see, the name of the plant component is always placed before the plant name.

## § 57. The morphological structure of one-word Latin drug names

The one-word drug names usually consist of a noun root, a suffix (-in- is the most common, then follow suffixes -ōl- and -īd-), and, finally, the most common ending - um:

Codeīnum — codein; Dibazōlum — dibazol; Saluzīdum — saluzid
In the drug names are widely used specific Greek and Latin noun roots expressing certain pharmaceutical information. Knowledge of these morphological elements of most common usage enables to write correctly complicated drug names with a correct spelling, what is one of the main tasks of
learning the pharmaceutical part of our subject. Let you memorize the first part of these morphological elements:

| Morphological <br> root | Meaning | Latin example | English <br> equivalent |
| :---: | :---: | :---: | :---: |
| -cyclin- | antibiotics-tetracycline | Tetracyclīnum | tetracycline |
| -cyclo- | making an effect on the metabolic <br> processes | Cycloserīnum | cycloserin |
| -menth- | product including mint | Menthōlum | menthol |
| -mycīn- | antibiotics-streptomycin | Monomycīnum | monomycin |
| -myco- | antimycotic, against fungi | Mycoseptīnum | mycoseptin |
| -pyr- | influence on the body temperature | Antipyrīnum | antipyrin |
| -strept- | different pharmaceutical effects | Streptocīdum | streptocid |

You should memorize prefixes of Greek origin used in drug name constructing:

| Prefix | Meaning | Latin example | English equivalent |
| :---: | :---: | :---: | :---: |
| -a-,-an- (before <br> a vowel) | denying, removing | Apressīnum <br> Analgīnum | apressin <br> analgin |
| anti- | acting against | antiasthmatīcus | antiasthmatic |
| hyper- | increase, elevation | Hyperōlum | hyperol |
| hypo- | decrease, lowering | Hypothiazīdum | hypothiazid |

## § 58. Some rules of building multiword Pharmaceutical terms

Every multiword Latin pharmaceutical term begins, as a rule, with a drug form name. Then, the drug name follows. If the drug form has an adjective, this adjective is the last in the term:

Extractum Crataegi fluǐdum - liquid extraction of hawthorn
Tabulettae Tetracyclīni obductae - coated tablets of tetracycline
Sometimes, the drug name is used without a form name, especially if prescription or way of storage is indicated:

Aether pro narcōsi - ether for narcosis
Cycloserīnum in capsǔlis - cycloserin in capsules
Somatotropīnum humānum pro injectionĭbus - human somatotropin for injections

Thyreoidīnum in tabulettis - thyreoidin in tablets
Latin names of drugs with compound composition can be enclosed into quotation marks or inverted commas. But English equivalents of these names are used without quotation marks or inverted commas, compare:

Aërosolum "Camphomenum" - aerosol of camphomen
Suppositoria "Anaesthesolum" - suppositories of anaesthesol
You can find in the dictionaries indication with which nouns these specific signs are used.

## § 59. Exercises

## 1. Write down the dictionary form of each word and translate into English:

Extractum Leonūri fluĭdum; Linimentum Aloës; Rhizōma cum radicībus Valeriānae; Sirūpus ex fructǐbus Rosae; Solutio «Tetrosterōnum» pro injectionı̌bus; Suppositoria vaginalia cum Synthomycīno; Tabulettae Aspirīni obductae; Tinctūra foliōrum Eucalypti; Unguentum Dibiomycīni ophthalmĭcum
2. Give the dictionary form of each word and translate into Latin:
antiasthmatic species; coated tablets of tetracycline; decoction of oak bark; tincture of pepper mint; dry extract of belladonna; ether for narcosis; herb of spring adonis; liquid extract of hawthorn; medicinal tea for children; mint pepper leaves; ointment of mycoseptin; powder of foxglove leaves; root and rhizome of valerian; simple and compound powders; tablets of antipyrin; tincture of matricary flowers

## § 60. Vocabularies to the lesson 8

## I. Latin-English dictionary

Aloë, ës f - aloe
Aspirīnum, in - aspirin
cum (Abl.) — with
Dibiomycīnum, in - dibiomycine
ex (Abl.) - of
Eucalyptus, if - eucalyptus
extractum, in - extract
fluĭdus, a um - liquid
folium, in - leaf
fructus, us $m$ - fruit
injectio, ōnis f - injection
linimentum, in - liniment
Leonūrus, i m - motherwort

## II. English-Latin dictionary

adonis - Adōnis, ǐdis f antipyrin - Antipyrīnum, in bark - cortex, ǐcis m belladonna-Belladonna, ae f children - infantes, ium m, f coated - obductus, a, um compound - composĭtus, a, um
obductus, a, um - coated ophthalmĭcus, a, um - ophthalmic radix, īcis f - root rhizōma, ătis $n$ - rhizome sirūpus, i m - syrup
suppositorium, i n - suppository
Synthomycīnum, in - synthomycine
tabuletta, ae f - tablet
tinctūra, ae f - tincture
Testosterōnum, in - testosterone unguentum, in- ointment vaginālis, e - vaginal
matricary - Chamomilla, ae f
medicinal - medicinālis, e
mint - Mentha, ae f
narcosis - narcōsis, is f
oak - Quercus, us f
ointment - unguentun, in
pepper - piperĭtus, a, um
decoction - decoctum, in
dry - siccus, a, um
ether - aether, ěris $m$
extract - extractum, i, n
flower - flos, floris m
for - pro (+ Abl.)
foxglove - Digitālis, is f
herb - herba, ae f
leaf - folium, in
liquid - fluĭdus, a, um
powder - pulvis, ěris m
rhizome - rhizōma, ătis n
root — radix, īcis f
simple - simplex, ĭcis
species - species, èrum f (only plur.)
spring - vernālis, e
tablet - tabuletta, ae f
tea - thea, ae f
tertracycline - Tetracyclīnum, in
valerian - Valeriāna, ae f

# Lesson 9 <br> LATIN IN THE MEDICAL PRESCRIPTION. STANDARD VERB FORMS INDICATING ORDER AND INSTRUCTIONS IN MAKING UP THE LATIN PART OF PRESCRIPTION. GENERAL RULES OF MAKING UP THE LATIN PART OF PRESCRIPTION 

## § 61. Current use of Latin in medical prescription

The use of Latin medical prescription nowadays is still common in many states of Europe, particularly in the countries of the former USSR including the Republic of Belarus and Russian Federation. That's why the rules of proper use of Latin in medical prescriptions are obligatory in medical university education programs of these states. Latin inscriptions are written on the labels of drug packing, reference books, and in medical prescriptions.

## § 62. The Imperative verb forms used in a simple medical prescription

The Latin part of a medical prescription begins with the Imperative form Recipe: - Take: This word is addressed to a pharmacist to use the drug to make the prescription.

If the drug is produced by a pharmaceutical plant then the prescription includes the name of this drug which is written after the Recipe:

Recĭpe: Unguenti Tetracyclini ophthalmici 10,0
Take: Ointment of ophthalmic tetracycline 10,0
Recĭpe: Extracti Crataegi fluǐdi 25 ml
Take: Liquid hawthorn extract 25 ml
After that in the new line two standard Imperative verb forms follow: Da. (Give) and Signa (Write on the label) so that the full prescription gets the following forms:

Recǐpe: Unguenti Tetracyclīni 10 Da. Signa:

Take: Ointment of tetracycline 10,0 Give. Write on the label:

Recĭpe: Extracti Crataegi fluĭdi 25 m Take: Liquid hawthorn extract 25 ml Da. Signa: Give. Write on the label:

One should pay attention to the fact that both the drug form and the drug name after the "Recĭpe" are in the Genitive form. This case form depends on the quantity of the drug administered mainly in gram amounts (indicated in decimal points without the abbreviation gr.) and milliliter amounts with the abbreviation ml :


After the standard expression Signa - Write on the label - goes the signature, where the physician indicates the way of using the drug in the patient's native language.

So - from Recipe to Signa - that is how the Latin part of the simple prescription, when the drug is kept at a drugstore in the prepared form, is written.

## § 63. The Conjunctive forms in medical prescription

The Imperative verb forms can be substituted (with some exception) by the Conjunctive mode forms. These Conjunctive forms are translated into English with the word combination «let it be» + Participle II:

| Imperative <br> form | English <br> equivalent | Conjunctive form | English equivalent |
| :---: | :---: | :---: | :---: |
| Adde | Add | Addātur | Let it be added |
| Da | Give | Detur <br> Dentur tales doses | Let it be given <br> Let it be given of such doses |
| Misce | Mix | Misceātur | Let it be mixed |
| Repēte | Repeat | Repetātur | Let it be repeated |
| Signa | Write on the label | Signētur | Let it be labelled |
| Sterilĭsa! | Sterilize! | Sterilisētur! | Let it be sterilized! |

One should remember, that the Imperative form Recipe can never be replaced by the Conjunctive one.

The use of the Imperative or Conjunctive forms depends only on the physician writing out the medical prescription. As to students, they are to be able to write correctly the grammar form of an order or an instruction according to the initial Latin or English verb form.

## § 64. The structure of a complex medical prescription

Sometimes the physician asks the pharmacist to prepare a drug in the pharmacy. In this case, he writes down all components of this drug. Such a prescription is called a complex one. Naturally, in such prescription the physician indicates some components to be mixed: Misce - Mix. He can also define more precisely, for what purpose the mixing is necessary - that is for making some drug form. In this case, two forms are used: fiat for the nouns in the Singular and fiant for the nouns in the Plural:

Misce, fiat pulvis - Mix to make a powder
Misce, fiant suppositoria vaginalia - Mix to make vaginal suppositories
One should remember, that the Imperative form Misce only is used in the combination with the forms fiat and fiant.

Sometimes, the physician indicates in which form and in what amount the drug is to be prepared. In this case, he writes down these standard forms:

Da (Dentur) tales doses numěro ... in tabulettis (ampullis, capsǔlis etc) - Give (Let be given) in such dose amount... in tablets (ampoules, capsules etc.) form

If two or more components are taken in the same amount, the dose is indicated only after the latter one, and the adverb ana "of each" is written before this amount:

Recǐpe: Cortǐcis Frangǔlae Take: Cortex of buckthorn Foliōrum Urtīcae ana $15,0 \quad$ Leaves of nettle of each 15,0

Now, let's see some complex medical prescriptions with different standard phrases:

Recĭpe: Sulfadimezini
Streptocidi
Synthomycini ana 1,0
Misce, fiat pulvis
Detur
Signētur:
Recĭpe: Euphyllini 0,2
Butyri Cacao 2,0
Misce, fiat suppositorium
Da tales doses numěro 6
Signa:

Take: Sulfadimezin
Streptocid
Synthomycin of each 1,0
Mix to make a powder
Let it be given
Let it be labelled:
Take: Euphyllin
Cocoa oil 2,0
Mix to make a suppository
Give such dose in the amount 6
Write on the label:

## § 65. Some peculiarities of quantity expression in the medical prescription

Sometimes, the amount of oils or other liquids can be indicated in drops. The number of drops is written in Roman figures. If one drop is indicated, so
the Accusative Singular form guttam is used, if more than one, the Accusative plural form guttas:

Recĭpe: Olei Menthae piperītae guttam I
Recĭpe: Olei Eucalypti guttas V

Take: Mint pepper oil I drop
Take: Eucalypt oil V drops

In some cases, the physician doesn't indicate the dosage of a complex prescription component and lets the pharmacist determine the quantity of this component on his own. In this case, the standard expression quantum satis in sufficient amount - is used:

Recĭpe: Chinosōli 0,03
Acĭdi borĭci 0,3
Tannini 0,06
Olei Cacao quantum satis, fiat suppositorium vaginale Da tales doses numěro 6 Signa:

Take: Chinosol 0,03
Boric acid 0,3
Tannin 0,06
Cocoa oil in sufficient amount to make vaginal suppository
Give such dose in the amount 6 Write on the label:

## § 66. Some important rules for making up the Latin part of medical prescription

1. Every new line begins with the capital letter.
2. Every first letter of the following new line is written strictly under the first letter of the previous one.
3. If the prescription text is to be continued in the next line, the first letter in the next line should begin under the fourth letter of the previous one.
4. Any correction in the prescription text is forbidden.
§ 67. Morphological roots of plant origin indicating alkaloids and glycosides with different pharmaceutical effects

| Morphological roots | Latin examples | English equivalents |
| :---: | :---: | :---: |
| -anth- | Galanthamīnum, in | Galanthamin sunflower |
| -eph-, | Helianthus, i m |  |
| -ephedr-, | Ephatīnum, i n | ephedrīnum, i n |
| -phedr- | Theophedrīnum, in | ephedrin <br> theophedrin |
| -glyc(y)- | Glycerīnum, i n | glycerin |
|  | Corglycōnum, in | corglycon |
|  | Glycyrrhīza, ae i | licorice |
|  | Sed: Glucōsum, i n | But: glucose |
| -phyll- | Euphyllīnum, in | euphylline |
|  | Platyphyllīnum, in | platyphylline |


| Morphological roots | Latin examples | English equivalents |
| :---: | :---: | :---: |
| -phyt | Phytīnum, i n <br> Phytolysīnum, i n | phytin <br> phytolysin |
| -stroph- | Strophanthus, i m <br> Strophosānum, i n | strophanthus <br> strophosan |
| -the(o)- | Theobromīnum, in <br> Theophyllīnum, in | theobromin <br> theophylline |

## § 68. Exercises

1. Give the dictionary form of each word, translate the terms into English:

Capsǔlae Phytomenadiōni; Emulsum olei Helianthi; Granŭla Glycyrami; Pulvis Phytīni pro infantǐbus; Solutio Corglycōni in ampullis; Solutio Glucōsi pro injectionǐbus; Suppositoria cum Euphyllīno; Tabulettae «Theophedrinum»; Theophyllīnum in tabulettis
2. Give the dictionary form of each word, translate the terms into Latin: aerosol of ephatin; dry (liquid) extract of licorice; glyceric solution of ichthyol; oily solution of phytomenadion; pectoral species; tincture of strophanthus; sunflower oil for emulsion; suppositories with theophylline; sublingual tablets of glycin
3. Write down the dictionary form of the nouns and adjectives as well as standard verb forms indicating order or instruction in medical prescription; translate the texts of medical prescriptions into Latin:

1. Take: | Soluble streptocid 5,0 |
| :--- |
| Solution of glucose $10 \%-$ |
| $\quad 100 \mathrm{ml}$ |
|  |
| Mix. Let it be sterilized! |
| Give. Write on the label: |
2. Take: Tincture of srophanthus 5 ml

Tincture of lily of the valley
Tincture of valerian of each 10 ml
Let it be mixed
Let it be given
Let it be labelled:
5. Take: Solution of strophanthine $0,05 \%-1 \mathrm{ml}$
Give in such dose amount 10 in ampoules
Write on the label:
2. Take: Theophylline 0,2

Cocoa oil 2,0
Mix to make a rectal suppository
Give. Write on the label:
4. Take: Cortex of althea

Cortex of licorice Seed of flax of each 10,0
Leaves of eucalyptus 2,5
Mix to make a species
Give. Write on the label:
6. Take: Oily solution of nitroglycerin $1 \%-0,0005$
Let it be given in such dose amount 20 in capsules
Let it be labelled:
7. Take: Chloroform

Sunflower oil of each 20 ml
Mix to make a liniment
Let it be given
Let it be labelled:
8. Take: Ichthyol 3,0

Vaseline up to 30,0
Mix to make an ointment
Give.
Write on the label:

## § 69. Vocabulary to lesson 15

## I. Latin-English vocabulary

ampulla, ae f - ampoule capsŭla, ae f - capsule Corglycōnum, in - corglycon emulsum, in - emulsion Euphyllīnum, in - euphylline Glycyrāmum, in - glycyram Glucōsum, in - glucose granŭlum, in - granule Helianthus, i m - sunflower

## II. English-Latin vocabulary

aerosol - aërosōlum, in
althea - Althaea, ae f
ampoule - ampulla, ae f
capsule - capsǔla, ae f
chloroform - Chloroformium, in
cocoa - Cacāo (without
a dictionary form)
extract - extractum, in
ephatin - Ephatīnum, in
emulsion - emulsum, in
eucalyptus - Eucalyptus, if
flax - Linum, in
glucose - Glucōsum, in
glyceric - glycerinōsus, a, um
glycin - Glycīnum, in
ichthyol - Ichthyōlum, in
leafe - folium, in
licorice - Glycyrrhīza, ae f
lily of the valley - Convallaria, ae f
infans, ntis m, f-child Phytīnum, in - phytin Phytomenadiōnum, in - phytomenadion pulvis, ĕris $m$ - powder solutio, ōnis f - solution tabuletta, ae f-tablet Theophedrinum, in - theophedrine Thehophyllīnum, in - theophylline
liniment - linimentum, in
Nitroglycerin - Nitroglycerīnum, in oil - oleum, in
oily - oleōsus, a, um
pectoral - pectorālis, e
phytomenadion - Phytomenadiōnum, in
rectal - rectālis, e
seed - semen, ĭnis n
soluble - solubǐlis, e
solution - solutio, ōnis f
species - species, èrum f (only Plural)
streptocide - Streptocīdum, in
strophanthine - Strophanthīnum, in
strophanthus - Strophanthus, im
sublingual - sublinguālis, e
sunflower - Helianthus, i m
theophylline - Theophyllīnum, in
up to - ad
Vaseline - Vaselīnum, in

## Lesson 10

## THE USE OF THE ACCUSATUVE OF SOME PHARMACEUTICAL FORMS IN THE FIRST LINE OF A MEDICAL PRESCRIPTION

## § 70. General information on the use of the Accusative of the pharmaceutical forms in a medical prescription

The Accusative of some pharmaceutical forms is used only in a simple medical prescription. This is the way of prescribing tablets, drops, suppositories, ophthalmic films, and sponges for different medical purposes, aerosols. The name of these pharmaceutical forms is written in the Accusative singular or plural. The Latin drug name in the Nominative form is sometimes enclosed in inverted commas or quotation marks, which are omitted in the English text, where in this case the common construction with preposition "of" is used. The amount of the prescribed drug is hereby not indicated in grams or in milliliters but is expressed by the word "numěrus" (number) in the Ablative form (numěro) and a common figure. In the second line the standard verb forms are written:

Recĭpe: Tabulettas "Antistrumīnum" Take: Tablets of antistrumin number 50 numěro 50
Detur.
Signetur:
Let it be given
Let it be labelled:
Recĭpe: Tabulettas Aloës obductas 0,05 numěro 20
Da
Signa:

Give.
Write on the label:

As in English drug names inverted commas or quotation marks are not used, it is impossible when translating to find out which Latin equivalent drug name with these specific signs is to be written. That is why when translating from English into Latin we have to consult the dictionary and to find out whether the drug name is enclosed in inverted commas or quotation marks or not. So, if we see in the dictionary: psoriasin (ointment) - Unguentum "Psoriasīnum"; antistrumin (tablets) - Tabulettae «Antistrumīnum»; Benspar (capsules) - Capsulae "Bensparum", we know, how the Latin drug name is to be written correctly, for example:
Take: Capsules of benspar number 100

Recĭpe: Capsŭlas "Benspar" numěro 100
Give.
Da. Signa:
Write on the label:

## § 71. The prescription of tablets in the Accusative form

The drug prescription in tablets may proceed in three forms.
In the first case after Recĭpe the Accusative singular form Tabulettam is written, then follow the drug name in the Genitive form and the dose. In the second line of the prescription the instruction Da (Dentur) tales doses numěro ... in tabulettis is written and after that the standard verb form Signa (Signetur) follows:
Recĭpe: Tabulettam Paracetamoli 0,3 Take: Tablet of paracetamol 0,3
Da tales doses numero 6 in Give such a dose in the mount tabulettis
Signa: 6 in tablets
Write on the label:
In the second case after "Recǐpe" the Accusative plural form "Tabulettas" is written, then follow the drug name in the Genitive form and figures indicating the amount of active medical substance of a tablet and, finally, the dosage expressed by the "numero" and a figure:
Recǐpe: Tabulettas Paracetamōli 0,3 Take: Tablet of paracetamol 0,3 numero 6
Da
Signa: number 6
Give
Write on the label:
But the same drug can be prescribed in a traditional form indicating the drug quantity, and that is the third way of drug prescribing in the tablet form. In this case after "Recĭpe" the drug name and its dose follow. In the second line the instruction Da (Dentur) tales doses numěro 6 in tabulettis and, finally, the standard form Signa (Signetur) are written:

Recǐpe: Paracetamōli 0,3
Da tales doses numěro 6 in tabulettis
Signa:

Take: Paracetamol 0,3
Give such a dose in the amount 6 in tablets
Write on the label:

It is absolutely imperative that every doctor is to know all the ways of writing out medical prescriptions. But the choice of a prescription form is up to him.

## § 72. The prescription of drops in the Accusative form

Drops (as the equivalent in Latin pharmaceutical terminology the French word "dragées" is used) are now prescribed mainly in the plural form. From the grammar point of view, the "dragées" is considered as Accusative depending on the word Recǐpe, but as a French word, it has no case and dictionary form. The prescription regulations for drops are the following. After the Recĭpe follow
the form Dragées, the drug names in inverted commas (quotation marks) or in the Genitive form and the Ablative case numero with a figure indicating the dose:

| Recĭpe: | Dragées "Undevitum" numero 3 | Take: |
| :--- | :--- | :--- |
| Detur. Drops of undevit number 30 <br> Signetur:  <br> Let it be given  |  |  |
|  | Let it be labelled: |  |

One should add that sometimes, some other order of drops prescription is used. In this case, after Recĭpe the singular form Dragée is written with the drug name in the Genitive and a figure indicating the dose. In the second line follows the phrase Da (Dentur tales doses) numero ...:

| Recĭpe: | Dragée Diazolini 0,05 | Take: | Dragée of diazolin 0,05 |
| :--- | :--- | ---: | :--- |
|  | Da tales doses numero 20 |  | Give such a dose in the amount 20 |
| Signa: |  | Write on the label: |  |

## § 73. The prescription of ophthalmic films

Ophthalmic films are absorbable gelatin films containing drug substances. They are used instead of ophthalmic drops when keeping such a film under the eyelid at night.

The ophthalmic films are usually prescribed with the preposition "cum". The prescription regulations for the ophthalmic films are the following. The verb Recipe is followed by the Accusative plural forms lamellas (or membranulas) ophthalmicas, the drug name in the Genitive, the preposition "cum" with the active pharmaceutical component and the form numéro with a figure. In the second and third lines the standard phrases Da (Dentur) tales doses numero ... and Signa (Signetur) are written:
Recǐpe: Lamellas ophthalmicas cum Take: Ophthalmic films with novocain

Novocaino numero 8
Da. Signa:
number 8
Give. Write on the label:

## § 74. The prescription of suppositories in the Accusative case

A pharmaceutical suppository is a drug in the form of a round or conical tablet which is solid at room temperature and semisolid at body temperature. They distinguish the rectal suppository and the vaginal one. In the Accusative case, suppositories are prescribed as medical sponges:

1. Recĭpe is followed by the Accusative plural form Suppositoria with the adjective vaginalia (rectalia) or without these adjectives, the drug name in inverted commas and the numero with a figure. The second and the third lines contain the standard phrases Da (Dentur) and Signa (Signetur):

Recǐpe: Suppositoria vaginalia
«Osarbonum» numěro 10
Da. Signa:

Take: Vaginal suppositories of osarbon number 10
Give. Write on the label:
2. Recipe is followed by the Accusative plural form Suppositoria, the preposition "cum" and the active pharmaceutical component in the Ablative, a figure indicating the amount of this component, the form "numero" with a figure. After that the standard forms Da (Detur) and Signa (Signetur) follow in the next lines:

Recĭpe: Suppositoria cum
Diprophyllīno 0,5 numěro 30
Detur.
Signetur:

Take: Suppositories with
diprophylline 0,5 number 30
Let it be given.
Let it be labelled:

## § 75. The prescription of aerosols in the Accusative case

An aerosol contains the drug in a gaseous form which is contained in a small cylinder provided with a valve.

Aerosols are prescribed in the Accusative singular form in two ways:

1. Recipe is followed by the Accusative singular form Aërosolum, its name in inverted commas and the numero with a figure. After that the standard forms Da (Detur) and Signa (Signetur) follow in the next lines:
Recĭpe: Aërosolum «Proposōlum» Take: Aerosol of proposol number 2
numero 2
Da
Signa:
2. Recipe is followed by the Accusative singular form Aërosolum and its name in inverted commas or quotation marks. In the second line, the standard phrase Da (Dentur) tales doses numero is written:
Recĭpe: Aërosolum «Proposōlum» Take: Aerosol of proposol Da tales doses numero 2 Signa:

Give.
Write on the label:

Give such a dose in the amount 2
Write on the label:

## § 76. Morphological roots

| Morpholo- <br> gical roots | Meaning | Latin examples | English <br> equivalents |
| :---: | :---: | :---: | :---: |
| -aesthes-, | correction | Anaesthesīnum, in | anaesthesin |
| -aesth-, | of <br> -asthes-, | sensibility | Aesthocīnum, i n | | aesthocin |
| :---: |
| -esthes- |


| Morpholo- <br> gical roots | Meaning | Latin examples | English <br> equivalents |
| :---: | :---: | :---: | :---: |
| -cain- | anesthetic effect | Novocaīnum, i n <br> Ultracaīnum, in | novocain <br> ultracain |
| -camph- | influence on thecentral and <br> peripheral nervous system | Bromcamphōra, ae f <br> Camphōnium, i n | bromcamphora <br> camphonium |
| -erythr-, <br> -eryth-, <br> -ery- | 1) containing erythromycin <br> 2) produced from erythrocytes | Erythromycīnum, in <br> Eryhaemum, in <br> Erycyclīnum, i n | erythromycīn <br> eryhaem <br> erycycline |
| -haem- | haemostatic or haematopoiesis <br> stimulating effect | haemostatīcus, a, um <br> Haemostimulīnum, i n | haemostatic <br> haemostimulin |
| -oestr- | female genital hormones | Oestradiōlum, i n <br> Synoestrōlum, in | oestradiol <br> synoestrol |
| -test- | male genital hormones | Medrotestrōnum, in <br> Testosterōnum, in | medrotestron <br> testosteron |
| -thym- | immunity stimulators <br> produced by thymus | Thymalīnum, in <br> Thymoptīnum, in | thymalin <br> thymoptin |
| -thyr(e)- | correction of thyroid function | Thyreoidīnum, in <br> Rifathyroīnum, in | thyroidin <br> rifathyroin |

## § 77. Exercises

## 1. Give the dictionary form of each word, translate from Latin into

 English:Ampullae cum pulvěre Rifathyrō̄ni; Granŭla Erycyclīni in capsŭlis; Injectiōnes Thymalīni pro adultis; Lamellae ophthalmĭcae cum Dicaīno; Pulvis Dicaīni crystallisātus; Solutio Pyromecaīni pro infusionǐbus intravenōsis; Spongia haemostatīca in vitro vitreo; Suppositoria "Anaesthesōlum"; Thyreoidīnum in tabulettis
2. Give the dictionary form of each word, translate from English into

## Latin:

anaesthesin for narcosis; camphoric spirit for triturating; eryhaem in vitreous phials; haemostatic plaster of feracryl; oily solution of synoestrol in the ampoules; testoenat for injections; tablets of pregoestrol; solution of thymogen for intranasal introduction
3. Give the dictionary form of the nouns and the adjectives; translate into

## Latin:

1. Take: Coated tablets of allochol for 2. Take: Capsules of oestradiol 0,14 children number 25
Give.Write on the label:
number 12
Give. Write on the label:
2. Take: Thyreoidin 0,05

Let it be given of such a dose number 50 in tablets
4. Take: Solution of haemophobin 5 ml Give such a dose in the amount 10 in ampoules

Let it be labelled:
5. Take: Erynit 0,1

Give such a dose in the amount 20 in tablets
Write on the label:
7. Take: Vaginal suppositories with synthomycin 0,15 number 10
Give. Write on the label:
9. Take: Hemostatic collagen sponge

Let it be given of such a dose number 4 in plastic packets
Let it be labelled:

Write on the label:
6. Take: Ophthalmic films with neomycin number 8
Let it be given
Let it be labelled:
8. Take: Aerosol of camphomen Give such a dose in the amount 2 Write on the label:
10. Take: Anaestesin 2,5

Cocoa oil in sufficient amount to make a rectal suppository
Let it be given of such a dose number 50 in tablets
Let it be labelled:

## § 78. Vocabulary to lesson 10

## Latin-English vocabulary

adultus, a, um - adult ampulla, ae f - ampoule "Anaesthesōlum" (Anaesthesōlum, i n) anaesthesol
capsǔla, ae f - capsule crystallisātus, a, um - crystal
Dicaīnum, i n- dicain Erycyclīnum, in - erycyclin granŭlum, i n - granule haemostatǐcus, a um - haemostatic infusio, ōnis f — infusion intravenōsus, a, um - intravenous

## English-Latin vocabulary

aerosol - aërosōlum, i n
ampoule - ampulla, ae f
anaesthesin - Anaesthesinum, in
camphomen - "Camphomēnum"
(Camphomēnum, in)
camphoric - camphorātus, a, um
collagen - collagenĭcus, a, um
eryhaem - Eryhaemum, in
lamella, ae f - film (ophthalmic)
Oestradiōlum, i n - oestradiol
ophthalmicus, a, um - ophthalmic Pyromecaīnum, i n-pyromecain pulvis, ěris $m$ - powder Rifathyroīnum, i n — rifathyroin spongia, ae f - sponge
Thymalīnum, in - thymalin
Thyreoidīnum, in - thyreoidin
vitrum, i n - phial, glass
vitreus, a, um - vitreous
introduction - inductio, ōnis f neomycin - Neomycīnum, i n oily - oleōsus, a, um packet - fascicŭlus, i m
phial - vitrum, in
plaster - emplasrum, i n
plastic - polyaethylenĭcus, a, um pregoestrol - Praegoestrōlum, in
erynit - Erynitum, in erythromycin - Erythromycīnum, in feracryl - "Feracrylum"
(Feracrylum, in)
glass - 1) vitrum, in; 2) vitreus, a, um haemophobin - Haemophobīnum, i n haemostatic - haemostatĭcus, a, um in sufficient amount - quantum satis intranasal - intranasālis, e
spirit (alcohol) - spirǐtus, us $m$ sponge - spongia, ae f synthomycin - Synthomycīnum, in synoestrol - Synoestrōlum, in testoenat - Testoenātum, in trituration - trituratio, ōnis f thymogen - Thymogĕnum, in vaginal - vaginālis, e

## Lesson 11 <br> LATIN NAMES OF CHEMICAL ELEMENTS, ACIDS, OXIDES, HYDROXIDES, PEROXIDES

## § 79. Latin names of chemical elements

Latin names of chemical elements are, as a rule, nouns of the second declension and of the neuter gender beginning always with a capital letter:

Aluminium, in-aluminum
Ferrum, in-iron
Zincum, i n - zinc
Nouns of two chemical elements are exception from this rule:
Phosphǒrus, i m - phosphorus
Sulfur, ŭris n - sulphur (in American English the spelling is sulfur)
Some elements have double names:
fluorine - Fluōrum, in n Phthorum, in
magnesium - Magnium, in = Magnesium, in
See the chemical element names of most common usage in the table below:

| Latin chemical symbols | Latin names | English names |
| :---: | :---: | :---: |
| Al | Aluminium | aluminium |
| Ag | Argentum | silver |
| As | Arsenĭcum | arsenic |
| Au | Aurum | gold |
| Ba | Barium | barium |
| Bi | Bismŭthum | bismuth |
| Br | Bromum | bromine |
| Ca | Calcium | calcium |
| C | Carboneum | carbon |
| Cl | Chlorum | chlorine |
| Cu | Cuprum | copper |
| Fe | Ferrum | iron |
| F | Fluōrum seu Phthorum | fluorine |


| Latin chemical symbols | Latin names | English names |
| :---: | :---: | :---: |
| Hg | Hydrargy̆rum | mercury |
| H | Hydrogenium | hydrogen |
| I | Iōdum | iodine |
| K | Kalium | potassium |
| Li | Lithium | lithium |
| Mg | Magnium seu Magnesium | magnesium |
| Mn | Mangănum | manganese |
| Na | Natrium | sodium |
| N | Nitrogenium | nitrogen |
| O | Oxygenium | oxygen |
| Pb | Plumbum | lead |
| P | Phosphŏrus | phosphorus |
| Sl | Silicium | silicon |
| S | Sulfur | sulphur (sulfur) |
| Zn | Zincum | zinc |

## § 80. Latin names of acids

Every Latin acid name consists of the noun acǐdum (acid) and an adjective of the first group with the ending -um in accordance with the rules of grammar agreement. One should, hereby, pay attention, that in the dictionary form, both nouns and adjective are written with a small letter but in the combination with adjectives the noun acĭdum is written with a capital letter:
acǐdum, in - acid
borǐcus, a, um - boric
but: Acĭdum borǐcum
There are three variants of Latin acid names. The first two variants cover the names of acids which include oxygen, the last one - the names of acids without oxygen.

In the first variant, when an acid contains the greatest amount of oxygen, the suffix -ic- and the ending -um are added to the stem of a chemical element. English equivalents of these Latin adjectives have the suffix -ic as a final element:

| Latin noun of <br> chemical element | The <br> stem | Latin adjective <br> indicating the acid | The full Latin name <br> of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ŭris n | sulfur- | sulfurǐcus, a, um | Acǐdum sulfurĭcum <br> $\left(\mathrm{H}_{2} \mathrm{SO}_{4}\right)$ | sulphuric acid |

The same way of acid names building is used when names of organic acids are formed:

| Latin noun | The <br> stem | Latin adjective <br> indicating the acid | The full Latin name <br> of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| lac, lactis n (milk) | lact- | lactĭcus, a, um | Acǐdum lactĭcum | lactic acid |

In the second variant when the acid of the same element contains lesser amount of oxygen, the suffix -os- is used. In this case English equivalents have the ending -ous:

| Latin noun | The <br> stem | Latin adjective <br> indicating the acid | The full Latin name <br> of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ŭris n | sulfur- | sulfurōsus, a, um | Acǐdum sulfurōsum <br> $\left(\mathrm{H}_{2} \mathrm{SO}_{3}\right)$ | sulphurous acid |

In the third variant, when an acid doesn't contain oxygen, the prefix hydroand the suffix -ic- are added to the stem:

| Latin noun | The <br> stem | Latin adjective <br> indicating the acid | The full Latin name <br> of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ŭris n | sulfur- | hydrosulfurǐcus, <br> a, um | Acǐdum <br> sulfurōsum $\left(\mathrm{H}_{2} \mathrm{~S}\right)$ | hydrosulphuric <br> acid |

One should remember that in acid names (as well as in salt names) formed from the noun Nitrogenium only a part of the stem is used: -nitr:

Acĭdum nitrǐcum - nitric acid
Acǐdum nitrōsum - nitrous acid

## § 81. Latin names of oxides, hydroxides, peroxides

Latin names of oxides, hydroxides, peroxides consist of two words. The first one is always the Genitive form of a chemical element, then the Nominative form oxy̆dum (hydroxy̆dum, peroxy̆dum) follows:

Zinci oxy̆dum - zinc oxide
Aluminii hydroxy̆dum - aluminum hydroxide
Hydrogenii peroxy̆dum - hydrogen peroxide
The names oxyydum, hydroxydum, peroxy̆dum are nouns of the neutral gender of the second declension:
oxy̆dum, i n
hydroxy̆dum, in
peroxy̆dum, in
§ 82. Morphological roots reflecting chemical information

| Morpho- <br> logical roots | Meaning | Latin examples | English <br> equivalents |
| :---: | :---: | :---: | :---: |
| -(a)z-, | presence of nitrogen | Azaleptīnum, i n | azaleptin |
| -(a)zid-, | in the heterocyclic | Phthivazīdum, in | phthivazid |
| -(a)zin-, | compounds | Sulfapyridazīnum, in | sulfapyridazin |
| -(a)zol-, |  | Norsulfazōlum, in | norsulfazol |
| -(a)zon- |  | Sibazōnum, in | sibazon |


| Morphological roots | Meaning | Latin examples | $\begin{gathered} \text { English } \\ \text { equivalents } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| -benz- | presence of benzene ring | Benzohexonium, in benzoĭcus, a, um | benzohexon benzoic |
| -cyan- | cyanic acid, its anions or a cyan group | Cyanocobalamīnum, in cyanĭdum, in | cyanocobalamine cyanide |
| -hydr-, -hyd- | presence of hydrogen, water or a hydroxyl group | Hydrogenium, in Formaldehy̆dum, in | hydrogen formaldehyde |
| -naphth- | products of petroleum | Naphthalānum, in Naphthyzīnum, in | naphthalan naphthyzin |
| -0xy- | presence of oxygen and its compounds | Chinoxydīnum, In Oxylidīnum, in | chinoxydin oxylidin |
| -phtha(l)- | derivatives of phthalic acid | Phthalazōlum, in Phthazōlum, in | phthalazol phthazol |
| -phthor- | presence of fluorine compounds | Phthorocortum, in Phthoracizīnum, in | phthoracizin phthorocort |
| -sulf- | presence of sulphur or its derivatives | Norsulfazōlum, in sulfas, ātis m | norsulphazol sulphate |
| -thi- | presence of sulphur atom in the names of thiosalts and thioacids | Thiopentālum, in thiosulfas, ātis m | thiopental thiosulphate |
| -yl- | presence of carbohydrogenic radicals | Benzylpenicillīnum, in salicylĭcus, a, um | benzylpenicillin salicylic |

## § 83. Exercises

## 1. Give the dictionary form of each word and translate into English:

Acǐdum arsenicōsum anhydrĭcum; Acĭdum ascorbinĭcum in dragées; Cyanocobalamīnum seu Vitamīnum B ${ }_{12}$; Emplastrum Plumbi simplex; Emulsum Erythrophosphatīdi in ampullis; Phthalazōlum in tabulettis; Pulvis Magnesii oxy̌di; Sirūpus Aloës cum Ferro; Sulfacȳlum solubǐle pro injectionǐbus; Suspensio Hydrocortisōni in flaconǐbus; Tabulettae Acǐdi folĭci; Tabulettae Acĭdi acetysalicylǐci enterosolubĭles

## 2. Give the dictionary form of each word and translate into Latin:

1) ascorbic acid in drops; coated tablets of glutaminic acid; clear hydrochloric acid; diluted solution of hydrogen peroxide; emulsion of castor oil; granules of furazolidon for children; powder of foxglove leaves; solution of nicotinic acid; solution of soluthizon for intratracheal injection; spirituous solution of iodine for internal use; suspension of aluminium hydroxide; tablets of lipoic acid; thioacetazon in tablets; white powder of sulphadimidine; yellow mercury oxide

| 1. Take: | Tablets of phthalazol 0,05 number 20 | 2. Take: | Naphthalan ointment 50,0 <br> Let it be given |
| :---: | :---: | :---: | :---: |
|  | Give. Write on the label: |  | Let it be labelled: |
| 3. Take: | Clear hydrochloric acid 6,0 | 4. Take: | Purified sulphur |
|  | Distilled water up to 100 ml |  | Peach oil of each 30,0 |
|  | Let it be mixed |  | Let it be mixed |
|  | Let it be given |  | Let it be sterilized! |
|  | Let it be labelled: |  | Let it be given |
|  |  |  | Let it be labelled: |
| 5. Take: | Streptocide | 6. Take: | Glutaminic acid 1,5 |
|  | Sulphadimezin |  | Solution of glucose $25 \%$ - |
|  | Norsulphazol of each 5,0 |  | 450 ml |
|  | Mix to make the finest |  | Mix |
|  | powder |  | Give |
|  | Let it be given |  | Write on the label: |
|  | Let it be labelled: |  |  |
| 7. Take: | Menthol 0,1 | 8. Take: | Boric acid 5,0 |
|  | Zinc oxide |  | Zinc oxide |
|  | Boric acid of each 0,5 |  | Wheat starch of each 25,0 |
|  | Vaseline 10,0 |  | Ointment of naphthalan 45,0 |
|  | Mix to make an ointment |  | Mix to make a paste |
|  | Give |  | Give |
|  | Write on the label: |  | Write on the label: |
| 9. Take: | Ascorbic acid 0,2 | 10. Take: | Yellow hydrogen oxide 0,6 |
|  | Nicotinic acid |  | Ichthyol 0,8 |
|  | Riboflavin of each 0,25 |  | Zinc ointment 20,0 |
|  | Distilled water up to 100 ml |  | Mix to make a paste |
|  | Let it be mixed |  | Give |
|  | Let it be given |  | Write on the label: |
|  | Let it be labelled: |  |  |
| 11. Take: | Extract of belladonna 0,015 | 12. Take: | Salicylic acid |
|  | Powder of rhubarb root |  | Lactic acid of each 6,0 |
|  | Magnesium oxide of each |  | Icy acetic acid 3,0 |
|  | 0,3 |  | Collodium up to 20,0 |
|  | Mix to make a powder |  | Mix |
|  | Give such a dose |  | Give |
|  | in the amount 10 |  | Write on the label: |
|  | Write on the label: |  |  |

## § 84. Vocabulary to lesson 11

## I. Latin-English vocabulary

acetylsalicylĭcus, a, um - acetylsalicylic ačidum, in - acid
Aloë, ës f — aloe
anhydrǐcus, a, um - anhydrous
arsenicōsus, a, um - arsenous
ascorbinǐcus, a, um - ascorbic
Cyanocobalamīnum, in cyanocobalamin
depurātus, a, um - purified
dragées - drops
emplastrum, in - plaster
emulsum, in - emulsion
enterosolubĭlis, e - enteric soluble
Erythrophosphatīdum, in -
erythrophosphatide
Ferrum, in - iron
flaco, ōnis m - phial
folǐcus, a, um - folic

## II. English-Latin vocabulary

acetic - acetĩcus, a um
acid - acĭdum, i n
aluminium - Aluminium, in
ascorbic - ascorbinǐcus, a, um
boric - borǐcus, a, um
castor oil - oleum Ricǐni
castor oil plant - Ricĭnus, i m
clear - purus, a, um
coated - obductus, a, um
collodium - Collodium, in
diluted - dilūtus, a, um
distilled - destillātus, a, um
drops - dragées
emulsion - emulsum, in
finest - subtilissimmus, a, um
foxglove - Digitālis, is f
furazolidon - Furazolidōnum, in
glutaminic - glutaminǐcus, a, um
hydrochloric - hydrochlorǐcus, a, um

Hydrocortisōnum, in hydrocortisone
Magnesium, in - magnesium
Naphthalānum, in - naphthalan
Norsulfazōlum, in - norsulphazol
oxy̆dum, in - oxide
Phthalazōlum, in - phthalazol
Plumbum, in - lead
Riboflavīnum, in - riboflavin
Ricĭnus, i m - castor-oil plant seu - or
simplex, ǐcis - simple
solubîlis, e - soluble
Streptocīdum, in - streptocide
Sulfac• lum, in - sulphacyl
Sulfur, ŭris n - sulphur
suspensio, ōnis f - suspension
vitamīnum, in - vitamīn
lipoic - lipoǐcus, a, um
mercury - Hydrargy̆rum, in
naphthalan - Naphthalānum, in
nicotinic - nicotinǐcus, a, um
oxide - oxy̆dum, in
paste - pasta, ae f
peach - Persǐcum, in
peroxide - peroxy̆dum, in
phthalazol - Phthalazōlum, in
peach oil - Oleum Persicōrum
rhubarb - Rheum, in
riboflavin - Riboflavīnum, in
root - radix, īcis f
salicylic - salicylĭcus, a, um
soluthizon - Soluthizōnum, in
spirituous - spirituōsus, a, um
starch - Amy̆lum, in
sulphadimezine - Sulfadimezīnum, in
sulphadimidine - Sulfadimidīnum, in
hydrogen - Hydrogenium, in hydroxide - hydroxy̆dum, in ichthyol - Ichthyōlum, in icy - glaciālis, e intratracheal - intratracheālis, e iodine - Iōdum, in lactic - lactǐcus, a, um
thioacetazone - Thioacetazonum, in
up to - ad
use - usus, us m
vaseline - Vaselīnum, in
water - aqua, ae f
wheat - Tritīcum, in
yellow - flavus, a, um

## Lesson 12

LATIN NAMES OF SALTS ON THE LABELS OF DRUG NAMES AND IN MEDICAL PRESCRITIONS

## § 85. Latin names of salts, whose anions contain oxygen

Latin names of salts consist of two parts. First goes the Genitive case of a cation (a chemical element name or, more seldom, a drug name), in the second place is the Nominative of an anion. Anion names are always written with a small letter. If we speak of anions derivatives of acids containing oxygen of different degrees, two variants of these anions are distinguished:

1. Names of anions containing the greatest amount of oxygen are masculine nouns of the third declension with the endings -as in the Nominative and -ātis in the Genitive singular: $\mathrm{Na}_{2} \mathrm{SO}_{4}$ - Natrii sulfas $\rightarrow$ sulfas, ātis m:

| Chemical symbol <br> of the salt | Latin name <br> of the salt | The anion and <br> its dictionary <br> form | English <br> equivalent of <br> the anion name | English <br> equivalent <br> of the salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{SO}_{4}$ | Natrii sulfas | sulfas, ātis m | sulphate | sodium sulphate |
| $\mathrm{NaNO}_{3}$ | Natrii nitras | nitras, ātis m | nitrate | sodium nitrate |

So, one can very easily find out the correlation between English and Latin anion names of the first group: the English ending -ate corresponds to the Latin ending -as. In this way we may instantly determine Latin equivalents of English anions without analyzing their chemical composition, including all the anions of organic acids having the ending -ate too:
sodium salicylate - Natrii salicylas
testosterone propionate - Testosterōni propionas
2. The names of anions containing lesser amount of oxygen are masculine nouns of the third declension with the endings -is in the Nominative and -itis in the Genitive singular: $\mathrm{Na}_{2} \mathrm{SO}_{3}$ - Natrii sulfis $\rightarrow$ sulfis, ītis m:

| Chemical symbol <br> of the salt | Latin name of <br> the salt | The anion and <br> its dictionary <br> form | English <br> equivalent of the <br> anion name | English <br> equivalent <br> of the salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{SO}_{3}$ | Natrii sulfis | sulfis, ītis m | sulphite | sodium sulphite |
| $\mathrm{NaNO}_{2}$ | Natrii nitris | nitris, ītis m | nitrite | sodium nitrite |

As you can see, the Latin anion ending -is corresponds to the English anion ending -ite, and it allows, as it is seen above, to determine any necessary equivalent taking as well into consideration the spelling of each separate word.

## § 86. Latin names of salts whose anions do not contain oxygen

The names of anions which don't contain oxygen are neutral nouns of the second declension with the suffix -id- and the ending -um:

| Chemical <br> symbol <br> of the salt | Latin name <br> of the salt | The anion and its <br> dictionary form | English <br> equivalent of <br> the anion name | English <br> equivalent of the <br> salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{~S}$ | Natrii sulfidum | sulfĭdum, i $n$ | sulphide | sodium sulphide |
| NaCl | Natrii chlorǐdum | chloridum, i $n$ | chloride | sodium chloride |

So, the complex ending -ǐdum of the Latin anions which don't contain oxygen corresponds to the English ending -ide in the anions with the similar chemical compound.

Conclusion: if you remember the endings of the three seen above variants of Latin anions and if you know which Latin anion ending corresponds to the English one, you do not need to know the chemical compound of any salt to express correctly both English and Latin salt name.

## § 87. Anion names of basic salts

Latin anion names of basic salts are formed by adding the prefix sub-:
Bismŭthi subnĭtras - basic nitrate of bismuth
Aluminii subacētas - basic acetate of aluminium

## § 88. Two-component names of potassium and sodium salts

Two-component Latin names of potassium and sodium salts are written with a hyphen. Each component of such a name is a neutral noun of the second declension. The second component following the hyphen is written with a small letter. In the dictionary form, after the two-component Nominative cases the ending -i and the gender sign $\mathbf{n}$ follow. English equivalents of these terms are written without a hyphen:

Sulfacylum-natrium, i n - sulphacyl sodium
Benzylpenicillīnum- kalium, in - benzylpenicillin potassium
§ 89. Morphological roots reflecting pharmaceutical information

| Morpholo- <br> gical roots | Meaning | Latin examples | English <br> equivalents |
| :---: | :---: | :---: | :---: |
| -aeth- | presence of ethyl group | aethylĭcus, a, um <br> Aethynālum, i n | ethylic <br> etynal |
| -lysin-, | removing some destructive |  |  |
| -lytin- | Phytolysīnum, in <br> Broncholytīnum, in | phytolysin <br> broncholytin |  |
| -meth- | presence of methyl group | Methylēnum, i n <br> Methylium, in | methylen <br> methyl |
| -morph- | analgetics, derivatives of <br> morphine | Apomorphīnum, in <br> Morpholongum, i n | apomorphin <br> morpholong |
| -phen- | presence of phenyl group <br> Phenōlum, i n <br> Phthorophenazīnum, in | phenol <br> phthorophenazin |  |
| -phthi- | antitubercular effect | Phthivazīdum, in <br> Phthizopyrāmum, in | ftivazide <br> phthizopyram |
| -poly- | large number, multitude <br> polyvitaminōsus, a, um <br> Polyamīnum, i n | multivitaminous <br> polyamin |  |
| -thromb- | thrombolytics, against |  |  |
| thrombosis | Thromb̄̄num, i n <br> Thrombocytīnim, in | thrombin <br> thrombocytin |  |

## § 90. Exercises

## 1. Give the dictionary form of each word, translate from Latin into English:

Aether stabilisātus pro narcosi; Barii sulfas pro rentgeno; Cerebrolysīnum in ampullis ad usum parenterālem; Emulsum Benzylii benzoātis medicinālis; Granŭla Aethazōli-natrii pro infantǐbus; Membranŭlae ophthalmĭcae cum Atropīni sulfāte; Methylēnum coeruleum in capsŭlis; Phenylii salicylas in tabulettis; Pulvis Phenoxymethylpenicillīni pro suspensiōne; Solutio Aethacridīni lactātis spirituōsa; Species polyvitaminōsae et pectorāles; Tabulettae Calcii orotātis; Theobrominum-natrium cum Natrii salicylāte; Spirǐtus aethylĭcus rectificātus; Vitamīnum $\mathrm{B}_{6}$ seu Pyridoxini hydrochlorǐdum

## 2. Give the dictionary form of each word, translate from English into

## Latin:

basic acetate of lead; basic nitrate of bismuth with belladonna extract; coated tablets of tetracycline hydrochloride; hypertonic solution of sodium chloride; isotonic solution of sodium chloride; morpholong for intramuscular injections; ointment of copper citrate; ophthalmic films with fibrinolysin; polyethylenoxide for intravenous use; powder of sarcolysin for solution; precipitated calcium carbonate; rectified ethylic spirit; solution of terrilytin for inhalation; suppositories of methyluracil; syrup of broncholytin in phials; tablets of ethylmorphine hydrochloride for adults; tablets of phthivazid

## 3. Give the dictionary form of both nouns and adjectives; translate the medical prescriptions:

| 1. Take: | Tincture of spring | 2. Take: | Extract of belladonna 0,001 |
| :---: | :---: | :---: | :---: |
|  | 180 ml |  | Phenyl salicylate of each |
|  | Amidopyrin 2,0 |  | 0,25 |
|  | Sodium bromide 4,0 |  | Mix to make a powder |
|  | Codeine phosphate 0,2 |  | Give such a dose |
|  | Mix. |  | in the amount 10 |
|  | Give. |  | Write on the label: |
|  | Write on the label: |  |  |
| 3. Take: | Ethylmorphine hydrochloride 0,1 | 4. Take: | $\begin{aligned} & \text { Rectified ethyl spirit } \\ & 95 \%-20 \mathrm{ml} \end{aligned}$ |
|  | Vaseline 10,0 |  | Water for injections 100 ml |
|  | Mix to make an ointment |  | Let it be mixed |
|  | Give. |  | Let it be given |
|  | Write on the label: |  | Let it be labelled: |
| 5. Take: | Platyphylline hydrotartrate 0,005 | 6. Take: | Dimedrol 0,01 <br> Ephedrin hydrochloride 0,1 |
|  | Phenobarbital |  | Peach oil 10 ml |
|  | Papaverin hydrochloride of each 0,02 |  | Mint oil I drop Mix |
|  | Give such a dose in the amount 10 |  | Give.Write on the label: |
|  | Write on the label: |  |  |
| 7. Take: | Coated tablets of oleandoandomycin phosphate | 8. Take: | Ophthalmic films with neomycin sulphate number 10 |
|  | 0,125 number 25 |  | Let it be given |
|  | Let it be given |  | Let it be labelled: |
|  | Let it be labelled: |  |  |
| 9. Take: | Morphine hydrochloride | 10. Take: | Magnesium carbonate 4,0 |
|  | 0,01 |  | Potassium carbonate 5,0 |
|  | Apomorphine hydrochloride |  | Sodium hydrocarbonate 1,0 |
|  | 0,05 |  | Glycerin in sufficient |
|  | Diluted hydrochloric acid 1 ml |  | amount |
|  |  |  | Mix to make a paste |
|  | Distilled water up to 2000 ml |  | Give |
|  |  |  | Write on the label: |
|  | Let it be mixed |  |  |
|  | Let it be given |  |  |
|  | Let it be labelle |  |  |

11. Take: Menthol

Ethylmorphine
hydrochloride of each 200 ml
Sugar 0,03
Mix to make a powder
Give such a dose in amount 10
Write on the label:
12. Take: Tincture of althea root 180 ml
Sodium hydrocarbonate
Sodium benzoate of each 5,0
Simple syrup 20,0
Mix. Give.

Write on the label:

## § 91. Vocabulary to lesson 18

## I. Latin-English vocabulary

Aethacridīnum, i n - ethacridine
Aethazōlum-natrium, i n - ethazol sodium
aether, ěris $m$ - ether aethylĭcus, a, um - ethyl
Althaea, ae f - althea
Apomorphinum, i n-apomorphine
Atropīnum, i n - atropin
benzoas, ātis $m$ - benzoate
Benzylium, i n - benzyl
Calcium, in-calcium
Cerebrolysīnum, i n - cerebrolysin
coeruleus, a, um - blue
hydrochlorĭdum, i n - hydrochloride
lactas, ātis m - lactate
medicinālis, e - medical
Methylēnum, i n - methylene orōtas, ātis m - orotate

## II. English-Latin vocabulary

amidopyrin - Amidopyrīnum, i n apomorphine - Apomorphīnum, i n
basic acetate - subacētas, ātis m
basic nitrate - subnĭtras, ātis $m$
belladonna - Belladonna, ae f
benzoate - benzoas, ātis $m$
bismuth - Bismŭthum, in
bromide - bromĭdum, in
broncholytin - Broncholytīnum, in
parenterālis, e - parenteral pectorālis, e - pectoral Phenoxymethylpenicillīnum, i nphenoxymethylpenicillin Phenylīnum, in - phenyl polyvitaminōsus, a, um polyvitaminous
Pyridoxīnum in - pyridoxine rentgēnum, i n - roentgenoscopy salicylas, ātis m - salicylate spirituōsus, a, um - spirituous spirǐtus, us $m$ - spirit sulfas, ātis m - sulphate suspensio, ōnis f - suspension Theobrominum-natrium, intheobromine sodium vernālis, e - existing in spring vitamīnum, in - vitamin
magnesium - Magnesium, in menthol - Menthōlum, in morphine - Morphīnum, i n neomycin - Neomycīnum, in papaverine- Papaverīnum, i n peach - Persĭcum, i n peach oil - Oleum Persicōrum phenobarbital - Phenobarbitālum, in
calcium - Calcium, in
carbonate - carbōnas, ātis m
chloride - chlorǐdum, in
citrate - citras, ātis m
codeine - Codeīnum, in
copper - Cuprum, in
diluted - dilūtus, a, um
dimedrol - Dimedrōlum, in
fibrinolysin - Fibrolysīnum, in
film - lamella, ae f ; membranŭla, ae f
glycerin - Glycerīnum, in
hydrocarbonate - hydrocarbōnas, atis m
hydrochloride - hydrochlorídum, in
hypertonic - hypertonǐcus, a, um
inhalation - inhalatio, ōnis f
intramuscular - intramusculāris, e
intravenous - intravenōsus, a, um
isotonic - isotonĭcus, a, um
lead - Plumbum, in
phenyl - Phenylium, in
phosphate - phosphas, ātis m
phthivazid - Phthivazīdum, in
platyphylline - Platyphyllīnum, in
polyethylenoxide -
Polyaethylenoxīdum, in
potassium - Kalium, in
precipitated - praecipitātus, a, um
salicylate - salic• las, ātis m
sarcolysin - Sarcolysīnum, in
sodium - Natrium, in
spring Adonis (= spring pheasant's
eye) - Adōnis (ĭdis m, f) vernālis (is, e)
spirit - spiritus, us $m$
sugar - Sacchărum, in
syrup - sirūpus, i m
terrilytin - Terrilytīnum, in
vaseline - Vaselīnum, in

## § 92. Model (sample) of the final test in the pharmaceutical therminology

1. Write down the dictionary forms of each word and translate in Latin the terms:
1) basic bismuth nitrate; 2) peach oil; 3) rectified ethylic spirit; 4) ether for narcosis; 5) ascorbic acide in tablets; 6) liquid extract of hawthorn; 7) tincture of lily of the valley
2. Write down the dictionary forms of the nouns and adjectives and translate the following prescriptions in Latin:
Take: Ethylmorphine hydrochloride 0,1 Take: Oily solution of nitroglycerin Vaseline 10,0
Mix to make an ointment
Give. Write on the label:
Take: Soluble streptocid 5,0
Solution of glucose $10 \%$ 100 ml
Mix. Let it be sterilized!

Give. Write on the label:
$1 \%-0,0005$
Let it be given in such dose amount 20 in capsules
Let it be labelled:
Take: Chloroform
Sunflower oil of each 20 ml
Mix to make a liniment
Let it be given
Let it be labelled:

## LATIN-ENGLISH VOCABULAR

## A

acetylsalicylĭcus, a, um
acetylsalicylic
acǐdum, i n acid
ad (Acc.) for
adultus, a, um adult
Aethacridīnum, i n ethacridin
Aethazōlum-natrium, i n ethazol sodium
aether, ěris $m$ ether
aethylĭcus, a, um ethylĭc
Aloë, ës f aloe
Althaea, ae $\mathbf{f}$ althea
ampulla, ae $f$ ampoule
Anaesthesōlum, in anaesthesol
anhydrǐcus, a, um anhydrous
Apomorphīnum, i n apomorphin
arsenicōsus, a, um arsenicous
ascorbinĭcus, a, um ascorbic
Aspirīnum, in aspirin
Atropīnum, i $\mathbf{n}$ atropin

## B

Bariuum, in
benzoas, ātis $m$ benzoate
Benzylium, i n benzyl

## C

Calcium, i n calcium capsŭla, ae f casule
Cerebrolysīnum, i n cerebrolysin coeruleus, a, um blue
Corglycōnum, i n corglycon crystallisātus, a, um crystal cum (Abl.) with
Cyanocobalamīnum, in cyanocobalamin

## D

depurātus, a, um purified
Dibiomycīnum, i n dibiomycine
Dicaīnum, i n dicain
dragée drop

## E

emplastrum, i n plaster emulsum, in emulsion enterosolubilis, e in enter soluble Erycyclīnum, in erycyclin Erythrophosphatīdum, in
erythrophosphatide et and
Eucalyptus, if eucalyptus
Euphyllīnum, i n euphyllin
ex (Abl.) from, of
extractum, in extract

## F

Ferrum, i n iron
flaco, $\overline{\text { onnis }} \mathbf{m}$ phial
fluĭdus, a um liquid
folĭcus, a, um folic
folium, in leaf
fructus, us $\mathbf{m}$ fruit

## G

Glucōsum, i n glucose
Glycyramum, i n glycyram
granŭlum, i n granule

## H

haemostaticcus, a, um haemostatic
Helianthus, i m sunflower
hydrochlorǐdum, i n hydrochloride
Hydrocortisōnum, in
hydrocortisone

I
in (Abl) in
infans, $n$ tis m, $\mathbf{f}$ child
infusio, ōnis $\mathbf{f}$ infusion
injection, ōnis finjection
intravenōsus, a, um intravenous

## L

lactas, ātis m lactate
lamella, ae f film (ophthalmic)
Leonūrus, i m motherwort
linimentum, in liniment

## M

Magnesium, in magnesium medicinālis, $\mathbf{e}$ medical Methylēnum, in methylen

## N

Naphthalānum, in naphthalan
narcōsis, is $\mathbf{f}$ narcosis
Natrium, in sodium
Norsulfazōlum, i n norsulphazol

## O

obductus, a, um coated
Oestradiōlum, i n oestradiol
oleum, in oil
ophthalmicus, a, um ophthalmic
orōtas, ātis $\mathbf{m}$ orotate
oxy̆dum, in oxide

## P

parenterālis, e parenteral
pectorālis, e pectoral
Phenoxymethylpenicillīnum, in phenoxymethylpenicillin
Phenylium, in phenyl
Phthalazōlum, in phthalazol
Phytīnum, in phytin
Phytomenadiōnum, in
phytomenadion

Plumbum, in lead
polyvitaminōsus, a, um
polyvitaminous
pro (Abl.) for
pulvis, ĕris $m$ powder
Pyridoxīnum in pyridoxine
Pyromecaīnum, in pyromecain

## Q

quantum satis in sufficient amount Quercus, us foak

## R

 radix, īcis $\mathbf{f}$ rootrectificātus, a, um rectified rentgenum, in roentgenoscopy rhizōma, ătis $\mathbf{n}$ rhizome Riboflavinum, in riboflavin Rič̌nus, i m castor oil plant Rifathyroīnum, in rifathyroin
Rosa, ae f dog rose, wild rose

## S

salicylas, ātis m salicylate
seu or
simplex, ĭcis simple
sirūpus, im syrup
solubilis, e soluble
solutio, ōnis f solution
species, èrum f species
spirituōsus, a, um spirituous
spiritus, us $\mathbf{m}$ spirit
spongia, ae $f$ sponge
Streptocīdum, i n streptocid
Sulfac• lum, in sulfacyl
sulfas, ātis $\mathbf{m}$ sulphate
Sulfur, ŭris n sulphur
suppositorium, in suppository
suspensio, ōnis $\mathbf{f}$ suspension
Synthomycīnum, i n synthomycin

## T

tabuletta, ae f tablet
Testosterōnum, in testosteron
Theobrominum-natrium, in
theobromin sodium
Theophedrīnum, in theophedrin
Thophyllīnum, in theophylline
Thymalīnum, in thymalin
Thyreoidīnum, i n thyreoidin
tinctūra, ae $\mathbf{f}$ tincture
U
unguentum, i n ointment

## V

vaginālis, e vaginal
vitamīnum, i n vitamin
vitreus, a, um vitreous
vitrum, i n phial, glass

## ENGLISH-LATIN VOCABULARY

## A

acetic acetǐcus, a um
acid acǐdum, i n
adonis Adōnis, ǐdis f
adonis vernalis, spring pheasant eye Adōnis (ĭdis m, f) vernālis (is, e)
aerosol aërosōlum, in
althea Althaea, ae f
aluminium Aluminium, in
amidopyrin Amidopyrīnum, i n
ampoule ampulla, ae f
anaesthesin Anaesthesinum, in
antiasthmatic antiasthmatĭcus, a, um
antipyrin Antipyrīnum, in
apomorphin Apomorphīnum, in
ascorbic ascorbinǐcus, a, um

## B

bark cortex, ǐcis m basic acetate subacētas, ātis m basic nitrate subnitras, ātis m belladonna Belladonna, ae f benzoate benzoas, ātis $m$ bismuth Bismŭthum, in boric borǐcus, a, um
bromide bromǐdum, in
broncholytin Broncholytīnum, in

## C

calcium Calcium, in
camphomen "Camphomēnum"
(Camphomēnum, i n)
camphoric camphorātus, a, um
capsule capsŭla, ae f
carbonate carbōnas, ātis m
castor oil oleum (um, in) Ricǐni (us, i m)
children infantes, ium $m, f$
chloride chlorǐdum, in
chloroform Chloroformium, in
citrate citras, ātis m
clear purus, a, um
coated obductus, a, um
cocoa Cacāo (without a dictionary
form)
codeine Codeīnum, in
collagen collagenǐcus, a, um
collodium Collodium, in
compound composǐtus, a, um
copper Cuprum, in

## D

decoction decoctum, in
diluted dilūtus, a, um
dimedrol Dimedrōlum, in
distillated destillātus, a, um
drops dragées
dry siccus, a, um

## E

emulsion emulsum, in
ephatin Ephatīnum, in
eryhaem Eryhaemum, in
erynit Erynitum, in
erythromycin Erythromycinum, in
ether aether, ěris m
eucalyptus Eucalyptus, if
extract extractum, in
F
feracryl "Feracrylum"
(Feracrylum, in)
fibrinolysin Fibrolysīnum, in
film lamella, ae f; membranŭla, ae f
finest subtilisšmus, a, um
flax Linum, in
flower flos, floris $m$
for pro (Abl.)
foxglove Digitālis, is $f$
furazolidon Furazolidōnum, in

## G

glass 1) vitrum, in 2) vitreus, a, um glucose Glucōsum, in
glutaminic glutaminĭcus, a, um
glyceric glycerinōsus, a, um
glycerin Glycerīnum, in
glycin Glycīnum, in

## H

haemophobin Haemophobīnum, in haemostatic haemostatǐcus, a, um hawthorn Crataegus, if
herb herba, ae f
hydrocarbonate hydrocarbōnas, ātis $m$
hydrochloric hydrochlorǐcus, a, um hydrochloride hydrochloridum, in hydrogen Hydrogenium, in hydroxide hydroxy̆dum, in hypertonic hypertonĭcus, a, um

## I

ichthyol Ichthyōlum, in icy glaciālis, e
in sufficient amount quantum satis
inhaling inhalatio, ōnis $f$
intramuscular intramusculāris, e
intranasal intranasālis, e
intratracheal intratracheālis, e
intravenous intravenōsus, a, um
introduction inductio, ōnis f
iodine Iōdum, in
isotonic isotonǐcus, a, um

## L

lactic lactǐcus, a, um
lead Plumbum, in
leaf folium, in
licorice Glycyrrhīza, ae f
lily of the valley Convallaria, ae $f$
liniment linimentum, in
lipoic lipoǐcus, a, um
liquid fluĭdus, a, um

## M

magnesium Magnesium, in matricary Chamomilla, ae f medicinal medicinālis, e
menthol Menthōlum, in
mercury Hydrargy̆rum, in
mint Mentha, ae $f$
morphine Morphīnum, i n

## N

naphthalan Naphthalānum, in
narcosis narcōsis, is $f$
neomycin Neomycinum, in
nicotinic nicotinĭcus, a, um
nitroglycerin Nitroglycerīnum, in

## 0

oak Quercus, us f
oil oleum, in
oily oleōsus, a, um
ointment unguentun, in
oxide oxy̆dum, in

## P

packet fascicŭlus, i m
papaverin Papaverīnum, in
past pasta, ae f
peach Persicum, in
peach oil Oleum (i, n) Persicōrum
(um, in)
pectoral pectorālis, e
pepper piperǐtus, a, um
phenobarbital Phenobarbitālum, in
phenyl Phenylium, in
phial vitrum, in
phosphate phosphas, ātis m
phthivazid Phthivazīdum, in
phytomenadion Phytomenadiōnum, in
plaster emplasrum, i n
plastic polyaethylenǐcus, a, um platyphylline Platyphyllīnum, i n polyethylenoxid

Polyaethylenoxīdum, in
potassium Kalium, in
powder pulvis, ěris $m$
precipitated praecipitātus, a, um
pregoestrol Praegoestrolum, in

## R

rectal rectālis, e
rhizome rhizōma, ătis $n$
rhubarb Rheum, i n
riboflavin Riboflavīnum, in
root radix, īcis $f$

## S

salicylate salicylas, ātis m
salicylic salicylĭcus, a, um
sarcolysin Sarcolysīnum, i n
seed semen, ǐnis n
simple simplex, ĭcis
sodium Natrium, i n
soluble solubĭlis, e
soluthizon Soluthizōnum, in
solution solutio, ōnis f
species species, ērum f (only plur.)
spirit (alcohol) spirǐtus, us m
spirituous spirituōsus, a, um
sponge spongia, ae $f$
spring vernālis, e
starch Amy̆lum, i n
streptocid Streptocīdum, i n
strophanthine Strophanthīnum, in
strophanthus Strophanthus, i m
sublingual sublinguālis, e
sugar Sacchărum, i n
sulphadimezin Sulfadimezīnum, in
sulphadimidine Sulfadimidīnum, in
sunflower Helianthus, i m
synoestrol Synoestrōlum, in
synthomycin Synthomycīnum, in
syrup sirūpus, i m

## T

tablet tabuletta, ae f
tea thea, ae f
terrilytin Terrilytīnum, in
tertracycline Tetracyclīnum, in
testoenat Testoenātum, in
theophylline Theophyllīnum, i n
thioacetazone Thioacetazōnum, in
thymogen Thymogěnum, in
triturating trituratio, ōnis f

## U

up to ad
use usus, us m

## V

vaginal vaginālis, e
valerian Valeriāna, ae f
vaseline Vaselīnum, in

## W

water aqua, ae f
wheat Tritǐcum, in

## Y

yellow flavus, a

# Part IV CLINICAL TERMINOLOGY 

Lesson 13
INTRODUCTION TO THE LATIN CLINICAL TERMINOLOGY. ONE-WORD TERMS AND THEIR MORPHOLOGICAL STRUCTURE. INITIAL AND FINAL MORPHOLOGICAL ELEMENTS USED FOR WORD BUILDING. MULTIWORD CLINICAL TERMS. NAMES OF BRANCHES OF MEDECINE AND MEDICAL SPECIIALISTS. NAMES OF MEDICAL EXAMINATIONS

## § 93. General remarks on the Latin clinical terminology

Clinical names are the most numerous among all medical terms, as these names signify the huge amount of different diseases, pathological conditions and abnormalities, medical examinations and operations. This terminology also includes a great amount of paramedical vocabulary. It is estimated that about $50 \%$ English medical terms is of Greek origin, but this relation is particularly marked in clinical terms.

The word clinical itself is of Greek origin (klinike means bed) and it is the acknowledgement of the outstanding role of Greek physicians in both theoretical and practical medicine. Thanks to Greek physicians many diseases got their names and via Latin became part of European medical languages. New clinical names coming into use were built, as a rule, on the base of Greek vocabulary and Greek morphological elements. The grammar form of new clinical terms corresponds to the norms of Latin or other European languages. This historical tradition, in particular, is strictly followed in English. For example:

| Latin | English | Meaning |
| :---: | :---: | :---: |
| adenītis | adenitis | inflammation of a gland |
| cardiopathia | cardiopathy | disease of the heart |
| osteōma | osteoma | tumour made up of bone tissue |

It is indisputable, that clinical terms composed on the base of Greek morphological elements have a very important advantage: they are short, but may stand in for a large clinical definition. That's why they are the priority choice of the physicians all over the world, and every one who has a M. D. must know the rules of word building of medical terms and to learn lexical and morphological word building elements.

## § 94. The morphological structure of one-word clinical terms

From the point of view of their morphological structure, one-word clinical terms can be: 1) simple, containing only one stem; 2) compound, consisting of two or more morphological elements.

About $15 \%$ clinical names belong to the first group, e. g. asthma, ătis n asthma; cancer, cri $m$ - cancer; herpes, ětis $m$ - herpes; ulcus, ěris $n$ - ulcer. These noun-terms are mostly used in combination with adjectives or nouns: asthma bronchiale - bronchial asthma; ulcus gastris - ulcer of the stomach.

The majority of one-word clinical terms consist of two or more morphological elements. These elements can be expressed by:

1. Greek affixes (prefixes, suffixes) and roots of nouns or adjectives. In this case, the name can contain:
1.1. A prefix, a root, a suffix and an ending (mostly -ia, -ēma, -ismus, -ītis, -ōma, -ōsis):
parametrītis, ǐdis $\mathbf{f}$ - parametritis (tissue inflammation near uterus). The name includes: a) the prefix para- (near); b) the root metr- (uterus); c) the suffix -itis (strictly speaking - combination of suffix -it- and ending -is) with the constant meaning of "inflammation";
1.2. A prefix, one or more roots and an ending:
atrichia, ae $\mathbf{f}$ - atrichia (lack of hair). The name includes: a) the prefix a(absence, lack, cessation of a function); b) the root trich- (hair); c) the ending -ia;
hypermetropia, ae f - hypermetropia (long-sightedness). The name includes: a) the prefix hyper- (excess function); b) the root -metr- (dimension); c) the final root -opia (sight).
1.3. A root and a suffix (suffixed ending): chondrōma, ătis n chondroma (tumour of cartilaginous tissue). The name includes: a) the root chondr- (cartilage); b) the suffix -ōma with the meaning "tumour" (= tumor).
2. The initial and final word building roots in combination with the term endings -ia, -ēma, -ismus, -ītis, -ōma, -ōsis, -us. If the initial word building root hereby ends up with a consonant and the final one begins with a consonant too, these roots are joined via a connecting vowel -o-:
rhinopathia, ae $\mathbf{f}$ - rhinopathy (disease of the nose). The name includes: 1) the root rhin- (nose); 2) the connecting vowel -o-; 3) the root path- (disease);
otorhinolaryngolŏgus, $\mathbf{i} \mathbf{m}$ - otorhinolaryngologist (the doctor for treating ear, nose and larynx diseases). The name includes: a) the root ot- (ear); b) the root rhin- (nose); c) the root laryng- (larynx); d) the final root -logus (specialist in a medical region).

If the first root ends with a vowel, the connecting -o- is usually omitted:
pelvimetria, ae $\mathbf{f}$ - pelvimetry ( measuring of pelvis dimension in women);
tachycardia, ae f - tachycardia (abnormally fast heart rate).

If the second root begins with a vowel, the connecting -0- as a rule is omitted too:
haemat + uria $\rightarrow$ haematuria, ae $\mathbf{f}$ - hematuria (blood in the urine);
odont + algia $\rightarrow$ odontalgia, ae $\mathbf{f}-$ odontalgia (toothache, feeling of pain in the tooth).

Some exceptions to this rule are nevertheless found: e. g. the roots broncho- and bronchi- never lose their final vowels: bronchiectasia, ae $\mathbf{f}$ (= bronchoectasia) - bronchiectasis (expansion of the bronchi); bronchoadenitis, ititdis $\mathbf{f}$ - bronchoadenitis (inflammation of lymphatic glands). The root bi- is always used with the connecting -o-: biocycle, biology, microbiology, biopharmaceutics.

## § 95. Some notes on the word stressing in clinical names

In the compound nouns with the ending -ia the last but one vowel «i» is, as a rule, stressed contrary to the rule «vowel before vowel is short»: atrichía, bronchiectasía, haematuría, hypermetropía, odontalgía, rhinopathía. The noun anatómia (anatomy) and nouns with the final element -logia keep the third syllable from the end stressed: cardiológia (cardiology), stomatologia (stomatology).

## § 96. Initial and final root elements

Initial root elements are combined in a one-word term, as you could see above, with the final roots via the connecting vowel -o- or with the final suffixes. These roots are presented in the table of each lesson in the following consequence: 1) the Greek root; 2) its Latin equivalent in the dictionary form; 3) English meaning; 4) English clinical word element:
haem-, haemat-
sanguis, innis m
blood, condition of blood
haem-, haemat-
Initial roots can have two or more variants: ger-, geront- (old men or old age); haem-, haemat- (blood). All these variants are to be learnt by heart.

Final root elements are not as numerous as initial ones, but their word building capacity is very high. One should also remember that the final root or suffixed word building element is the first in the making up the literal translation of the term, for example:

The term nephrographia, ae f consists of the initial root nephr- (kidney) and the final root -graphia (X-ray examination), so the literal translation is "X-ray examination of the kidneys", nephrography.

The term myōma, ătis $n$ consists of the initial root my- (muscle) and the final root -oma (tumour), so the literal translation is "tumour of muscular tissue", myoma.

Final root elements can be part of an adjective too, e. g.: -gěnus, a, um in the term biogěnus, a , um - biogenic (caused by a vital organism).

The final roots are presented at each lesson in the table like that:
-logus - a specialist in a brunch of science or medicine
-iāter - a doctor, specialist in a brunch of clinical medicine
Some roots may be both initial and final. As final roots they have common endings, mostly the ending -ia. For example: odont- as the initial root and -odontia as the final one: odontolithus, i m - odontolith, calculus on the teeth and orthodontia, ae $\mathbf{f}$ - orthodontics, the part of dental surgery which is concerned with the prevention and correction of the malocclusion of teeth.

## § 97. The structure and vocabulary of multiword clinical terms

Any multiword term consists, as a rule, of two or three words. The noun containing the cardinal information of the term is placed first, and then one or two nouns or one or two adjectives follow. The second and third nouns indicate the localization of the diseased organ or tissue; adjectives give qualitative and quantitative characteristics of the morbid condition:
infarctus cerĕbri - cerebral infarct, an infarct of cerebral tissue due to failure of blood supply resulting from vascular thrombosis, embolism or spasm
neuralgia nervi trigemĭni - trigeminal neuralgia, neuralgic pain located in various portions of the head - in the distributions of one or more of the sensory divisions of the $5^{\text {th }}$ cranial nerve
anaemia haemorrhagĭca - haemorrhagic anaemia, anaemia caused by acute or chronic loss of blood because of whatever cause
stomatītis aphthōsa chronĭca - chronic aphthous stomatitis, inflammation of the mucous membrane of the mouth, accompanied by small vesicles occurring on the mucous membrane of the cheeks and lips and rupturing to painful ulcers.

The combination of a noun and an adjective after the first noun of the term can be present too:

Atrophia faciēi progrediens - progressive facial atrophy, a condition in which there is a progressive wasting of the skin of the face

Status precancerōsus cutis faciēi - precancerous state of the face skin
To sum up, we can say that multiword clinical terms are built similar to anatomical ones. First of all, the dictionary form of every word should be given. After that, the term is built according to the already known rules.

## § 98. The names of the common branches of clinical medicine

The names of common branches of clinical medicine are usually formed by means of the final root element -logia and the appropriate initial one, which determines the cardinal sense of the term. It should be mentioned that the most numerous names of medico-biological sciences are built according to this rule:
ophthalm- (eye) + logia $\rightarrow$ ophthalmologia, ae f - ophthalmology, branch of clinical medicine treating eye diseases;
proct- ( rectum) $+\operatorname{logia} \rightarrow$ proctologia, ae $\mathrm{f}-$ proctology, branch of clinical medicine treating rectum diseases. Compare also:
immunologia, ae f - immunology, science about immunity;
pharmacologia, ae f - pharmacology, science about drugs and their usage;
physiologia, ae f - physiology, science about normal vital processes in human organism.

Names of some branches of clinical medicine are built by adding the root -patho- (disease) and the final root -logia to the initial root:
neur- (nerve) + -patho- + logia $\rightarrow$ neuropathologia, ae f - neuropathology, clinical neurology, branch of clinical medicine meant for treating nerve diseases;
sex- (sex) + -patho- + logia $\rightarrow$ sexopathologia, ae $\mathrm{f}-$ sexopathology, branch of medicine meant to heal sexual disorders.

Some names of medical branches are formed by means of the final root element -iatria, which means some definite branches of clinical medicine:
geriatria, ae f - geriatrics, particular branch of medicine treating diseases of older age;
paediatria, ae f -pediatrics, branch of medicine treating children's diseases;
phoniatria, ae f - phoniatrics, branch of medicine treating disorders of voice formation;
phthisiatria, ae f - phthisiology, branch of medicine treating tuberculosis;
psychiatria, ae f - psychiatrics (psychiatry), branch of medicine treating mental diseases.

## § 99. Names of medical specialists

Most medical specialist's names are composed of the final root element -logus and the appropriate initial root element which determines the cardinal sense of the term. In this way names of most biological and medical specialist are formed:
anthropolŏgus, i m - anthropologist, a specialist studying the man in the process of his evolution;
stomatolŏgus, i m - stomatologistgist, a specialist studying forms of life and vital organisms;
diaetolŏgus, i m - dietarian, a doctor-specialist in the dietary nutrition;
haematolŏgus, i m - hematologist, a doctor-specialist in blood diseases.
If the name of a branch of medicine has the ending -pathologia, then the name of specialist has the ending -patholŏgus:
neuropathologia $\rightarrow$ neuropatholŏgus, i m - neuropathologist, a doctorspecialist in nerve diseases;
sexopathologia $\rightarrow$ sexopatholŏgus, i $\mathrm{m}-$ sexopathologist, a doctorspecialist treating sexual disorders.

If the name of a branch of medicine has the ending -iatria, then the name of specialist has the ending -iāter:
paediatria $\rightarrow$ paediāter, tri m - pediatrician (= pediatrist), a doctorspecialist in children's diseases.

Finally, many Latin names of medical specialists are built by means of the suffix -ista and the initial root element:
oculista, ae $m$ - oculist, a doctor-specialist treating eye diseases;
therapeutista, ae m - physician, therapeutist, a doctor-specialist treating inner organs.

## § 100. Some notes on the names of medical specialists in Latin and English

Names of medical specialists in Latin don't fully coincide with the English equivalents, as seen above. The difference lies not only on the morphological level (pthisiāter, tri m - phthisiologist), - sometimes, the lexical units don't correspond each other. For example, the name otorhinolaryngologist is not quite common for English or American medical use; - instead three separate terms are used: otologist, rhinologist and laryngologist. But, the term otolaryngologist exists too. That's why it's more convenient to use this slightly artificial, but formally correct term otorhinolaryngologist, than to bring three English terms as equivalents. And otherwise, we tend to keep the terms presented both in modern English and Latin medical dictionaries.

## § 101. The names of medical examinations and methods of treatment

The names of medical examinations are usually formed by means of the final root elements -graphia, -metria, -scopia, -diagnostica:
cystographia, ae f - cystography, X-ray examination of the urinary bladder;
craniometia, ae f - craniometry, measuring of skull;
proctoscopia, ae f - proctoscopy, internal examination of the rectum;
thermodiagnostǐca, ae f - thermodiagnostics, a diagnosis via registration of infrared radiation.

Names which signify methods of medical treatment usually contain the final root element -therapia and the initial root element pointing at the method of the treatment:
phytotherapia, ae f - phytotherapy, treatment by means of medicinal herbs.

Results of X-ray, electric or other methods of medical examination are expressed by the final root -gramma:
haemogramma, ătis $n$ - hemogram, results of quantitative and qualitative examination of blood;
rhinogramma, ătis $n$ - rhinogram, X-ray photograph of nose

## § 102. Table of initial root elements

| Greek initial roots <br> and its variants | Latin equivalents <br> in dictionary form | English meaning | English word <br> building equivalents |
| :---: | :---: | :---: | :---: |
| anthrop- | homo, ĭnis m | man, human | anthrop- |
| bi- | vita, ae f | life | bi- |
| cardi- | cor, cordis n | heart | cardi- |
| gloss- | lingua, ae f | tongue | gloss- |
| gynaec- | femĭna, ae f | wife | gynaec- |
| haem-, haemat- | sanguis, ĭnis m | blood | hem-, hemat- |
| neur- | nervus, i m | hand | neur- |
| odont- | dens, dentis m | tooth | odont |
| ophthalm- | ocŭlus, i m | eye | ophthalm- |
| ot- | auris, is f | ear | ot- |
| paed- | infans, ntis m, f | child | ped- |
| path- | morbus, i m | disease | path- |
| pharmac- | medicamentum, i n | drug | pharmac- |
| phthisi- | tuberculosis, is f | tuberculosis | phthisi- |
| physi- | natūra, ae f | nature | physi- |
| phyt- | planta, ae f | plant | phyt- |
| proct- | rectum, i n | rectum | proct- |
| psych- | anĭmus, i m | psyche | psych- |
| rhin- | nasus, i m | nose | rhin- |
| stom-, stomat- | os, oris n | mouth | stom-, stomat- |

## § 103. Table of final root elements

| Final root elements | English meaning |
| :---: | :--- |
| -diagnostica | examination of functional state of organs in order to reveal <br> some disorders |
| -gěnus, a, um | caused by any factor |
| -graphia | 1) X-ray examination; 2) examination by means of electricity; <br> 3) recording of the result of some examination |


| Final root elements | English meaning |
| :---: | :--- |
| -gramma | result of some medical examination seen on a film or <br> presented graphically |
| -iater | medical specialist treating certain inner diseases |
| -iatria | any definite branch of clinical medicine |
| -logia | name of some science or branch of clinical medicine |
| -logus | name of medical or biological specialists |
| -metria | measurement of physical characteristics of human body |
| -odontia | tooth or state of teeth |
| -scopia | visual or instrumental visual examination |
| -therapia | method of treatment |

So, your task is to memorize the word building elements of this and the following lessons and combine these elements in terms. If you are not quite sure of your version of translation, consult the dictionary.

## § 104. Exercises

1. Determine orally the full dictionary form of each term and the meaning of the initial and final roots and write down the full definition of each term:
anthropologia; anthropogĕnus; biolŏgia; cardiolŏgus; cardiogĕnus; gynaecolŏgus; haematologia; iatrogěnus; neuropatholŏgus; ophthalmoscopia; odontogěnus; otorhinolaryngologia; physiologia; phthisiāter; phytotherapia; proctolŏgus; psychiatria; rhinogramma; stomatoscopia
2. Make up in the Latin dictionary form the one-word terms with the following meaning:
branch of clinical medicine treating rectum diseases; branch of medicine treating diseases of children; medical specialist treating blood diseases; medical specialist treating inner organs; results of quantitative and qualitative examination of blood; science studying drugs and their usage; treatment by means of natural or artificial physical factors; specialist studying forms of life and living organisms; specialist studying the man in the process of his evolution; treatment by means of medical herbs; the X-ray examination of tooth

## 3. Give the Latin dictionary form and the full definition in English of

 the terms:anthropologist; biopharmaceutics; cardiogram; cardiography; gerontology; hematology; hemogram; iatrogenic; odontogram; neurogenic; ophthalmoscopy; otogenic; otorhinolaryngologist; pediatrician; pharmacotherapy; phthisiologist; phytotherapy; proctodiagnostics; proctoscopy; psychiatrist; psychogenic; psychologist; rhinoscopy; stomatology; stomatologist; therapeutist; thoracometry

## 4. Give the Latin dictionary form and translate into English (A) and into

## Latin (B):

A. Caries dentium incisivōrum; curatio cariēi profundae; extractio dentis; foetor ex ore; fractura mandibŭlae; mobilĭtas dentium premolarium; herpes simplex; morbi allergĭci; tuberculōsis laryngis;
B. Comatose state; denudation of the tooth cervix; devitalized teeth; diseases of the pulp; plicated tongue; rupture of nasal septum; short frenulum of upper lip; trauma of masticatory muscles; viral and bacterial infections

## § 105. Vocabulary to lesson 13

## I. Latin-English vocabulary

allergǐcus, a, um - alergic
anthropologia, ae f - anthropology, science studying the man in the process of his evolution
anthropolŏgus, i m - anthropologist, specialist studying the man in the process of his evolution
biologia, ae f — biology, science studying forms of life and vital organisms cancer, cri m - cancer
cardiogĕnus, a, um - cardiogenic, happening because of the heart
cardiolŏgus, i m - cardiologist, medical specialist treating heart diseases
caries, èi f - caries, a gradual decay or death of bone as a result of chronic infection
curatio, ōnis f - medical treatment
dentinogeněsis, is f - dentinogenesis, the formation and development of the dentine by the odontoblasts
extractio, ōnis f - extraction
foetor, ōris $m$ - a foul odor or stench, fetor
fractūra, ae f — fracture
geriāter, tri $m$ - geriatrician, medical specialist treating diseases of the aged
gynaecolŏgus, i m - gynecologist, medical specialist treating genital diseases in women
haematologia, ae f - hematology, branch of medicine studying blood and its diseases
herpes, ētis $m$ - inflammation of the skin or mucous membrane, with clusters of deep-seated vesicles, herpes
iatrogĕnus, a, um - iatrogenic, happening because of the physician's manner or injudicious remarks
imperfectus, a, um - incoplete
incisīvus, a, um (dens) - incisor tooth
larynx, yngis m - larynx
lingua, ae f - tongue
luxatio, ōnis f - luxation, dislocation
mandibŭla, ae f - mandible
mobilitas, ātis f - mobility
morbus, i m - disease
mucōsus, a, um - mucous
neuropatholŏgus, i m - neuropathologist, specialist treating diseases of the nervous system
odontogramma, ătis n - odontogram, X-ray film of the tooth
odontoscopia, ae f - odontoscopy, instrumental-visual examination of the tooth
ophthalmoscopia, ae f - ophthalmoscopy, instrumental-visual examination of the eye
os, oris n - mouth
otorhinolaryngologia, ae f - otorhinolaryngology, branch of medicine treating diseases of ear, nose and larynx
physiologia, ae f - physiology, science studying normal vital processes in human body
phthisiāter, tri m - phthisiologist, specialist treating tuberculosis
phytotherapia, ae f - phytotherapy, method of treatment by means of medicinal herb
plicātus, a, um - plicate, folded
premolāris, e - premolar
proctolŏgus, i m - proctologist, specialist treating diseases of rectum
profundus, a, um - deep
psychiatria, ae f-psychiatry, branch of medicine treating mental diseases
rhinogramma, ătis $n$ - rhinogram, X-ray film of the nose
stomatoscopia, ae f - stomatoscopy, visual examination of the oral cavity
tuberculōsis, is f - tuberculosis
tunĭca, ae f - membrane
zoster, ēris m - zoster, zona, shingles

## II. English-Latin vocabulary

amputation - amputatio, ōnis f
anthropologist, specialist studying the man in the process of his evolution - anthropolŏgus, i m
bacterial - bacteriālis, e
biopharmaceutics, study of physical and chemical properties of medicinal substances - biopharmaceutǐca, ae f
branch of clinical medicine treating rectum diseases - proctologia, ae f
branch of clinical medicine treating diseases of children - paediatria, ae f cardiogram: 1) result of X-ray examination of the heart; 2) graphical picture of heart action - cardiogramma, ătis n
cardiography: 1) X-ray examination of the heart; 2) graphical recording of heart action - cardiographia, ae f
cervix - cervix, īcis f
comatose, affected with coma - comatōsus, a, um
denudation, the state of being deprived of a protecting layer or covering denudatio, ōnis f
devitalized, deprived of life or vitalizing properities - devitalisātus, a, um diagnosis via examination of iris, iridodiagnostics - iridodiagnostĭca, ae f
fracture - fractūra, ae f
frenulum - frenŭlum, in
glossotomy, dissection of the tongue - glosssotomia, ae f
hemogram, results of quantitative and qualitative examination of blood haemogramma, ătis n
iatrogenic, happening because of the physician's manner or injudicious remarks - iatrogĕnus, a, um
infection - infectio, ōnis $f$
iridodiagnostics, diagnosis via examination of iris - iridodiagnostǐca, ae f
lip - labium, in
luxation, dislocation - luxatio, ōnis $f$
masticatory - masticatorius, a, um
measurement of pelvis in women, pelvimetry - pelvimetria, ae $f$
medical specialist treating blood diseases, hematologist - haematolŏgus, i m
nasal - nasālis, e
neurogenic, happening because of the nervous system disorders neurogěnus, a, um
ophthalmoscopy, instrumental-visual examination of the eye ophthalmoscopia, ae f
otogenic, happening because of the ear - otogĕnus, a, um
otorhinolaryngologist, specialist treating ear, nose and larynx diseases otothinolaryngolŏgus, i m
pediatrician, specialist treating children's diseases - paediāter, tri m
pharmacotherapy, the treatment of disease with drugs - pharmacotherapia, ae $f$
phytotherapy, method of treatment by means of medical herbs phytotherapia, ae f
plicated - plicātus, a, um
proctodiagnostics, examination of the functional state of the rectum proctodiagnostica, ae f
proctoscopy, instrumental-visual examination of the rectum proctoscopia, ae f
psychiatrist, specialist treating mental diseases - psychiāter, tri m
phthisiologist, specialist treating tuberculosis - phthisiāter, tri m
pulp - pulpa, ae f
results of quantitative and qualitative examination of blood, hemogram haemogramma, ătis n
rhinoscopy, instrumental-visual examination of the nose - rhinoscopia, ae f rupture, the breaking or forcible disruption of continuity of the bone or an other structure - ruptūra, ae f
science studying drugs and their usage, pharmacology - pharmacologia, ae $f$
septum - septum, in
short - brevis, e
somatology, branch of anthropology, studying structure of human body somatologia, ae f
specialist studying forms of life and living organisms, biologist biolŏgus, i m
specialist studying the man in the process of his evolution, anthropologist anthropolŏgus, i m
specialist treating diseases of inner organs, therapeutist (therapist) therapeutista, ae m
state - status, us m
stomatology, branch of clinical medicine treating diseases of the oral cavity - stomatologia, ae f
therapeutist, specialist treating diseases of inner organs - therapeutista, ae $m$ thoracometry, measurement of the size of the thorax - thoracometria, ae f tongue - lingua, ae f
tonsillectomy, the surgical operation for removal of a tonsil tonsillectomia, ae f
trauma, injury - trauma, ătis n
treatment by means of medicinal plants, phytotherapy - phytotherapia, ae f
treatment by means of natural or artificial physical factors, physiotherapy physiotherapia, ae f
tuberculosis, the disease caused by infection with the Mycobacterium tuberculosis - tuberculōsis, is f
viral - virālis, e
the X-ray examination of mamma, mammography - mammographia, ae f

## Lesson 14

## NAMES OF FUNCTION DISORDERS, PATHOLOGICAL PROCESSES AND ABNORMAL CONDITIONS

## § 106. Composition of one-word names of functional disorders

Usually, one-word names of functional disorders are composed of Greek prefixes and roots. There are the following prefixes:

1. The prefix a- (before a consonant) or an- (before a vowel). This prefix signifies cessation or loss of a function as well as lack of property:
adentia, ae $\mathbf{f}$ - lack of teeth, adentia;
anuria, ae $\mathbf{f}$ - complete cessation of the secretion and excretion of urine, anuria;
aphagia, ae $\mathbf{f}$ - a condition in which the ability of swallowing is lacking, aphagia;

In the same way the Latin prefix in- (im- before consonants $\mathbf{b}$ or $\mathbf{m}$ ) combined with Latin roots is used both in nouns and adjectives:
incontinentia, ae $\mathbf{f}$ - lack of voluntary control over the discharge of faeces or urine, incontinence;
insufficientia, ae $\mathbf{f}$ - state of being inadequate to perform normal functions, insufficiency;
immobilĭtas, ātis $\mathbf{f}$ — lack of mobility, immobility;
insensibillis, $\mathbf{e}$ - lack of sensibility or intelligence, insensible.
2. The prefix dys- signifies functional disorders:
dysgeusia, ae $\mathbf{f}$ - impairment or perversion of the sense of taste, dysgeusia;
dysthyreōsis, is $\mathbf{f}$ - imperfect functioning of the thyroid gland, dysthyreōsis;
dysuria, ae $\mathbf{f}$ - condition in which the passage of urine is difficult, dysuria.
3. The prefix en- (em- before consonants $\mathbf{b}, \mathbf{m}, \mathbf{p}$ ) indicates the inner location of any morbid condition:
empyēma, ătis $\mathbf{n}$ - accumulation of pus in a cavity;
enophthalmus, i m - recession of the eyeball into the cavity of the orbit
As prefixed elements some Greek adjectives, pronouns and numerals are used:

| Prefix | Meaning | Latin example | English translation |
| :---: | :---: | :---: | :--- |
| auto- | self-, resulting <br> of one's own <br> action | autopepsia, ae f <br> (autoly̆sis, is f) | the process of spontaneous disintegration of <br> cells and tissues resulting from the action of <br> intracellular enzymes, autopepsia (autolysis) |
| mono- | one (part) | monoplegia, <br> ae f | a pathological condition in which only one <br> muscle, one group of muscle or one part of |


| Prefix | Meaning | Latin example | English translation |
| :---: | :---: | :---: | :--- |
| di- | two (parts) | diplegia, ae f | the body is affected, monoplegia <br> paralysis of similar parts on both sides of <br> the body, diplegia |
| hemi- | half | hemialgia, ae f | neuralgic pain affecting the right or the left <br> side of the body or the right or the left side of <br> any part of the body, hemialgia |

## § 107. Composition of one-word names of pathological processes and abnormal conditions

The majority of one-word names of pathological processes and abnormal conditions are composed of Greek roots, suffixes and endings which are adapted to Latin grammar system. One group of terms consists of a root, a suffix and an ending. Two suffixes of this group compose a morphological unity with their endings:

| Latin suffix | Meaning | Latin <br> example | English <br> equivalent | Full English <br> explanation |
| :---: | :--- | :---: | :---: | :---: |
| -ismus <br> (suffix -ism- + <br> -us, ending of <br> the 2 2 nd <br> declension) | abnormality or <br> pathological process, <br> the meaning of which <br> is determined by the <br> root element | botulismus, <br> i m | botulism | form of food <br> poisoning due to <br> the botulinum <br> toxin |
| -ōsis <br> (suffix -os- +-is, <br> ending of the 3 ${ }^{\text {rd }}$ <br> declension) | pathological <br> condition or process | dermatōsis, <br> is f | dermatōsis | any skin disease |

Attention! The final suffix -ōsis may be used as the morphological part of a noun term not denoting a disease:
diagnōsis, is f - diagnosis, the scientific recognition of the disease from which a person suffers;
symbiōsis, is f - symbiosis, the intimate association of two organisms.
The next two suffixes are considered as final suffixed elements of the nouns of the $3^{\text {rd }}$ declension:

| Latin <br> suffix | Meaning | Latin example | English <br> equivalent | Full English explanation |
| :--- | :---: | :---: | :---: | :---: |
| -ēma | different <br> pathological <br> conditions | enanthēma, <br> antis n | enanthema | the rash or eruption on <br> the mucous tissue |
| -iăsis | different <br> pathological <br> conditions | psoriăsis, is f | psoriasis | a chronic disease of the skin <br> characterized by the appearance <br> of laminated scales |

But the majority of terms composed of morphological elements present with initial and final roots. First of all, the root path- combined with the ending -ia is used:
arthropathia, ae $\mathbf{f}$ - any disease affecting a joint, athropathy;
nephropathia, ae f - a disease of the kidney, nephropathy;
rhinopathia, ae f - any morbid condition of the nose, rhinopathy.
Other roots are also used as final elements which define more precisely the character of pathological condition, e. g.:
angiorrhagia, ae $\mathbf{f}$ - a hemorrhage from a vessel, angiorrhagia; arthralgia, ae $\mathbf{f}$ - any kind of pain affecting a joint, arthralgia;
cancerophobia, ae $\mathbf{f}$ - unfounded or unreasonable fear that there is a predisposition to carcinoma, cancerophobia (= carcinomatophobia).

Nevertheless, about $20 \%$ of one-word terms signifying pathological processes and abnormal conditions are nouns comprised of one root:
coma, ătis $\mathbf{n}$ - the state of complete loss of consciousness with a disorder of vitally important functions, coma;
infarctus, us $\mathbf{m}$ - an area of dead tissue produced by the obstruction of an end artery, infarction;
insultus, us $\mathbf{m}$ - cerebral thrombosis, stroke;
sepsis, is $\mathbf{f}$ - infection with pyogenic microorganisms, sepsis
Sometimes, to correct or improve some abnormal condition of the organism, one must use an operative interference. The names of such operative interferences are composed with the help of an initial Greek root signifying the object of this interference and final root elements -tomia (operative cutting) or -ectomia (amputation or excision of an organ or its part), for example:
osteotomia, ae $\mathbf{f}$ - the operation of cutting trough a bone, osteotomy
tonsillectomia, ae f-surgical excision of a tonsil, tonsillectomy
Surgical removal of a part, usually of some magnitude, e. g. jaw, stomach etc. is named resection, ōnis $f$ (resection), for example:

Resectio gingivae - gum resection, resection of the gingiva.
The full removal of an organ or an anatomical structure is named amputatio, ōnis $f$ (amputation), for example:
amputatio radicis dentis - amputation of teeth root
§ 108. Initial Greek roots and their Latin equivalents

| Initial Greek roots <br> and their variants | Latin equivalents in <br> dictionary form | English <br> meaning | English word building <br> equivalents |
| :---: | :---: | :---: | :---: |
| angi- | vas, vasis n | vessel | angi- |
| arthr- | articulatio, ōnis f | joint | arthr- |
| brady- | lentus, a, um | slow | brady- |
| cephal-, cephalia | caput, ĭtis n | head | cephal-, cephaly |


| Initial Greek roots <br> and their variants | Latin equivalents in <br> dictionary form | English <br> meaning | English word building <br> equivalents |
| :---: | :---: | :---: | :---: |
| chondr- | cartilāgo, ĭnis f | cartilage | chondr- |
| dactyl-, -dactylia | digĭtus, i m | finger or toe | dactyl- |
| derm-, dermat-, <br> -dermia | cutis, is f | skin | derm-, dermat-, -dermia |
| encephal- | cerĕbrum, i n | brain | encephal- |
| my- | muscŭlus, i m | muscle | my- |
| nephr- | ren, renis m | kidney | nephr- |
| oste- | os, ossis n | bone | oste- |
| phon-, -phonia | vox, vocis f | voice | phon-, -phonia |
| phot- | lux, lucis f | light | phot- |
| phleb- | vena, ae f | vein | phleb- |
| pseud- | falsus, a, um | false | pseud- |
| spasm-, -spasmus | spasmus, i m | spasm | spasm-,-spasm |
| tox-, toxic- | venēnum, i n | poison | tox-, toxic- |
| tachy- | celer, ěris, ěre | fast, quick | tachy- |
| trich-, -trichia | capillus, i m; pilus, i m | hair | trich- |
| xer- | siccus, a, um | dry | xer- |

§ 109. Table of final root elements

| Final root elements | English meaning |
| :---: | :--- |
| -algia | pain in any part of the body |
| -ectomia | amputation or excision of an organ or its part |
| -geusia | different pathological conditions of taste |
| -kinesia | different pathological conditions of voluntary motion |
| -mania | any form of mental disorder accompanied by some degree of <br> excitation |
| -mycōsis | a morbid condition caused by a pathogenic fungus |
| -opia, -opsia | any condition of vision |
| -pathia | a general name of a disease of any organ due to various causes |
| -pepsia | any condition of digestion |
| -phagia | any pathological condition in the act of swallowing |
| -philia | predisposition to any morbid condition |
| -phobia | a pathological fear |
| -plegia | paralysis (palsy) of the muscles of any organ |
| -pnoë | a pathological condition of breathing |
| -tomia | operative cutting |
| -trophia | nutrition |

## § 110. Exercises

1. Complete (orally) the dictionary form of each noun. Determine the meaning of each initial and final morphological element; write down the full definition of each term and its English equivalent:
angiopathia; autohaemotherapia; bradyphagia; bradypnoë; chondropathia; dactylospasmus; dermatōsis; dermatomycōsis; dysgeusia; encephalogramma; gastrospasmus; hemicrania; hemiplegia; monodactylismus; myoplegia; myotomia; osteopathia; phlebocarcinōma; phlebotomia; photophobia; pseudoanodontia; pseudoarthrōsis; spasmophilia; stomatomycōsis; tachycardia; toxicomania; xerophthalmia

## 2. Make up the Latin dictionary form of one-word terms with the following meaning:

abnormal quickness in eating; a chronic disease of the skin, characterized by the appearance of laminated scales; a condition in which the ability to swallow is lacking; any disease affecting a joint; any disease of the skin; any morbid condition or abnormal growth of the hair; any morbid condition of the nose; a pathological condition in which only one muscle, one group of muscle or one part of the body is affected; an impairment of the voice; kind of pain affecting a joint; paralysis of similar parts on both sides of the body; the rash or eruption on the mucous tissue; the X-ray examination of the great vessels and the chambers of the heart; unfounded or unreasonable fear that there is a predisposition to carcinoma

## 3. Give the full definition in English and the Latin dictionary form of the terms:

angiology; apnoea; arthralgia; atrichia; atrophy; bradycardia; cephalalgia; didactylism; dystrophy; glossotomy; hemiatrophy; hemophilia; mastopathy; nephrogenic, nephropathy, ophthalmoplegia, osteochondrosis; osteodystrophy; osteotomy; pharmacophobia; phoniatrics; phlebography; phonocardiogram; photophobia; proctospasm; rhinopathy; tachyphagia; tonsillectomy; toxicosis; xerostomia
4. Give the dictionary form and translate into English (A) and into Latin (B):
A. Atrophia papillārum linguae; cysta dentālis radiculāris; defectus cuneiformis dentium; dysplasia enamēli; exacerbatio parodontōsis chronĭcae; fistŭla suppuratīva buccae; resectio mandibŭlae; ulcus linguae.
B. Actinomycōsis of salivary glands; amputation of teeth root; diabetic coma; hyperesthesia of the hard teeth tissues; insufficiency of the cardiac valves; prophylaxis of malignant tumors; protrusive occlusion

## § 111. Vocabulary to lesson 14

## I. Latin-English vocabulary

allergǐcus, a, um - caused by or affected with allergy, allergic
angiopathia, ae f - any disease of blood vessels, angiopathy
arthromalacia, ae f - softening of joints, arthromalacia
atrophia, ae f - a condition of general malnutrition from whatever cause, atrophy
autohaemotherapia, ae f - a method of treatment in which the patient's own blood is administered to him, autohaemotherapy
bradyphagia, ae f - slowing of swallowing, bradyphagia
bradypnoë, ës f - an abnormally slow rare of breathing, bradypnea
bucca, ae f-cheek
cariōsus, a, um - affected with caries, carious
chondropathia, ae f - any disease affecting a cartilage, chondropathy
chronǐcus, a, um - long continued, chronic
cuneiformis, e - cuneiform
cysta, ae f - a cavity lined by an inflamed or neoplastic tissue, cyst
dactylospasmus, i m - spasmodic contraction of a finger or toe, dactylospasm
defectus, us $m$ - a defect
dentālis, e - dental
dermatōsis, ae f - any disease of the skin, dermatosis
dermatomycōsis, ae f - a generic term for all cutaneous infections due to fungi
dysgeusia, ae f - impairment or perversion of the sense of taste, dysgeusia
dysplasia, ae f - abnormal development of tissue, dysplasia
enamēlum, in - enamel
encephalogramma, ătis $n$ - any X-ray film obtained in the radiological examination of the ventricles and subarachnoid space of the brain, encephalogram
exacerbatio, ōnis $f$ - increase in severity of a disease, exacerbation
fistŭla, ae f - an unnatural communication between an organ and the body surface, fistula
gastrospasmus, i m - an involuntary contraction of the stomach muscle, gastrospasm
hemicrania, ae f - a periodic morbid condition with localized headaches, hemicrania
hemiplegia, ae f - paralysis of one side of the body, hemiplegia
monodactylismus, i m - a congenital condition in which only one finger or toe is present on the hand or the foot, monodactylism
morbus, i m - disease
myoplegia, ae f - paralysis of muscle or a condition in which muscular force is decreased, myoplegia
myotomia, ae f - the dissection of a muscle or of muscular tissue, myotomy
osteomalacia, ae f - softening of bones, osteomalacia
osteopathia, ae f - disease of bones, osteopathia
papilla, ae f - papilla
parodontōsis, is f (= periodontōsis, is f ) - any degenerative change occurring in alveolar periosteum
phlebocarcinōma, ătis $n$ - a malignant epithelial tumour affecting a vein, phlebocarcinoma
photophobia, ae f - abnormal intolerance to light, photophobia
pseudarthrōsis, is $\mathrm{f}-\mathrm{a}$ false joint formed between the fragments of a fractured bone which have failed to unite, pseudarthrosis
radicularis, e - radicular
resectio, ōnis $f$ - resection, surgical removal of a part
spasmophilia, ae f - a morbid state in which there is a tendency to convulsions and a spasm, spasmophilia
stomatomycōsis, is f - any morbid condition caused by a microscopical fungus, stomatomycosis
suppuratīvus, a, um — pus-forming; having a tendency toward suppuration, suppurative
tachycardia, ae f - a rapid action of the heart, tachycardia
toxicomania, ae f - an insane desire for poison, toxicomania
ulcus, ěris $n$ - a localized necrotic lesion of the skin or a mucous surface, an ulcer

## II. English-Latin vocabulary

abnormal quickness in eating, tachyphagia - tachyphagia, ae f
a chronic disease of the skin, characterized by the appearance of laminated scales, psoriasis - psoriasis, is $f$
a condition in which the ability to swallow is lacking, aphagia - aphagia, ae f
actinomicosis, a chronic infective disease transmitted from cattle actinomycōsis, is $f$
acute - acūtus, a, um
amputation, the removal of a limb or portion of a limb, or of any other appendage - amputatio, ōnis $f$
angiology, the science of blood vessels - angiologia, ae f
any disease affecting a joint, arthropathy - arthropathia, ae f
any disease of the skin, dermatosis - dermatōsis, is f
any kind of pain affecting a joint, arthralgia - arthralgia, ae $f$
any morbid condition of the nose, rhinopathy - rhinopathia, ae $f$
any morbid condition or abnormal growth of the hair, trichopathy trichopathia, ae f
apnea, the cessation of breathing - apnoë, ës f
arthralgia, any kind of pain affecting a joint - arthralgia, ae f
atrichia, not having hair - atrichia, ae f
atrophy, a condition of general malnutrition from whatever cause atrophia, ae f
biopsy, examination for purposes of diagnosis of issue cut from the living body - biopsia, ae f
bradycardia, slowing of the heart rate - bradycardia, ae f
cardiac - cardiăcus, a, um
cephalalgia, pain in the head - cephalalgia, ae f
coma, the state of complete loss of consciousness from which the patient can not be rousedby any ordinary external stimulus - coma, ătis n
diabetic, relating to diabetes - diabetĭcus, a, um
didactylism, the congenital condition of having only two fingers on a hand or two toes on a foot - didactylismus, i m
dysplasia, abnormal development of tissue - dysplasia, ae f
dystrophy, a disorder of the structure and functions of an organ or tissue due to perverted nutrition - dystrophia, ae f
encephalomalacia, softening of the brain - encephalomalacia, ae f
fibrous - fibrōsus, a, um
gland - glandŭla, ae f
hard - durus, a, um
hemiatrophy, atrophy affecting only one side of the body, or one half of an organ - hemiatrophia, ae f
hemophilia, a severe hereditary bleeding disease affecting males and transmitted by females - haemophilia, ae f
impairment of the voice, dysphonia - dysphonia, ae $f$
infection - infectio, ōnis f
insufficiency - insufficientia, ae f
intravenous - intravenōsus, a, um
lingual - linguālis, e
malignant (neoplasm), indicative of danger to ill - malignus, a, um
mastopathy, any diseased condition of the mammary gland - mastopathia, ae f
medical specialist treating diseases of inner organs - therapeutista, ae m
monopathophobia, fear of a particular disease - monopathophobia, ae f
monostotic, pertaining to a singular bone - monostotĭcus, a, um
myopia, short sight - myopia, ae f
narcosis - narcōsis, is f
nephrogenic, produced by or originating in the kidney - nephrogĕnus, a um nephropathy, disease of the kidney - nephropathia, ae f
occlusion, the contact between upper and lower teeth on the closure of the jaws or during normal movement of the mandible - occlusio, ōnis $f$
ophthalmoplegia, palsy (paralysis) of ocular muscles - ophthalmoplegia, ae f
osteochondrosis, a degenerative change in bony and cartilage tissues osteochondrosis, is f
osteodystrophy, a disorder of bone nutrition - osteodystrophia, ae f
paralysis of similar parts on both sides of the body, diplegia - diplegia, ae f
a pathological condition in which only one muscle, one group of muscle or one part of the body is affected, monoplegia - monoplegia, ae $f$
pharmacophobia, a morbid fear of taking drugs or medicines pharmacophobia, ae f
phoniatrics ( $=$ phoniatry), the treatment of disorders of speech phoniatria, ae f
phlebography 1) a radiographic visualization of veins; 2) the tracing of the venous pulse by means of a phlebograph - phlebographia, ae f
phonocardiogram, the record produced by an instrument for recording heart sounds - phonocardiogramma, ătis n
photophobia, abnormal intolerance to light - photophobia, ae f
proctospasm, a spasmatic contraction of the rectum - proctospasmus, i m
progressive - progressīvus, a, um
prophylaxis, the art of preventing disease - prophylaxis, is f
protrusive, removed ahead - protrusīvus, a, um
the rash or eruption on the mucous tissue, enanthema - enanthēma, ătis n
rhinopathy, any morbid condition of the nose - rhinopathia, ae f
salivary - salivarius, a, um
tachyphagia, abnormal quickness in eating - tachyphagia, ae f
tissue - textus, us m
toxicosis, a pathological condition caused by the absorption of poisons toxicōsis, is f
tumor - tumor, ōris m
unfounded or unreasonable fear of a predisposition to carcinoma cancerophobia, ae f
valve - valva, ae f
viral - virālis, e
xerostomia, dryness of the mouth due to failure of the salivary gland xerostomia, ae f
the X-ray examination of the great vessels and the chambers of the heart, angiocardiography - angiocardiographia, ae f

## Lesson 15 <br> NAMES OF QUALITATIVE AND QUANTITATIVE ABNORMALITIES IN MORPHOLOGICAL STRUCTURES AND PHYSIOLOGICAL PROCESSES

## § 112. Increase and decrease in different quantitative conditions

Increase and decrease of different quantitative conditions may, as a rule, be expressed by means of the prefixes hyper- and hypo- which are joined by final root elements:
hyperaesthesia, ae f excessive sensitiveness of the skin, hyperaesthesia;
hyperkinesia, ae $\mathbf{f}$ - a condition in which there is abnormally great strength of movement, hyperkinesias;
hyperplasia, ae $\mathbf{f}$ - any condition in which there is an increase in the number of cells in any body's part, hyperplasia;
hypodynamia, ae $\mathbf{f}$ - diminished muscular or nervous energy, hypodynamia;
hypogalactia, ae $\mathbf{f}$ - the secretion of a too small quantity of milk, hypogalactia;
hypopepsia, ae $\mathbf{f}$ - abnormal slowness and weakness of the process of digestion, hypopepsia.

Increase and decrease in the functional activity is sometimes expressed by means of the initial roots tachy- and brady-:
tachypnoë, ës f - abnormally rapid breathing, tachypnoea
bradykinesia, ae f abnormal sluggishness of physical movements, bradykinesia

## § 113. Increase or decrease in dimension of anatomical and histological structures

Increase in size is expressed by means of the following initial and final roots: dolich-, macr-, mega-, megal-, -megalia:
dolichocōlon, i n - an abnormally long colon of normal diameter, dolichocolon
macrocy̆tus, $\mathbf{i} \mathbf{~ m}$ - a red blood cell that is larger than normal, macrocyte
megaduodēnum, in - duodenum of abnormally large size, megadoduenum
megalosplenia, ae f-enlargement of the spleen, megalosplenia
hepatomegalia, ae $\mathbf{f}$ - a condition of enlargement of the liver, hepatomegalia

Decrease in size of anatomical and histological structures is expressed by means of the initial roots brachy- and micr-:
brachydactylia ae $\mathbf{f}$ - a condition in which there are abnormally short fingers or toes, brachydactylia
microcephălus, i m - a person with an unusually small size of head, microcephalus.

Dilatation or narrowing in volume of a hollow organ, cavity or tube is epressed by means of the following roots: -ectasia, -ectăsis, -dilatatio, sten-, -stenōsis:
bronchiectăsis, is $\mathbf{f}$ - a condition of dilatation of a bronchus or bronchi, bronchiectasis
gastrectasia, ae $\mathbf{f}$ - dilatation of the stomach, gastrectasia
vasodilatatio, ōnis $\mathbf{f}$ - dilatation of a blood vessel, vasodilatation
stenostomia, ae f-abnormal narrowness of the mouth, stenostomy
oesophagostenōsis, is $\mathbf{f}$ - narrowing of the oesophagus, oesophagostenosis

## § 114. Increase and decrease in the quantity of anatomical and histological structures

Increase and decrease in the quantity of anatomical and histological structures is expressed by means of the roots olig-, poly-, -penia:
oligodontia (=oligodentia), ae f - a state in which most of the teeth are lacking, oligodontia
polyarthropathia, ae $\mathbf{f}$ - a pathological condition involving many joints, polyarthropathy
erythropenia, ae $\mathbf{f}$ - a state in which there are too few erythrocytes in the blood, erythropenia

Increase in the quantity of any anatomical or histological structure may also be expressed by the final prefix - $\overline{\text { osis }}$ :
leucocytōsis, is $\mathbf{f}$ - an increase in the total number of leucocytes in the blood, leucocytosis
papillomatōsis, is $\mathbf{f}$ - the condition of diffuse formation of papillomata, papillomatosis

## § 115. Table of initial root elements

| Greek root and its <br> variants | Latin equivalents <br> in dictionary form | English meaning | English word- <br> building equivalents |
| :---: | :---: | :---: | :---: |
| aesthes-, -aesthesia | sensus, us m | sensibility, <br> sensitiveness | aesthes-, <br> -aesthesia |
| brachy- | brevis, e | short | brachy- |
| cheil-, -cheilia | labium, i n | lip | cheil-, -cheilia |
| cyt-, -cy̆tus | cellŭla, ae f | cell | cyt-, -cyte |
| dolich- | longus, a, um | long | dolich- |


| Greek root and its <br> variants | Latin equivalents <br> in dictionary form | English meaning | English word- <br> building equivalents |
| :---: | :---: | :---: | :---: |
| erythr- | ruber, bra, brum | red | erythr- |
| gen-, -genia | maxilla, ae f | mandible | gen-, -genia |
| gloss-, -glossia | lingua, ae f | tongue | gloss-, -glossia |
| glyc- | dulcis, e | sugar | glyc- |
| gnath-, -gnathia | maxilla, ae f | maxilla, upper <br> jaw | gnath-, -gnathia |
| leuc- | albus, a, um | white | leuc- |
| macr-, mega-, | magnus, a, um | large | macr-, mega-, |
| megal-, -megalia | megal-, -megalia |  |  |
| melan- | niger, gram, grum | black | melan- |
| micr- | parvus, a, um | small | micr- |
| myel, -myelia | 1) medulla ossium; <br> 2) medulla spinālis | $1)$ bone marrow; <br> 2) spinal cord | myel, -myelia |
| olig- | parvus, a, um | few | olig- |
| pod-, -podia | pes, pedis m | foot | pod-, -podia |
| poly- | multus, a, um | many | poly- |
| splen-, -splenia | lien, ēnis m | spleen | splen-, -splenia |
| therm-, -thermia | 1) calor, ōris m; <br> 2) temperatūra, ae f | 1) heat; <br> 2) temperature | therm-, -thermia |
| thyr(e)- | glandŭla thyr(e)oidea | thyroid (gland) | thyro- |

## Attention!

1. The initial roots macr- and megal- may be used in many (but not in all!) cases as synonyms: macrocephalia $=$ megalocephalia, macropodia $=$ megalopodia. When choosing the necessary variant of the initial root one should consult the dictionary.
2. The root -cyt- can be omitted if the term begins with erythrocyt- or leucocyt- and ends with -penia:
erythrocytopenia $=$ erythropenia; leucocytopenia $=$ leucopenia, but: monocytopenia, thrombocytopenia - the only variants.

## § 116. Table of final roots

| Final root <br> elements | $\quad$ English meaning |
| :---: | :--- |
| -aemia | any condition of the blood |
| -genĕsis | the origin and (formative) development |
| -genia | any condition of mandible |
| -mnesia | any condition of the memory |
| -penia | a diminution in the number of any kind of cells present in the blood |
| -phrenia | a condition assciated with a serious mental disorder |
| -plasia | the development of tissues |


| Final root <br> elements | English meaning |
| :---: | :--- |
| -poësis | the formation: 1) of cells present in the blood; 2) of lymph; 3) of urine |
| -sthenia | any condition of strength, vigor or forcefulness |
| -tensio | a condition of arterial blood pressure |
| -tonia | a condition of muscular tension in the walls of vessels and bowels |

## § 117. Exercises

1. Complete (orally) the dictionary form of each noun. Determine the meaning of each initial and final morphological element; write down the full definition of each term as well as its English equivalent:
amnesia; anaesthesiolŏgus; apodia; asthenia; brachycheilia; brachydactylia; dolichocephalia; dysthyreōsis; erythropenia; glossoplegia; glycaemia; hyperaemia; hyperthermia; hypotonia; leucocytōsis; melanoderma; microgenia; micromyelia; odontogeněsis; oligocytaemia; oligodontia (= oligodentia); oligophrenia; polymastia; prognathia; splenomegalia; thermotherapia; thrombocytopoësis; thyreotoxicōsis

## 2. Make up the Latin dictionary form of one-word terms with the following meaning:

abnormal narrowness of the mouth; abnormal slowness and weakness of the process of digestion; abnormal sluggishness of physical movements; a condition in which there are abnormally short fingers or toes; a condition of enlargement of the liver; an abnormally long colon of normal diameter; an increase in the total number of leucocytes; a pathological condition involving many joints; a red blood cell that is larger than normal; a state in which most of the teeth are lacking; a state in which there are too few erythrocytes; dilatation of the stomach; excessive sensitiveness of any organ or part of the body; the origin and development of bone marrow; the origin and development of morbid condition; extremely rapid breathing

## 3. Give the full definition and the Latin dictionary form of the terms:

aglossia; anaemia; brachyoesophagus; cytology; dolichocolon; dystonia; erythema; gnathalgia; haematomyelia; halitosis; hepatomegalia; hyperesthesia; hyperglycaemia; hypertension; hypomnesia; hypophrenia; hypoplasia; hypothermia; macrocyte; megaloduodenum; megalomania; melanocarcinoma; microcephaly; microgenia; monocytopoesis; myelocytaemia; oligodactylia; podagra; podalgia; polyavitaminosis; splenohepatomegaly

## 4. Give the Latin dictionary form and translate into English (A) and into

 Latin (B):A. Anaesthesia intraorālis; gingivītis ulcerōsa; hypertrophia muscǔli massetēris; hypoplasia enamēli; odontogeněsis imperfecta; syndrŏmum immunodeficientiae acquisītae; trismus gradus primi
B. Chemical burn of the face; false diastema; gingival abscess; hemolytic anemia of pregnancy; latent hypermetropia; primary hypothyroidism; progressive facial hemiatrophy; true hyposalivation; viral warts

## § 118. Vocabulary to lesson 15

## I. Latin-English vocabulary

acquisītus, a, um - acquired
actinomycōsis, is f - an infective disease, caused by Actinomyces israelli, actinomycosis
amnesia, ae f - loss of memory of varying degree, amnesia
anaemia, ae f - a condition of the blood in which there are quantitative and qualitative changes in the red cells and hemoglobin, anemia
anaesthesia, ae f - loss of feeling or sensation in some part of the body due to nervous lesion or a local anesthetic agent, anesthesia
anaesthesiolŏgus, i m - a specialist in the administration of anaesthetics, anesthesiologist
apodia, ae f - congenital absence of feet, apodia
asthenia, ae f - loss of vital forces, asthenia
atrophia, ae f - a condition of general malnutrition from whatever cause, atrophy
brachycephălus, i m - an individual with disproportionately short head, brachycephalic
brachydactylia, ae f - condition in which there are abnormally short fingers or toes, brachydactylia
dolichocephalia, ae f - the state of having a relatively long skull, dolichocephalia
dysthyreōsis, is f - imperfect function of the thyroid gland, dysthyreosis
erythropenia, ae f - a state in which there are too few erythrocytes, erythropenia
gingivītis, itĭdis f - inflammation of the gingival margins around the teeth, manifested by swelling and bleeting, gingivitis
glandŭla, ae f-gland
glossoplegia, ae f - paralysis of the tongue, glossoplegia
glycaemia, ae f - a condition in which the circulating blood contains a quantity of sugar above normal amounts, glycemia
gradus, us m - grade
hyperaemia, ae f - an excess of blood in any part of the body, hyperaemia
hyperthermia, ae f - very high body temperature, hyperthermia
hypertrophia, ae f - an increase in the number or size of the cells of which a tissue is composed as the result of increase in function of that tissue, hypertrophy
hypoplasia, ae f - defective formation or under-development of a tissue or part, hypoplasia
hypotonia, ae f - lessened tension in any body structure, hypotonia
immunodeficientia, ae f - immunodeficiency
imperfectus, a, um - incomplete
intraoralis, e - intraoral
leucocytōsis, is f - an increase in the total number of leucocytes in the blood, leucocytosis
m . massēter, ēris m - masseter (muscle)
melanoderma, ătis n - a condition in which there is an unusually large accumulation of melanin in the skin, melanoderma
microcheilia, ae f - a condition in which the lips are abnormally small, microcheilia
microgenia, ae $f$ - a condition in which the chin is of unusually small size, microgenia
micromyelia, ae $\mathrm{f}-$ general reduction in size of the spinal cord, micromyelia
odontogeněsis, is $f$ - the origin and formative development of teeth, odontogenesis
oligocytaemia, ae f - a condition in the blood in which there is cell deficiency, oligocytemia
oligodentia, ae f (= oligodontia, ae f ) - a state in which most of the teeth are lacking, oligodontia
oligophrenia, ae f - congenital lack of the mentality, oligophrenia
polymastia, ae f - a state in which in human beings there are more than two distinct mammary glands, polymastia
primus, a, um - first
prognathia, ae f - a condition in which there is abnormal projection of one or both jaws, prognatism
salivarius, a, um - salivary
splenomegalia, ae $f$ - enlargement of the spleen, splenomegalia
syndrǒmum, i m - a distinct group of symptoms or signs which, associated together, form a characteristic clinical picture of a disease, syndrome
thermotherapia, ae f - the use of heat in the treatment of disease, thermotherapia
thrombocytopoësis, is f - the formation of blood platelets, thrombocytopoiesis
thyreotoxicōsis, is f - any toxic condition attributable to hyperactivity of the thyroid gland, thyrotoxicosis
trismus, i m - inability to open the mouth due to tonic contracture of the muscles of the jaw, trismus
ulcerōsus, a, um - having the characteristics of an ulcer, ulcerous

## II. English-Latin vocabulary

abnormal slowness and weakness of the process of digestion, hypopepsia hypopepsia, ae f
abscess, an accumulation of puscircuscribed in a cavity produced by tissue disintegration - abscessus, us $m$
an abnormally long colon of normal diameter, dolichocolon dolichocōlon, in
abnormally rapid breathing, tachypnea - tachypnoë, ës f
aglossia, a congenital condition of being devoid of a tongue - aglossia, ae $f$
anaemia, a condition of the blood in which there are quantitative and qualitative changes in the red cells resulting in a reduction in the total amount of blood - anaemia, ae f
burn, an injury caused by heat or by chemical or physical agents heaving an effect similar to heat - combustio, ōnis f
brachyoesophagus, a congenitally short oesophagus - brachyoesophăgus, i m
a condition in which there are abnormally short fingers or toes, brachydactylia - brachydactylia, ae f
a condition of enlargement of the liver, hepatomegalia - hepatomegalia, ae f
cytology, the science of the form and functions of cells - cytologia, ae f
deviation, an abnormal variant in the development - deviatio, ōnis $f$
diastema, a pronounced gap between the lateral incisors - diastēma, ătis n
dilatation of the stomach, gastrectasia - gastrectasia, ae f
dolichocolon, an abnormally long colon of normal diameter dolichocōlon, in
dystonia, a state of disordered tonicity - dystonia, ae f
erythema, redness of the skin due to hyperaemia - erythēma, ătis $n$
excessive sensitiveness of any organ or part of the body, hyperaesthesia hyperaesthesia, ae f
extremely rapid breathing, tachypnea - tachypnoë, ës f
false - falsus, a, um
gingival - gingivālis, e
gnathalgia, pain in one or both jaws - gnathalgia, ae $f$
hematomyelia, bleeding within the substance of the spinal cord haematomyelia, ae f
hemolytic, pertaining to or causing hemolysis - haemolytĭcus, a, um
hepatomegalia, a condition of enlargement of the liver - hepatomegalia, ae f
hyperesthesia, excessive sensitiveness of any organ or part of the body hyperaesthesia, ae f
hyperglycemia, an excessive amount of sugar in the blood hyperglycaemia, ae f
hypertension, high arterial blood pressure - hypertensio, ōnis f
hypermetropia, a condition in which the image of an object viewed by the eye is formed behind the retina - hypermetropia, ae $f$
hypomnesia, a weak or defective state of the memory - hypomnesia, ae $f$
hypoplasia, underdevelopment of a tissue or part - hypoplasia, ae f
hypothermia, deficiency of body heat - hypothermia, ae f
hypothyroidism, a condition caused by under-activity of the thyroid gland - hypothyroidismus, i m (= hypothyreōsis, is f)
an increase in the total number of leucocytes, leucocytosis - leucocytōsis, is f
latent, existing but not manifest - latens, ntis
macrocyte, a red blood cell that is larger than normal - macrocy̆tus, i m
megaloduodenum, duodenum of abnormally large size - megaloduodēnum, in
melanocarcinoma, a darkly pigmented malignant epithelial tumor melanocarcinōma, ătis n
microcephaly, unusual smallness of the head - microcephalia, ae f
microgenia, a condition in which the chin is of unusually small size microgenia, ae $f$
monocytopoiesis, the production of monocytes in the bone marrow monocytopoësis, is f
myelocytaemia, the presence of myelocytes in the blood - myelocytaemia, ae $f$
oligodactylia, a congenital deficiency of fingers or toes - oligodactylia, ae f
the origin and development of a morbid condition, pathogenesis pathogeněsis, is f
the origin and development of the bone marrow, myelogenesis myelogenesis, is f
a pathological condition involving many joints, polyarthropathy polyarthropathia, ae $f$
podagra, gout, a disease of the purine metabolism characterized by attacks of arthritis with an assotiated raised serum uric acid - podagra, ae $f$
podalgia, sensation of pain in the foot - podalgia, ae $f$
polyavitaminosis, a morbid condition caused by deficiency of several vitamins - polyavitaminōsis, is f
pregnancy - gravidĭtas, ātis $f$
primary - primarius, a, um
a red blood cell that is larger than normal, macrocyte - macrocy̆tus, i m
a state in which most of the teeth are lacking, oligodentia - oligodentia, ae $f$
a state in which there are too few erythrocytes, erythropenia - erythropenia, ae f
splenohepatomegaly, enlargement of the spleen and the liver splenohepatomegalia ae f
wart, a circumscribed, cutaneous excrescence having a papilliferous surface - verrūca, ae f

## Lesson 16 <br> NAMES OF INFLAMMATORY PROCESSES WHICH OCCUR IN ORGANS AND TISSUES. ONE-WORD NAMES OF ENDOGENOUS PATHOLOGICAL CHANGES AND MALFORMATIONS

## § 119. Names of inflammatory conditions

The state of inflammation in any organ or tissue, as a rule, is usually expressed by means of the final suffixed element -itis which is transformed into -itidis in the Genitive form. The suffix -itis is added to the initial root of the noun which defines the place of a morbid state. All the terms with the suffix - itis are nouns of the $3^{\text {rd }}$ declension:
arthr- (joint) $+\mathbf{i}$ tis $\rightarrow$ arthrītis, itídis $\mathbf{f}$ - inflammation of a joint, arthritis
hepat- (liver) + ītis $\rightarrow$ hepatĩtis, itídis $\mathbf{f}-$ inflammation of the liver, hepatitis

The suffix -itis may be added both to the Greek and Latin roots:
nephr- (Greek nephros kidney) + ītis $\rightarrow$ nephrītis, itîdis $\mathbf{f}-$ an inflammatory disease of the kidneys, nephritis
tonsill- (Latin tonsilla, ae f tonsil) $+\overline{\mathrm{i}}$ tis $\rightarrow$ tonsillītis, itîdis $\mathbf{f}-$ an inflammation of the tonsil, tonsillitis

The site of the inflammatory process can be defined more precisely by means of the following prefixes of the Greek origin:

1) endo- (inner, mostly a mucous part of an organ):
endo + metr- (utěrus, i m) + ītis $\rightarrow$ endometrītis, itǐdis $f-$ an inflammation of the inner mucous membrane of the uterus, endometritis
2) para- (cellular, connective and other tissues near an organ):
para- + cyst (urinary bladder) $+\bar{i}$ tis $\rightarrow$ paracystītis, itîdis $\mathrm{f}-$ a condition of inflammation affecting the connective and other tissues lying close to the bladder, paracystitis
3) peri- (tissues enclosing an organ):
peri- + card- (heart) + ītis $\rightarrow$ pericardītis, itǐdis $\mathrm{f}-$ an inflammation of the membrane enveloping the heart, pericarditis.

Names of some inflammatory morbid conditions are formed without suffix -ītis, e. g.:
panaritium, in - an inflammation in the nail fold, panaris (= panaritium);
phlegmŏne, es $\mathbf{f}$ - inflammation of connective tissue without pus formation, phlegmon
pneumonia, ae $\mathbf{f}$ - an inflammation of the spongy tissue of the lung, pneumonia

## § 120. Names of pathological cavities

Abscesses, cysts and hernias usually belong to pathological cavities.
Abscess (abscessus, us m) is an accumulation of pus circumscribed in a cavity produced by tissue disintegration. This Latin noun is used mainly with adjectives:
abscessus apicalis - apical abscess, an abscess at the apex of the root of a tooth
abscessus tonsillāris - tonsillar abscess, a suppurative condition of the parenchyma of a tonsil.

Cyst (cysta, ae f) is a cavity lined by a well-defined epithelium, fibrous or degenerating tissue. This noun both in Latin and English is mainly used in twoword terms with adjectives and nouns:
cysta choledŏchi - choledochus cyst, cystic dilatation in the common bile duct
cysta pancreatica - pancreatic cyst, a cyst arising within or in close proximity to the pancreas.

Hernia (hernia, ae $\mathbf{f}$ ) is the protrusion of an internal organ through a defect in the wall of the anatomical cavity in which it lies. The noun is used like the previous one with adjectives and nouns:
hernia cerěbri - hernia of the brain, protrusion of the brain through a defect in the skull
hernia inguinālis - inguinal hernia, hernia in the inguinal canal
In one-word terms, the idea of hernia is expressed by the final root -cele:
gastrocēle, es $\mathbf{f}$ - hernia of the stomach, gasrocele
myocēle, es $\mathbf{f}$ - hernia of a muscle, myocele

## § 121. Names of tumors

Names of tumors of a definite organ or tissues are formed by means of final suffix -ōma added to the initial root which indicates the localization of abnormal growth. All these names are nouns of the $3^{\text {rd }}$ declension:
angiōma, ătis $\mathbf{n}$ - angioma, a tumor composed of blood vessels or of lymphatic vessels
nephrōma, ătis $\mathbf{n}$ - nephroma, a tumor derived from renal substance
osseōma, ătis $\mathbf{n}$ - osseoma, a tumor of bone.
Some names of innocent tumors are formed without the suffix -oma:
poly̆pus, i m polypus, a tumor with a stalk arising from mucous membranes or the body surface
verrūca, ae f-a wart, a small circumscribed epidermal tumor.
Both nouns are used in multiword terms:
poly̆pus laryngis - a polypus of larynx
verrūca plana - a plane wart.
A malignant tumor or any malignant growth is named cancer - cancer, cri m . This name is used with the nouns and adjectives which define localization of the tumor:
cancer cutis - cancer of the skin
cancer gastris - cancer of the stomach
A malignant epithelial tumor is called carcinoma - carcinōma, ătis n. This noun is used with adjectives mostly:
carcinōma bronchogenĭcum - a bronchogenic carcinoma, carcinoma originating from a bronchus
carcinōma cutaneum - carcinoma cutaneum, a squamous-celled carcinoma of the skin.

The name carcinoma can also be used as a final root of one-word terms:
adenocarcinōma, ătis $\mathbf{n}$ - a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
chondrocarcinōma, ătis $\mathbf{n}$ - a carcinoma the fragment of which contains cartilaginous elements, chondrocarcinoma.

## § 122. Names of concrements

A concrement is a pathological concretion - mostly a small mass which has become calcified in a cavity or in the tissue of a hollow anatomical structure. Such a concretion is denoted in Latin by the nouns concrementum, i n or calcullus, $\mathbf{i} \mathbf{m}$ and an adjective defining the localization of the concretion:
concrementum nasāle - nasal calculus
calcŭlus dentālis - dental calculus
The names of these concretions may also be expressed by one-word terms by means of the final root -lithus (Greek lithos stone) added to initial roots: rhinolĭthus, $\mathbf{i} \mathbf{m}=$ concrementum nasāle
odontolĭthus, i $\mathbf{m}=$ calcŭlus dentālis.
The condition in which a number of calculi are present in any part of the body is called calculosis - calculōsis, is $\mathbf{f}$. The formation of concretions is named lithiasis - lithiăsis, is $\mathbf{f}$. The same word is used as a final root of several one-word terms:
broncholithiăsis, is $\mathbf{f}$ - a condition in which calculi occur in the lumina of bronchial tubes, broncholithiasis
cholecystolithiăsis, is $\mathbf{f}$ - a condition in which there are gall-stones in the gall bladder or bile duct, cholelithiasis
nephrolithăsis, is $\mathbf{f}$ - a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis
urolithiăsis, is $\mathbf{f}$ - a morbid state due to the presence of calculi in the urinary system, urolithiasis
§ 123. Table of initial roots

| Greek roots and their variants | Latin equivalents in dictionary form | English meaning | English word building elements |
| :---: | :---: | :---: | :---: |
| aden- | 1) glandŭla, ae f; <br> 2) adenoĭdes, um f; <br> 3) nodus lymphatǐcus | 1) gland <br> 2) adenoids <br> 3) lymphatic node | aden- |
| carcin- | cancer, cri m | cancer | carcin- |
| chole- | bilis, is f; fel, fellis n | bile | chole- |
| cholecyst- | vesīca biliāris (fellea) | gall bladder | cholecyst- |
| col-, -colon | 1) intestīnum crissum; <br> 2) colon | 1) large intestine <br> 2) colon | col-, -colon <br> col-, -colon |
| cyst- | 1) saccus, i m; <br> 2) vesīca, ae f; <br> 3) vesīca urinaria | 1) sac; <br> 2) bladder; <br> 3) urinary bladder | cyst- |
| dacry- | lacrĭma, ae f | tear | dacry- |
| dacryocyst- | saccus lacrimālis | lacrimal sac | dacryocyst- |
| enter- | 1) intestīnum tenue; <br> 2) intestīnum | 1) small intestine; <br> 2) intestine | enter- |
| hist- | textus, us m | tissue | hist- |
| hyster-, metr- | uterus, i m | uterus | hyster-, metr |
| lith- | calcŭlus, i m concrementum, in | stone concretion | lith- |
| lip | adeps, 1 l pis m | fatty tissue of the body | lip- |
| necr- | mortuus, a, um | dead, lifeless | necr- |
| ne(0)- | novus, a, um | new | ne(o)- |
| onc- | tumor, ōris m | tumor, swelling | onc- |
| ophthalm-, -ophthalmia | ocŭlus, i m | eye | ophthalm-, -ophthalmia |
| pan-, pant- | omnis, e | all | pan-, pant- |
| py- | pus, puris n | pus | py- |
| scler- | durus, a, um | hard, hardening | scler- |
| sial-, -sialia | 1) salīva, ae f; <br> 2) ductus salivarii | 1) saliva; <br> 2) salivary ducts | sial-, -sialia |
| sten- | strictus, a, um | narrow, narrowing |  |


| Greek roots and <br> their variants | Latin equivalents <br> in dictionary form | English meaning | English word <br> building elements |
| :---: | :---: | :--- | :---: |
| ur-, -uria | 1) urea, ae f; <br> 2) urīna, ae f | 1) urea, the chief <br> nitrogenous <br> constituent of urine; <br> 2) urine | ur-, -uria |
| uran- | palātum, i n | palate | palat-, uran- |

## § 124. Table of final roots

| -carcinōma | a malignant epithelial tumor |
| :--- | :--- |
| -cele | hernia |
| -lithiăsis | the formation of concretions |
| - lithus | a concretion |
| -necrōsis | death of a portion of a tissue |
| -rrhagia | hemorrhage (bleeding) in any part of the body |
| -rrhoea | profuse discharge of mucus or other fluid substance |
| -salivatio | secretion of saliva |
| -schĭsis | congenial fissure of a tissue |
| -sclerōsis | hardening of a tissue |
| -stenōsis | the constriction or narrowing of an orifice or the lumen of a hollow <br> or tubular organ |
| -stăsis | cessation of the flow of any physiological fluid |
| -uria | any condition of the urine |

Attention! Instead of the initial Greek root uran- the Latin root palat- can be used:
palatoplegia, ae f (palatoplegia, paralysis affecting the soft palate) $=$ uranoplegia, ae f (uranoplegia)
palatoschǐsis, is f (palatoschisis, cleft palate, a congenital fissure in the midline of the hard palate) $=$ uranoschissis, is $f$ (uranoschisis)

## § 125. Exercises

1. Complete orally the dictionary form of each Latin noun and define the meaning of each word building element. Write down in English a full definition of each term and its English one-word equivalent:
adenalgia; adenocarcinōma; broncholithiăsis; carcinomatōsis; cheilocarcinoma; cheilognathoschǐsis; cholecystītis; dacryostenōsis; empyēma; endophthalmītis; enterocolītis; gastrocēle; gnathoschĭsis; histoly̆sis; hyposalivatio; lipuria; lymphostăsis; megalodontia; myocele; neoplasma; nephrolithiăsis; odontolĭthus; oncolŏgus; osteonecrōsis; palatoplegia; periodontītis; panalgia; pyogĕnus; uraemia; uranoschǐsis
2. Make up the Latin dictionary form of one-word terms with the following meaning:
abnormal narrowing of the internal diameter of a vessel; an accumulation of pus in the pericardium; calculus on the teeth; causing the growth of tumors; the discharge of mucus, pus or blood from eye; a discharge of pus; hardening of bony spaces; formation and development of body tissue; the formation of concretions; inflammation of the inner mucous membrane of the uterus; inflammation of the liver; narrowing or stricture of the duct of the lacrimal gland; paralysis affecting the soft palate;; profuse discharge of mucous fluid from the nose; the presence of blood in the urine; the production of urinary calculi and the morbid state due to the presence of calculi in the urinary system; separation of a tissue as a result of its death

## 3. Give the Latin dictionary form and the full definition of each term in English:

angioma; calculosis; cancerogenic (= carcinogenic); carcinoma; cheilognathopalatoschisis ( $=$ cheilognatouranoschisis); cystitis; dacryorrhoea; dropsy; endometritis; enterogastritis; gingivitis; gnathoschisis; hypersalivation; lymphangitis; oncologist; oncotherapy; parotitis; pericystitis; polyposis; sialolith; tonsillitis

## 4. Give the Latin dictionary form and translate into English (A) and into

 Latin (B):A. Labium leporīnum sive fissum; rhagădes labii inferiōris; calcŭlus supragingivalis; cancer tunǐcae mucōsae oris; polyposis laryngis; verrūcae planae; status textuum praecancerōsus; flegmŏne cavitātis oris
B. Simple odontome; artritis of temporomandibular joint; nasolabial cyst; submandibular adenitis; abscess of hard palate; implantation of inferior canine tooth; verrucose precancer; aphtous recurrent stomatitis

## § 126. Vocabulary to lesson 16

## I. Latin-English vocabulary

achlorhydria, ae f - a complete lack of free hydrochloric acid in the gastric juice, achlorhydria
adenalgia, ae f - a painful condition of a gland, adenalgia
adenocarcinōma, ătis $n-$ a carcinomatous tumor of glandular epithelium andconnective tissue, adenocarcinoma
amenorrhoea, ae f - the pathological absence or stoppage of the menstrual discharge from the uterus, amenorrhoea
broncholithiăsis, is f - a condition in which calculi occur in the lumina of bronchial tubes, broncholithiasis
cancer, cri m - cancer
carcinomatōsis, is f - the condition in which carcinoma is widely distributed throughout the body, carcinomatosis
calcŭlus, i m - a solid pathological concretion, usually of inorganic mater, formed in any part of the body, calculus
cheilocarcinōma, ătis n- carcinoma of the lip, cheilocarcinoma
cheilognathoschĭsis, is f - hare-lip in which the cleft involves the jaw as well as the lip, cheilognathoschisis
cholecystītis, itǐdis f - inflammation of the gallbladder, cholecystitis
dacryostenōsis, is - narrowing or stricture of the duct of the lacrimal gland, dacryostenosis
empyēma, ătis $n$ - an accumulation of pus in a cavity, empyema
endophthalmītis, itǐdis f - a suppurative inflammation of the interior of the eyeball, endophthalmitis
enterocolītis, itĭdis $f$ - an inflammed condition of the small intestine and the colon, enterocolitis
fissus, a, um (labium) - splintered (lip), hare-lip
flegmŏne, es f - inflammation of the tissue without pus formation, phlegmon
gastrocēle, es f - hernia of the stomach or of a portion which has become pouched, gastrocele
gnathoschǐsis, is $f$ - a congenital fissure of the maxilla, such as is present in cleft palate, gnathoschisis
hidradenītis, itǐdis f - inflammation of the sweat glands, hidradenitis
histoly̆sis, is f - spontaneous breaking-down or dissolution of living organic tissue, histolysis
hyposalivatio, ōnis f - a condition in which there is an abnormal decrease in secretion of saliva, hyposalivation
leporīnus, a, um - belonging to the hare (lip)
lipuria, ae f - the presence of an oily emulsion or fat in the urine, lipuria
lymphostăsis, is $f$ - cessation of the flow of lymph, lymphostasis
megalodontia, ae f - a condition in which the teeth are excessively large, megalodontia
mucōsus, a, um - mucous
myocēle, es f - herniation of a muscle, myocele
neoplasma, ătis $n$ - any new and morbid formation of tissue, neoplasm
nephrolithiăsis, is $f$ - a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis
odontolǐthus, i m - calculus on the teeth, odontolith
oncolŏgus, i m - a specialist, treating tumorous diseases, oncologist
osteonecrōsis, is f - death of bony tissue, osteonecrosis
palatoplegia, ae f - paralysis affecting the soft palate, palatoplegia
pantalgia, ae f - pain affecting all parts of the body, pantalgia
periodontītis, itǐdis f - inflammation of the periodontal membrane, periodontitis
planus, a, um - plane
polypōsis, is f - condition in which there are many polypi growing from the mucous membrane, polyposis
praecancerōsus, a, um - relating or belonging to the stage in which a precancer develops, before the growth has become malignant, precancerous
pyogěnus, a, um - forming or producing pus, pyogenic
rhagas, ădis $f$ (plur. rhagădes, um f) - fissures, chaps, or cracks at the angle of the mouth, rhagades
sive - or
status, us m - state
supragingivālis, e - supragingival
textus, us m - tissue
tunĭca, ae $\mathrm{f}-1$ ) layer, coat; 2) membrane
uraemia, ae f - a condition caused by retention of metabolic products in the blood and disturbance of acid-base ratio of the latter, uraemia
uranoschǐsis, is $f(=$ palatoschǐsis, is $f)$ - cleft palate
verrūca, ae f - wart

## II. English-Latin vocabulary

abnormal narrowing of the internal diameter of a vessel - angiostenosis, is f angiōma, a tumor composed of blood vessels - angiōma, ătis m
calculosis, a condition in which a number of calculi are present in any part of the body - calculōsis, is f
calculus of the teeth, odontolith - odontolǐhus, i m
cancerogenic (= carcinogenic), producing carcinoma - cancerogěnus, a, um
carcinoma, a malignant epithelial tumor - carcinōma, ătis n
causing the growth of tumors, oncogenous - oncogĕnus, a, um
cheilognathopalatoschisis (= cheilognatouranoschisis), the condition of having both hare-lip and cleft palate - cheilognathopalatoschǐsis, is f; cheilognatouranoschǐsis, is $f$
cystitis, inflammation of the urinary bladder - cystītis, itirdis f
dacryorrhoea, an escessive flow of the tears - dacryorrhoea, ae $f$
the discharge of mucus, pus or blood from eye, ophthalmorrhoea ophthalmorrhoea, ae f
a discharge of pus, pyorrhea - pyorrhea, ae $f$
dropsy, an abnormal collection of fluid in tissue or cavity space hydrops, ōpis m
enterogastritis, an inflammation of the small intestine and the stomach enterogastrītis, itǐdis f
formation and development of body tissue, histogenesis - histogeněsis, is f
gingivitis, inflammation of the gingival margins around the teeth gingivītis, itǐdis $f$
gnathoschisis, a congenital fissure in the maxillasuch as is present in cleft palate - gnathoschĭsis, is $f$
hardening of bony spaces, osteosclerosis - osteosclerōsis, is $f$
hypersalivation, excessive secretion of saliva - hypersalivatio, ōnis f
inflammation of the inner mucous membrane of the uterus, endometritis endometrītis, ititdis $f$
inflammation of the liver, hepatitis - hepatitis, itǐdis $f$
lymphangitis, inflammation of lymphatic vessels - lymphangitis, itĭdis f
lymphocytosis, an increase in the number of lymphocytes lymphocytōsis, is f
narrowing or stricture of the duct of the lacrimal gland, dacryostenosis dacryostenōsis, is f
oncologist, a specialist treating tumorous diseases - oncolŏgus, i m
oncotherapy, the treatement of tumorous diseases - oncotherapia, ae f
paralysis affecting the soft palate, palatoplegia - palatoplegia, ae f
parotitis, an inflammatory state of the parotid gland - parotītis, itǐdis f
the presence of blood in the urine, hematuria - haematuria, ae f
profuse discharge of mucous fluid from the nose, rhinorrhea rhinorrhoea, ae f
the production of urinary calculi and the morbid state due to the presence of calculi in the urinary system, urolithiasis - urolithiăsis, is f
sialolith, a salivary calculus - sialolithus, i m
a sudden blocking of a blood vessel, usually an artery, by emboli, thromboembolia (thromboembolism) - thromboëmbolia, ae f (thromboëmbolismus, i m)
tonsillitis, inflammation of the tonsil - tonsillitis, itǐdis $f$

## § 127. Model (Sample) of the final test in clinical terminology

1. Give Greek initial roots and Latin equivalents (in the dictionary form) with the following meanings:
1) blood; 2) cell;
2) black; 4) kidney; 5) tissue.
2. Compose one-word terms in the dictionary form with the following meaning:
1) a specialist treating tumorous diseases; 2 ) any new and morbid formation of tissue; 3) forming or producing pus; 4) a red blood cell that is larger than normal; 5) a state in which most of the teeth are lacking.
3. Write down in the dictionary form the Latin equivalents of the following terms and give the full definition of each term:
1) erythema; 2) iatrogenic; 3) macrocyte; 4) phthisiologist; 5) stomatitis.
4. Write down the dictionary form and translate in English:
1) artritis of temporomandibular joint; 2) comatose state; 3) denudation of the tooth cervix; 4) viral and bacterial infections.

## LATIN-ENGLISH VOCABULARY

A
abscessus, us $\mathbf{m}$ an accumulation of pus circumscribed in a cavity produced by tissue disintegration, abscess
actinomycōsis, is $\mathbf{f}$, an affective disease, caused by Actinomyces israelli, actinomycosis
acquisītus, a, um acquired
acūtus, a, um acute
adenalgia, ae $\mathbf{f}$ a painful condition of a gland, adenalgia
adenocarcinōma, ătis $n$
a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
aliēnus, a, um foreign
allergǐcus, a, um allergic
alopecia, ae $\mathbf{f}$ loss of hair, alopecia
amnesia, ae $\mathbf{f}$ loss of memory of varying degree, amnesia
anaemia, ae $\mathbf{f}$ a condition of the blood in which there are quantitative and qualitative changes in the red cells and hemoglobin, anemia
anaesthesia, ae $\mathbf{f}$ loss of feeling or sensation in some part of the body due to nervous lesion or a local anesthetic agent, anesthesia
anaesthesiolŏgus, $\mathbf{i} \mathbf{m}$ a specialist in the administration of anaesthetics, anesthesiologist
angiopathia, ae $\mathbf{f}$ any disease of blood vessels, angiopathy
anthropogĕnus, a, um caused by human activities
anthropologia, ae f science studying the man in the process of his evolution, anthropology
anthropolŏgus, i m specialist studying the man in the process of his evolution, anthropologist
apodia, ae $\mathbf{f}$ congenital absence of feet, apodia
arteria, ae fartery
asthenia, ae $\mathbf{f}$ loss of vital forces, asthenia
atrophia, ae $\mathbf{f}$ a condition of general malnutrition from whatever cause, atrophy
autohaemotherapia, ae $f$ a method of treatment in which the patient's own blood is administered to him, autohaemotherapy

## B

bacteriālis, e bacterial, originating or derived from, belonging to or consisting of bacteria
benignus, a, um benign
biologia, ae f biology, science studying forms of life and living organisms
blepharītis, itĭdis $\mathbf{f}$ inflammation of the eyelids, blepharitis
blepharoplastica, ae $f$ a plastic operation to restore an eyelid
brachydactylia, ae $f$ a condition in which there are abnormally short fingers or toes, brachydactylia
bradyphagia, ae $\mathbf{f}$ slowing of swallowing, bradyphagia
bradypnoë, ës $\mathbf{f}$ an abnormally slow rate of breathing, bradypnoea
broncholithiăsis, is $\mathbf{f}$ the condition in which calculi occur in the lumen of bronchial tubes, broncholithiasis
bucca, ae f cheek

## C

cadāver, ěris n a corps; a lifeless human body
calcŭlus, i m a solid pathological concretion, usually of inorganic matter, formed in any part of the body, calculus
cancer, cri m cancer
carcinōma, ătis $\mathbf{n}$ a malignant epithelial tumor, carcinoma
carcinomatōsis, is $f$ the condition in which carcinoma is widely distributed throughout the body, carcinomatosis
cardiogĕnus, a, um cardiogenic, arising because of the heart
cardiolŏgus, i m a specialist treating heart diseases, cardiologist
caries, èi fagradual decay of death of bone as a result of chronic infection, caries
cariōsus, a, um affected with caries, carious
cerēbrum, i n cerebrum
cervix, îcis f cervix
cholecystītis, itĭdis f inflammation of the gallbladder, cholecystitis
cheilocarcinōma, ătis $\mathbf{n}$ carcinoma of the lip, cheilocarcinoma
cheilognathoschĭsis, is $\mathbf{f}$ hare-lip in which the cleft involves the jaw as well as the lip, cheilognathopalatoschisis
cholecystītis, itĭdis $f$ inflammation of the gallbladder, cholecystitis
chondropathia, ae $f$ any disease affecting a cartilage, chondropathy
chronǐcus, a, um long continued, chronic,
combustio, ōnis f an injury caused by heat or by chemical or physical
agents having an effect similar to heat, burn, combustion
commotio, ōnis fa concussion or a violent shaking of a structure
congelatio, ōnis f congelation, frostbite, a local morbid condition caused by freezing
congenǐtus, a, um congenital
continuus, a, um continued
cor, cordis $n$ heart
cornea, ae f cornea
corpus, ŏris $\mathbf{n}$ body
craniometria, ae $f$ measurement of the skull, craniometry
cryotherapia, ae $\mathbf{f}$ the science of the use of cold as a therapeutic measure, cryotherapy
cuneifornis, e cuneiform
curatio, $\overline{\text { onis }} \mathbf{f}$ medical treatment
cysta, ae f a cavity lined by an inflamed or neoplastic tissue, cyst
cystorrhagia, ae $\mathbf{f}$ haemorrhage from the urinary bladder, cystorrhagia

## D

dacryostenōsis, is $\mathbf{f}$ narrowing or
stricture of the duct of the lacrimal gland, dacryostenosis
dactylospasmus, i m spasmodic
contraction of a finger or toe, dactylospasm
defectus, us $\mathbf{m}$ a defect
deformans, ntis deforming
dentālis, e dental
dentinogeněsis, is $\mathbf{f}$ the formation and development jf the dentine by the odontoblasts, dentinogenesis
dermatomycōsis, is $f$ a generic term for all cutaneous infections due to fungi
dermatōsis, is $\mathbf{f}$ any disease of the skin, dermatosis
dexter, tra, trum right
diabētes, ae $\mathbf{m}$ anyone of a group of diseases in which there is polyuria and a disturbed metabolism, diabetes
diabeticus, a, um diabetic, suffering from or relating to diabetes
diagnōsis, is $\mathbf{f}$ medical denotion of the disease from which a person suffers, diagnosis
digitus, $\mathbf{i} \mathbf{m}$ finger, toe
dolichocephalia, ae $\mathbf{f}$ the state of having a relatively long skull, dolichocephalia
duodēnum, $\mathbf{i} \mathbf{n}$ duodenum
dysgeusia, ae $f$ impairment or perversion of the sense of taste, dysgeusia
dysplasia, ae f abnormal development of tissue, dysplasia
dysthyreōsis, is $\mathbf{f}$ imperfect functioning of the thyroid gland, dysthyreosis

## E

embryologia, ae $\mathbf{f}$ the branch of biological science which is concerned with the origin and development of the embryo from the ovum to the stage of extrauterine life, embryology
empyēma, ătis $\mathbf{n}$ a collection of pus in a cavity, empyema
encephalogramma, ătis $\mathbf{n}$ any X-ray film obtained in the radiological examination of the ventricles and subarachnoid space of the brain, encephalogram
endophthalmītis, itǐdis $f$ a suppurative inflammation of the interior of eyeball, endophthalmitis
enterocolītis, itǐdis $\mathbf{f}$ an inflammed condition of the small intestine and the colon, enterocolitis
erosio, $\overline{\text { onis }} \mathbf{f}$ any superficial destructive process, erosion
erythropenia, ae f a state in which there are too few erythrocytes, erythropenia
exacerbatio, ōnis $f$ increase in severity of a disease, exacerbation
extractio, ōnis $\mathbf{f}$ the act or process of drawing out a part of body or foreign body, extraction

## F

faciālis, e facial
facies, èi $\mathbf{f}$ face
febris, is $f$ fever
fissus, a, um splintered (lip)
fistŭla, ae $\mathbf{f}$ an unnatural communication between an organ and the body surface, fistula
flegmŏne, es $f$ inflammation of connective tissue without pus formation, phlegmon
$\mathbf{f}(\mathbf{o})$ etor, ${ }^{\text {öris }} \mathbf{m}$ a foul odour or stench, fetor
fractūra, ae f

## G

gaster, tris $\mathbf{f}$ stomach
gastrocēle, es $\mathbf{f}$ hernia of the stomach or of a portion which has become pouched, gastrocele
gastrospasmus, i m an involuntary contraction of the stomach muscle, gastrospasm
gastrostŏma, ătis $\mathbf{n}$ natural or artificial gastric fistula, gastrostoma
geriāter, tri maspecialist treating diseases of the aged, geriatrician
gingivālis, e gingival
gingivītis, itĭdis finflammation of the gingival margins around the teeth, manifested by swelling and bleeding, gingivitis
glandǔla, ae f gland
glossoplegia, ae $\mathbf{f}$ paralysis of
the tongue, glossoplegia
glycaemia, ae $\mathbf{f}$ a condition in which
the circulating blood contains a quantity of sugar above normal amounts, glycaemia
gnathoschĭsis, is $\mathbf{f}$ a congenital fissure of the maxilla, such as is present in cleft palate, gnathoschisis
gradus, us $\mathbf{m}$ grade
granulōma, ătis $\mathbf{n}$ a tumour composed of granulation tissue, granuloma
gravida, ae $\mathbf{f}$ a woman who is pregnant, gravida
gynaecolŏgus, i m a specialist for treatment genital diseases in women, gynecologist

## H

haemarthrōsis, sis $\mathbf{f}$ extravasation of blood into a joint, haemarthrosis
haematologia, ae $\mathbf{f}$ branch of medicine studying blood and its diseases, hematology,
halitōsis, is $\mathbf{f}$ fetid or offensive breath, halitosis
hemicrania, ae $f$ a periodic morbid condition with localized headaches, hemicrania
hemiplegia, ae f paralysis of one half of the body, hemiplegia
hepar, ătis $n$ liver
herpes, ètis $\mathbf{m}$ inflammation of the skin or mucous membrane,
with clusters of deep-seated vesicles, herpes
hidradenītis, itǐdis $\mathbf{f}$ inflammation of the sweat glands, hidradenitis
histoly̆sis, is $\mathbf{f}$ spontaneous
dissolution of living organic tissue, histolysis
hyperaemia, ae $\mathbf{f}$ an excess of blood in any part of the body, hyperaemia
hyperthermia, ae $\mathbf{f}$ very high body temperature, hyperthermia
hypertrophia, ae $\mathbf{f}$ an increase in the number or size of the cellsof which a tissue is composed as the result of increase in function of that tissue, hypertrophy
hypoplasia, ae $\mathbf{f}$ defective formation or under-development of a tissue or part, hypoplasia
hyposalivatio, ōnis fa condition in which there is abnormal decrease in the secretion of saliva, hyposalivation
hypotonia, ae $\mathbf{f}$ lessened tension in any body structure, hypotonia

## I

iatrogĕnus, a, um happening because of the physician's manner or injudicious remarks, iatrogenic immunodeficientia, ae f immunodeficiency
imperfectus, a, um incomplete icisīvus, a, um incisor (tooth)
indigestio, önis $\mathbf{f}$ any disturbance of the normal process of digestion, indigestion
infarctus, us $\mathbf{m}$ a wedge-shaped area
of dead tissue, with or without haemorrhage, produced by
the obstruction of an end artery, infarct, infarction
infectio, $\overline{\text { onnis }} \mathbf{f}$ the invasion of a pathogenic organism into the body and its subsequent multiplication, infection
inflammatio, ōnis f inflammation
insufficientia, ae $\mathbf{f}$ the state of being inadequate to perform normal function, insufficiency
intraorālis, e intraoral

## K

keratotomia, ae f making an incision into the cornea, keratotomy

## L

labiālis, e labial
larynx, yngis m larynx
latens, ntis hidden
leporīnus, a, um belonging to the hare
leucocytōsis, is $\mathbf{f}$ an increase in the total number of leucocytes in the blood, leucocytōsis
ligamentum, in ligament
lingua, ae $f$ tongue
lipuria, ae $\mathbf{f}$ the presence of an oily emulsion or fat in the urine, lipuria
lumbālis, e lumbal
luxatio, ōnis f dislocation, luxation
lymphostăsis, is $\mathbf{f}$ cessation of the flow of lymph, lymphostasis

## M

maculōsus, a, um maculate, marked by maculae
mandibŭla, ae f mandible
massēter, ēris m masseter (muscle)
megacōlon, in a condition in which there is great dilatation of the large intestine, megacolon
megalodontia, ae $f$ a condition in which the teeth are excessively large, megalodontia
melanoderma, ătis $\mathbf{n}$ a condition in which there is an unusually large accumulation of melanin in the skin, melanoderma
mellītus, a, um (diabētes) mellitus (diabetes) characterized by a highfasting blood sugar
metamorphōsis, is $\mathbf{f}$ change of form or structure, metamorphosis
microcheilia, ae $f$ a condition in which the lips are abnormally small, microcheilia
microgenia, ae $f$ a condition in which the chin is of unusually small size, microgenia
micromyelia, ae f general reduction in size of the spinal cord, micromyelia
mobilĭtas, ātis f mobilĭty
monodactylismus, i ma congenital condition in which one finger or toe only is present on the hand or the foot, monodactylism
morbus, $\mathbf{i} \mathbf{m}$ disease
mucōsus, a, um mucous
myelītis, itĭdis $f$ inflammation of bone marrow, myelitis
myocēle, es $\mathbf{f}$ hernia of a muscle, myocele
myoplegia, ae $\mathbf{f}$ paralysis of muscle or a condition in which is decreased muscular force, myoplegia
myotomia, ae $\mathbf{f}$ the dissection of a muscle or of muscle tissue, myotomy

## N

neoplasma, ătis $\mathbf{n}$ any new and morbid formation of tissue, neoplasm
nephrolithiăsis, is $\mathbf{f}$ a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis
nervus, im nerve
neuralgia, ae fa painful affection of the nerves, due to functional disturbances or to neuritis, neuralgia
neurītis, itǐdis $\mathbf{f}$ inflammation of a nerve, neuritis
neuropatholŏgus, i ma specialist treating diseases of nervous system, neuropathologist

## 0

occipitālis, e occipital ocŭlus, i m eye
odontolithus, i m calculus on the teeth, odontolith
odontogeněsis, is $f$ the origin and formative development of teeth, odontogenesis
odontogramma, ătis n X-ray film of the tooth, odontogram
odontolithus, i m calculus of the teeth, odontolith
odontoscopia, ae finstrumentalvisual examination of the tooth, odontoscopy
oligocytaemia, ae $\mathbf{f}$ a condition in the blood in which there is cell deficiency, oligocytaemia
oligodentia, ae f(= oligodontia, ae f) a state in which most of the teeth are lacking, oligodentia (oligodontia)
oligophrenia, ae $\mathbf{f}$ congenital lack of the mentality, oligophrenia
oncolŏgus, i ma specialist treating tumors, oncologist
ophthalmoscopia, ae f instrumentalvisual examination of the eye, ophthalmoscopy
os, oris n mouth
osteōma, ătis $\mathbf{n}$ an innocent tumor of bone, osteoma
osteonecrōsis, is $\mathbf{f}$ death of bony tissue, osteonecrosis
osteopathia, ae $\mathbf{f}$ disease of bones, osteopathia
osteoporōsis, is $\mathbf{f}$ rarefaction of bone, osteoporosis
otorhinolaryngologia, ae f branch of medicine for treating diseases of ear, nose and larynx, otorhinolaryngology

## P

palatoplegia, ae f paralysis affecting the soft palate, palatoplegia
pantalgia, ae f(= panalgia, ae f) pain affecting all parts of the body, pantalgia
parodontōsis, is $\mathbf{f}$ (= periodontōsis, is $f$ ) any degenerative change occurring in alveolar periosteum, parodontosis
periodontītis, itǐdis $\mathbf{f}$ inflammation of the periodontal membrane, periodontitis
pes, pedis $m$ leg
phlebocarcinōma, ătis n a malignant epithelial tumor affecting a vein, phlebocarcinoma
photophobia, ae fabnormal intolerance to light, photophobia
phthisiāter, tri maspecialist treating tuberculosis, phthisiotherapist
physiologia, ae $\mathbf{f}$ science studying normal vital processes in human body, physiology
phytotherapia, ae $f$ method of treatment by means of medical plants, phytotherapy
planus, a, um plane
plicātus, a, um folded, plicate
polymastia, ae $\mathbf{f}$ the state in which in human beings there are more than two distinct mammary glands, polymastia
polypōsis, is $\mathbf{f}$ a condition in which there are many polypi growing from the mucous membrane, polyposis
poly̆pus, i m a tumor with a stalk arising from mucous membranes or the body surface, polyp
polyuria, ae $\mathbf{f}$ increase in the amount of the excreted urine, polyuria
praecancerōsus, a, um relating or belonging to the stage in which a precancer develops, before the growth has become malignant, precancerous
premolaris, e premolar
primus, a, um first
proctolŏgus, i m a specialist treating diseases of rectum, proctologist
profundus, a, um deep
prognathia, ae $f$ a condition in which there is abnormal projection of one or both jaws, prognatism
prophylaxis, is $\mathbf{f}$ the art of preventing disease, prophylaxis
pseudoarthrōsis, is $\mathbf{f}$ a false joint formed between the fragments of
a fractured bone which have failed to unite, pseudarthrosis
psychiatria, ae $\mathbf{f}$ branch of medicine treating mental diseases, psychiatry
psychōsis, is $\mathbf{f}$ any kind of mental disorder, psychosis
pyogĕnus, $a$, um forming or producing pus, pyogenic

## R

radiculāris, e radiclar
rectum, in rectum
renālis, e renal
resectio, ōnis f surgical removal of a part, usually of some magnitude, e. g. jaw, stomach etc., resection
rhagas, ădis $f$ usually plur.
rhagădes, um $\mathbf{f}$ fissures, chaps, or cracks at the angle of the mouth, rhagades
rhinogramma, ătis $\mathbf{n}$ X-ray film of the nose, rhinogram
ruptūra, ae $\mathbf{f}$ the breaking or forcible disruption of continuity of the bone or an other structure, rupture

## S

salivarius, a, um salivary
sarcōma, ătis $\mathbf{n}$ a malignant tumor of connective tissue or its derivatives, sarcoma
sectio, ōnis f the act of cutting, section
senīlis, e senile
simplex, ǐcis simple
situs, us $\mathbf{m}$ position, site
sive or
spasmophilia, ae fa morbid state in which there is a tendency to convulsions and spasm, spasmophilia
spasmus, i m a sudden, powerful, involuntary contraction of muscle, spasm
splenomegalia, ae $\mathbf{f}$ enlargement of the spleen, splenomegalia
spondylītis, itǐdis $\mathbf{f}$ inflammation of the spine, spondilitis
spongiōsus, a, um spongy (spongious), full of small holes, like a sponge
stomatomycōsis, is $\mathbf{f}$ any morbid condition of the oral cavity caused by a microscopial fungus, stomatomycosis
stomatoscopia, ae $\mathbf{f}$ visualinstrumental examination of the oral cavity, stomatoscopy
suppuratīvus, a, um pus-forming, having a tendency toward suppuration, suppurative
supragingivālis, e supragingival
syndrŏmum, in a distinct group of signs which form a characteristic clinical picture of the disease, syndrome

## T

tachycardia, ae frapid action of the heart, tachycardia
tenorrhaphia, ae $\mathbf{f}$ an operation
for the suturing of the divided ends of a tendon, tenorrhaphy
tenotomia, ae $\mathbf{f}$ the cutting of a tendon, tenotomy
textus, us $m$ a tissue
thermotherapia, ae $\mathbf{f}$ the use of heat in the treatment of disease, thermotherapia
thrombotǐcus, a, um characterized or caused by thrombosis, thrombotic
thyroideus, a, um thyroid
thyr(e)otoxicōsis, is $\mathbf{f}$ any toxic
condition attributable to
hyperactivity of the thyroid gland, thyrotoxicosis
toxicomania, ae $\mathbf{f}$ an insane desire for poison, toxicomania
toxicōsis, is $\mathbf{f}$ the pathological condition caused by the adsorption of poison, toxicosis
transplantātum, in a piece of tissue to transfer from one site to another, transplant
traumaticcus, a, um traumatic
trismus, i m inability to open
the mouth due to tonic contracture of the muscles of the jaw, trismus
tuberculōsis, is $\mathbf{f}$ tuberculosis
tunica, ae f membrane

## U

ulcerōsus, a, um having
the characteristics of an ulcer, ulcerous
ulcus, ĕris $\mathbf{n}$ a localized necrotic
lesion of the skin or a mucous surface, ulcer
unguis, is $\mathbf{m}$ nail
uraemia, ae $\mathbf{f}$ the condition which is associated with the retention of metabolic products in the blood and disturbance of acid-base ratio of the latter, uraemia
uranoschǐsis, is $\mathbf{f}$ (= palatoschǐsis, is f) cleft palate, a congenital fissure in the midline of the hard palate, uranoschisis (palatoschisis)
utěrus, i m uterus

## V

venōsus, a, um venous
verrūca, ae $\mathbf{f}$ wart
verus, a, um true
viscus, ĕris $\mathbf{n}$ the internal organs of the body which are closely related to the great serous cavities: pleural, pericardial or peritoneal
vitium, in a defect or a vice, vitium

## X

xerophthalmia, ae $f$ a morbid condition of eyes characterized by a shrunken appearance of the conjunctiva, xerophthalmia (= xeroma)

## Z

zoster, ēris m zoster, zona, shingles

## ENGLISH-LATIN VOCABULARY

## A

abnormal narrowing of the internal diameter of a vessel, angiostenosis angiostenōsis, is f
abnormal narrowing of the mouth,
stenostomy stenostomia, ae f
abnormal quickness in eating, tachyphagia tachyphagia, ae f
abnormally rapid breathing, tachypnoea tachypnoë, ës f
abscess, an accumulation of pus
circumscribed ina cavity
produced by tissue
disintegration abscessus, us m
acquired acquisītus, a, um
actinomycosis, an affective disease, caused by Actinomyces israelli actinomycōsis, is f
the act or process of drawing out a part of body or a foreign body, extraction extractio, ōnis f
acute acūtus, a, um
adiponecrosis, necrosis affecting the fatty tissue of the body adiponecrōsis, is f
aglossia, the congenital condition of being without a tongue aglossia, ae f
alimentary alimentarius, a, um
allergic allergĭcus, a, um
amputation, the surgical removal of a limb or a portion of a limb or of any other appendage amputatio, ōnis f
anaemia, changes in the red cells resulting in a reduction in the total amount of blood anaemia, ae f
angiology, the science of the blood vessels angiologia, ae f
angioma, a tumor composed of blood vessels or of lymphatic vessels angiōma, ătis, $n$
anthropologist, a specialist studying the man in the process of his evolution anthropolŏgus, i m
aortic aortǐcus, a, um
apn(o)ea, the cessation in breathing apnoë, ës f
arthralgia, any kind of pain affecting a joint arthralgia, ae f
atrichia, not having hair atrichia, ae f
atrophy, a condition of general malnutrition from whatever cause atrophia, ae f
atypical atypǐcus, a, um

## B

bacterial bacteriālis, e
benign benignus, a, um
biopharmaceutics, study
of physical and chemical
proprieties of medicinal
substances biopharmaceutǐca, ae f
blepharotomy, incision of an eyelid blepharotomia, ae f
bradycardia, slowing of the heart rate bradycardia, ae f
bradyphagia, slowing of swallowing bradyphagia, ae $f$
branch of clinical medicine treating rectum diseases, proctology proctologia, ae f
branch of medicine treating diseases of children, paediatrics paediatria, ae f
breast mamma, ae f
bronchitis, an inflammated condition of the bronchi bronchītis, itǐdis $f$
burn combustio, ōnis $f$

## C

calculosis, the condition in which a number of calculi are present in any part of the body calculōsis, is $f$
calculus (plur. calculi), a solid pathological concretion calcŭlus, i m
calculus on the teeth, odontolith odontolithus, i m
cancerogenic (= carcinogenic), producing carcinoma cancerogěnus, a, um
carcinoma, a malignant epithelial tumor carcinōma, ătis n
a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma adenocarcinōma, ătis n
cardinal cardinālis, e
cardiogram 1) result of X-ray examination of the heart;
2) graphical picture of heart work cardiogramma, ătis n
cardiography 1) X-ray examination of the heart; 2) graphical recording of heart activity cardiographia, ae $f$
causing the growth of tumors, oncogenous oncogěnus, a, um
cephalalgia, pain in the head cephalalgia, ae f
cerebral cerebrālis, e
cervix cervix, īcis $f$
changes in the red cells resulting in a reduction in the total amount of blood anaemia, ae $f$
cheilognathopalatoschisis (= cheilognathouranoscchisis), the condition of having both hare-lip and cleft palate cheilognathopalatoschǐsis, is $f$ (= cheilognathouranoscchĭsis, is f) (gnathouranoscchisis)
chemical chemĭcus, a, um
cholecystolithiasis, the condition in which there are gall-stones in the gall bladder or bile duct cholecystolithiăsis, is f
chronic chronǐcus, a, um
a chronic disease of the skin, characterized by the appearance of laminated scales, psoriasis psoriăsis, is $f$
closed clausus, a, um
coma, the state of complete loss of consciousness from which the patient cannot be roused by any ordinary external stimulus coma, ătis n
comatose, affected with coma comatōsus, a, um
composite compositus, a, um
a concussion or a violent shaking of a soft structure commotio, ōnis f
a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis nephrolithiăsis, is f
a condition in which the ability to swallow is lacking, aphagia aphagia, ae $f$
a condition in which there are abnormally short fingers or toes, brachydactylia brachydactylia, ae $f$
a condition of enlargement of the liver, hepatomegalia hepatomegalia, ae f
cystitis, inflammation of the urinary bladder cystitis, itīdis f
cytology, the science of the form and functions of cells cytologia, ae $f$

## D

dacryorrhoea, an excessive flow of tears dacryorrhoea, ae f
deficiency deficientia, ae f
denudation, the state of beeng deprived of a protecting layer or covering denudatio, ōnis $f$
dermatitis, inflammation of the skin dermatītis, itǐdis $f$
devitalized, deprived of life or vitalizing properities devitalisātus, a, um
diabetic, related to diabetes diabetǐcus, a, um
diastema, a pronounced gap between the lateral incisors dilatation of the stomach diastēma, ăis n
dilatation of the stomach, gastrectasia gastrectasia, ae f
direct directus, a, um
a discharge of pus, pyorrhoea pyorrhoea, ae f
any disease affecting a joint, arthropathy arthropathia, ae f
any disease of skin, dermatosis dermatosis, is f
dropsy, the abnormal accumulation of fluid in tissue or cavity space hydrops, ōpis $m$
dysplasia, abnormal development of tissue dysplasia, ae f
dystonia, a state of disordered tonicity dystonia, ae f
dystrophy, a disorder of the structure and functions of an organ or tissue due to perverted nutrition dystrophia, ae $f$

## E

eczema, a nocontagious
inflammatory disease of the skin with much itching and burning eczěma, ātis n
empyema, an accumulation of pus
in a cavity,
emphysema, a condition in which
the alveoli of the lungs are
dilated emphysēma, ătis n
encephalopathy, any morbid
condition of the brain
encephalopathia, ae f
endogenous, having origin within the organism endogěnus, a, um
endometritis, an inflammation of the inner mucous membrane of the uterus endometrītis, itǐdis f
enophthalmus, recession of
the eyeball into the cavity of
the orbit enophthalmus, i $m$
enteritis, inflammation of
the mucous membrane of the intestines enterītis, iticis $f$
enterogastritis, inflammation of the small intestine and
the stomach enterogastrītis, itĭdis $f$
enteromegalia, an unusually large
size of the intestine
enteromegalia, ae f
the entrance and establishment of parasites into the body of a host, invasion invasio, ōnis f
erythema, redness of the skin due to hyperaemia erythēma, ătis n excessive sensitiveness of any organ or part of the body, hyperaesthesia hyperaesthesia, ae $f$
exogenous, belonging to aetiological factors outside
the organism exogĕnus, a, um
extremely rapid breathing, tachypnea tachypnoë, ës f eye ocǔlus, i m

## F

false falsus, a, um
femur femur, ŏris n
fever febris, is $f$
fibroma, an innocent tumor composed chiefly of connective tissue fibrōma, ătis n
fibrous fibrōsus, a, um
formation and development of body tissue, histogenesis hystogeněsis, is f
the formation of concretions, lithiasis lithiăsis, is f
fracture, a break in the continuity
of a bone fractūra, ae $f$
frenŭlum frenŭlum, i n
functional functionālis, e

## G

gall bladder vesīca fellea (biliāris)
gerontology, science studying living processes in the aged
gerontologia, ae f
gingival gingivālis, e
gland glandŭla, ae f
glaucoma, a condition of increased intraocular pressure and its consequences glaucōma, ătis n
glossitis, inflammation of the tongue glossītis, itĭdis f
glossotomy, dissection of the tongue glossotomia, ae f
gnathalgia, pain in one or both jaws gnathalgia, ae f
gnathoschisis, a congenital fissure in the maxilla gnathoschǐsis, is $f$
goitre, an enlargement of the thyroid gland struma, ae f

## H

hand manus, us f
hard durus, a, um
hardening of bony spaces, osteosclerosis osteosclerōsis, is f
hematology, branch of medicine studying blood and its diseases haematologia, ae f
hemiatrophy, atrophy affecting only one side of the body, or a half of an organ hemidystrophia, ae f
hemogram, results of quantitative and qualitative examination of blood haemogramma, ătis n
hemophilia, a severe hereditary bleeding disease affecting males and transmitted by females haemophilia, ae f
hepatic hepatĭcus, a, um
hepatitis, inflammation of the liver hepatītis, itĭdis f
hepatomegalia, a condition of enlargement of the liver hepatomegalia, ae f
hereditary hereditarius, a, um
hyperesthesia, excessive sensitiveness of any organ or part of the body hyperaesthesia, ae $f$
hyperglycemia, an excessive amount of sugar in the blood hyperglycaemia, ae f
hypersalivation, excessive secretion of saliva hypersalivatio, ōnis f
hypertension, high arterial blood pressure hypertensio, ōnis f
hypomnesia, a weak or defective state of the memory hypomnesia, ae f
hypoplasia, underdevelopment of a tissue or part hypoplasia, ae f
hypothermia, deficiency of body heat hypothermia, ae f
hypothyroidism, a condition caused by under-activity of the thyroid gland, hypothyroidismus, i m (= hypothyreōsis, is f )

## I

iatrogenic, happening because of the physician's manner or injudicious remarks, iatrogenic immunodeficiency immunodeficientia, ae f
impairement of the voice, dysphonia dysphonia, ae f
implant, any piece of tissue used as a graft implantātum, in
implantation, the introduction of one tissue or structure into another with the aim of improving the function of any part of the body implantatio, ōnis f
an increase in the total number of leucocytes, leucocytosis leucocytōsis, is f
infection infectio, ōnis f
inflammation of the inner mucous membrane of the uterus,
endometritis endondometrītis, itĭdis f
inflammation of the liver, hepatitis hepatītis, itĭdis f
injury laesio ,ōnis f
insufficiency insufficientia, ae f
internal internus, a, um
intravenous intravenōsus, a, um

## J

joint articulatio, ōnis f

## K

keratomycosis, disease of cornea caused by a fungus keratomycōsis, is f
any kind of pain affecting a joint, arthralgia arthralgia, ae f

## L

latent, existing but not manifest lateens, ntis
left sinister, tra, trum
lingual linguālis, e
lip labium, in
lung pulmo, ōnis m
luxation, dislocation luxatio, ōnis $f$
lymphangiitis, inflammation of lymphatic vessels lymphangiītis, itĭdis f
lymphocytosis, an increase in the number of lymphocytes lymphocytōsis, is f

## M

macrocyte, a red blood cell that is larger than normal macrocy̆tus, i m
malignant, indicative of danger to
ill (neoplasm) malignus, a, um
mammogram (= mastogram) result of breast X-ray examination, mammogramma. ătis $n$
masticatory masticatorius, a, um
mastopathy, any diseased condition of the mammary gland mastopathia, ae f
medical specialist treating blood diseases, hematologist haematolŏgus, i m
medical specialist treating diseases of inner organs, therapeutist therapeutista, ae $m$
megalomania, a mental condition in which a person has grandiose delusions about himself and his own intellect, power, importance and so on megalomania, ae $f$
melanocarcinoma, a darkly pigmented malignant epithelial tumor melanocarcinōma, ătis n
metastasis, the transfer of disease from its primary site to distant parts of the body by blood vessels, lymphatics or direct contiguity metastăsis, is $f$
any morbid condition of the nose, rhinopathy rhinopathia, ae $f$
any morbid condition or abnormal growth of the hair, trichopathy trichopathia, ae f
myopia, short sight myopia, ae f

## N

narcosis, stupor produced by drugs and tending to insensibility and paralysis narcōsis, is f
narrowing or stricture
of the duct of the lacrimal gland, dacryostenosis dacryostenōsis, is f
nasal nasālis, e
nephrogenic, produced by or originating in a kidney nephrogěnus, a um
nephropathy, disease of the kidney nephropathia, ae f
neurogenic, happening because of the nervous system neurogĕnus, a, um

## 0

occlusion, the contact between upper and lower teeth on the closure of the jaws or during normal movement of the mandible occlusion, ōnis f
odontogenic, relating to the development of the teeth odontogĕnus, a, um
odontome, a solid or cystic tumour occurring in the jaws which is derived from cells conserved in tooth development odontōma, ătis $n$
oedema, the presence of excessive amounts of fluid in the intercellular tissue spaces of the body oedēma, ătis $n$
oesophagostenosis, narrowing of the oesophagus oesophagostenōsis, is f
oesophagus oesophăgus, i m
oligodactylia, a congenital deficiency of fingers, or toes oligodactylia, ae f
oncologist, a specialist treating tumorous diseases oncolŏgus, i m
oncotherapy, the treatment of tumours oncotherapia, ae f
open apertus, a, um
operation operatio, ōnis f
the operation of removal of the adenoid growth by excision, adenotomy adenotomia, ae f
ophthalmoscopy, instrumentalvisual examination of the eye ophthalmoscopia, ae f
ophthalmoplegia, pulsy (paralysis) of ocular muscles ophthalmoplegia, ae f
the origin and development of morbid condition,
pathogenesis pathogeněsis, is f
the origin, formation and development of body tissue, histogenesis histogeněsis, is f
osteodystrophy, a disorder of bone nutrition osteodystrophia, ae f
osteotomy, dissection of a bone osteotomia, ae f
otogenic, happening because of the ear otogěnus, a, um
otorhinolaryngologist, a specialist treating ear, nose and larynx diseases otorhinolaryngolŏgus, i m

## P

paralysis, loss of motor strength due to a functional or organic disorder of neural or neuromuscular mechanismus paraly̆sis, is $f$
paralysis affecting the soft palate, palatoplegia palatoplegia, ae f
paralysis of similar parts on both sides of the body, diplegia diplegia, ae $f$
paranephritis, an inflammatory condition involving the connective tissue adjacent to the kidney paranephrītis, itĭdis f
parotitis, an inflammaty state of the parotid gland parotītis, itĭdis $f$
partial partiālis, e
a pathological condition in which one muscle, one group of muscle or one part of the body is only affected, monoplegia monoplegia, ae f
pediatrician, a specialist treating children's diseases paediāter, tri m
pericystitis, inflammation in which the structures around the urinary bladder are affected pericystītis, itĭdis f
a person with an unusually small size of head, microcephalus microcephălus, $i \mathrm{~m}$
pharmacophobia, morbid fear of taking drugs or medicines pharmacophobia, ae f
pharmacotherapia, science studying drugs and their usage, pharmacotherapy pharmacotherapia, ae f
phlebography: 1) radiographic visualization of veins;
2) the tracing of the venous pulse by means of a phlebograph phlebographia, ae f
phoniatrics (= phoniatry), the treatment of disorders of speech phoniatria, ae f
photophobia, abnormal intolerance to light photophobia, ae f
phthisiologist, a specialist treating tuberculosis phthisiāter, tri m
phytotherapy, method of treatment by means of medical plants phytotherapia, ae f
plicated plicātus, a, um
pneumonia, inflammation of the spongy tissue of the lung pneumonia, ae f
podagra, gout, a disease of the purine metabolism characterized by attacks of arthritis with an assotiated raised serum uric acid podăgra, ae f
podalgia, sensation of pain in the foot podalgia, ae f
polyavitaminosis, a morbid condition caused by deficiency of several vitamins polyavitaminōsis, is $f$
polyposis, a condition in which the colon is studded with polypi growing from the mucous membrane polypōsis, is $f$
postoperative postoperatīvus, a, um
pregnancy gravidǐtas, ātis f
primary primarius, a, um
proctoscopy, instrumental-visual examination of the rectum proctoscopia, ae f
the production of urinary calculi and the morbid state due to the presence of calculi in the urinary system, urolithiasis urolithiăsis, is f
profuse discharge of mucous fluid
from the nose, rhinorrhoea rhinorrhoea, ae f
progressive progressīvus, a, um
prophylaxis, the art of preventing disease prophylaxis, is $f$
protrusive, removed ahead protrusīvus, a, um
psychiatrist, specialist treating mental diseases psychiāter, tri m
psychogenic, developing or originating of mental causes psychogěnus, a, um
psychologist, specialist studying mental activities of a human personality psycolŏgus, i m
pulp pulpa, ae f
pyuria, a condition in which pus is present in the urine pyuria, ae f

## R

a red blood cell that is larger than normal, macrocyte macrocy̆tus, i m
removal of an entire pathological structure, organ or part, amputation amputatio, ōnis $f$
resection, surgical removal of a part, usually of some magnitude, e.g. jaw, stomach, colon etc. resectio, ōnis f
results of quantitative and qualitative examination of blood, hemogram haemogramma, ătis $n$
rhinolith, a concretion in the cavity of the nose rhinolithus, i $m$
rhinopathy, any morbid condition of the nose rhinopathia, ae $f$
rhinoscopy, instrumental-visual examination of the nose rhinoscopia, ae f
rupture, the breaking or forcible disruption of continuity of the bone or an other structure ruptūra, ae f
right dexter, tra, trum

## S

salivary salivarius, a, um
short brevis, e
science studying drugs and their usage, pharmacotherapy pharmacotherapia, ae f
scientist studying normal vital processes in human organism physiolŏgus, i m
secondary secundarius, a, um
senile senīlis, e
septum septum, in
sialolith, a salivary calculus sialolĭthus, i m
simple simplex, ǐcis
specialist studying forms of life and vital organisms, biologist biolŏgus, i m
specialist studying the man in process of his evolution, anthropologist anthropolŏgus, i m
specialist treating
~ blood diseases, hematologist haematolŏgus, i m
~ children's diseases, pediatrician paediāter, tri m
~ ear and larynx diseases, otolaryngologist, otolaryngolŏgus, i m
~ inner organs, therapeutist therapeutista, ae m
~ mental diseases, psychiatrist psychiāter, tri m
~ tumorous diseases, oncologist oncolŏgus, i m
~ tuberculosis, phthisiologist phthisiāter, tri m
spondylopathy, any disease of the vertebrae spondylopathia, ae f
state status, us f
a state in which most of the teeth are lacking, oligodentia oligodentia, ae f
a state in which there are too few erythrocytes, erythropenia erythropenia, ae f
stenosis, narrowing or stricture of an orifice or of the lumen
of a hollow or tubular organ stenōsis, is f
stomach gaster, tris f
stomatology, branch of clinical medicine treating diseases of the oral cavity stomatologia, ae f
stomatītis, inflammation of the oral cavity, stomatītis, itĭdis f
subcutaneous subcutaneous a, um
a sudden blocking of a blood vessel, usually an artery, by the emboli, thromboembolism
thromboëmbolismus, i m
superficial superficiālis, e
suppurative, pus-forming
suppuratīvus, a, um
symblepharon, adhesion of
the eyelid to the eyeball
symblephăron, i n
symptom, the consciousness of
a disturbance in a bodily
function symptōma, ătis $n$
syndrome, a distinct group of signs
which form a characteristic clinical picture of the disease
syndrŏmum, in

## T

tachyphagia, abnormal quickness
in eating, tachyphagia tachyphagia, ae f
therapeutist, specialist for treating diseases of inner organs therapeutista, ae m
thromboembolism, a sudden blocking of a blood vessel, usually an artery, by the emboli thromboëmbolismus, i m
thrombosis, intravascular
coagulation during life
producing a thrombus
thrombōsis, is f
tissue textus, us $m$
tomography, body-section radiography tomographia, ae f
tongue lingua, ae $f$
tonsillitis, inflammation of the tonsil tonsillitis, itǐdis f
tonsillectomy, surgical excision of a tonsil tonsillectomia, ae f
toxicosis, the pathological condition caused by the absorption of poisons toxicōsis, is $f$
transfusion, the introduction of sterile fluids such as blood, plasma, serum and other solutions into the blood vessels of the circulatory system transfusio, ōnis f
transplantation, the operation of transference of a tissue or an organ from one place to an other with the aim of improving or renewing the function transplantatio, ōnis f
trauma, injury trauma, ătis n
treatment by means of medical plants, phytotherapy
phytotherapia, ae f
treatment by means of natural or artificial physical factors, physiotherapy physiotherapia, ae $f$
tuberculosis tuberculōsis, is f
tumor, tumor, ōris m
typhlocele, a hernia involving the caecum typhlocēle, es f

## U

ulcer, a localized necrotic lesion of the skin or a mucous surface ulcus, ěris n
ulceration, the process of formation of an ulcer ulceratio, ōnis f
ultrasonic, ultrasound ultrasonarius, a, um

## V

valve valva, ae f
viral virālis, e

## X

xerostomia, dryness of the mouth due to failure of the salivary gland xerostomia, ae f
the X-ray examination of breast, mammography mammographia, ae $f$
the X-ray examination of the great vessels and the chambers of the heart, angiocardiography angiocardiographia, ae $f$

## W

wart, a circumscribed, cutaneous excrescence having a papilliferous
surface verrūca, ae f
wound vulnus, ĕris n

## MEDICAL PROFESSIONAL EXPRESSIONS

| 1. Abactus venter | Artificially induced abortion |
| :--- | :--- |
| 2. Abalienatio mentis | Insanity; mental derangement |
| 3. Ad aurem (ad aur.) | At the ear |
| 4. Ad libĭtum (ad lib.) | At pleasure, freely |
| 5. Ad usum externum <br> (internum) | To be taken externally (internally); for external <br> (internal) use |
| 6. Alienatio partis | Gangrene |
| 7. Alternis diēbus (alt. d.) | Every other day |
| 8. Alternis horis (a. h.) | Every other hour |
| 9. Ante meridiem (a. m.) | Morning, before noon |
| 10. Ante mortem | Before death |
| 11. Ante partum | Before childbirth |
| 12. Ante prandium (a. p.) | Before dinner |
| 13. Auris dextra (a. d.) | Right ear |
| 14. Auris laevis (sinistra) (a. l., | Left ear |
| a. s.) | Both ears |
| 15. Aures utrae | A woman who has had born two children at <br> separate births |
| 16. Bipăra | Twice a day |
| 17. Bis in die (b. i. d.) | Of sound mind |
| 18. Compos mentis | Wandering pains |
| 19. Dolōres vagi | The appearance of a dying person described by <br> Hippocrates: a pale or livid face with dull <br> sunken eyes, pinched nose, hollow cheeks and <br> temples, openmouth and dropped lower jaw |
| 20. Facies hippocratĭca | The general physical appearance of a diseased <br> person; habit |
| 29. Inter alia | Goose flesh <br> l. In the normal, natural or original position <br> A. In aiven place |
| Atho the other |  |
| 22. Horrǐda cutis (= cutis |  |
| anserīna) | Sexual impotence in the male |
| 23. Impotentia coëundi | Sexual impotence due to lack of the power of <br> erection of the penis |
| 24. Impotentia erigendi | Inability to reproduce |
| 25. Impotentia generandi | At the instant of death |
| 26. In articŭlo mortis | An extrēmis |


| 30. In utěro | Within the uterus |
| :---: | :---: |
| 31. In vacuo | In a vacuum |
| 32. In vitro | Within a glass vessel; applied to changes taking place in the test-tube method of investigation |
| 33. In vivo | Within the living organism |
| 34. Intra vitam | During life |
| 35. Locum tenens | A medical practitioner who acts as deputy for another |
| 36. Locus minōris resistentiae | The place of least resistance (an organ or tissue most likely to be a particular disease) |
| 37. Lusus natūrae | A teratism or other freak of nature |
| 38. Malum aegyptĭcum | Diphtheria (literally - Egyptian evil) |
| 39. Malum arteriārum senīle | Senile arteriosclerosis (literally - senile evil of arteries) |
| 40. Malum cadūcum | Epilepsy (literally - falling evil) |
| 41. Malum venereum | Syphilis (literally - venereal evil) |
| 42. Minĭmum audibĭle | The auditory threshold; the least sound thatcan be heard |
| 43. Minĭmum cognoscibîle | The visibility threshold for recognizing shapes |
| 44. Minĭmum sensibĭle | The threshold of consciousness |
| 45. Muscae volitantes | The appearance in the fields of vision of variously shaped figures caused by defect of the vitreous humor (literally - flying flies) |
| 46. Noli me tangěre | An old but colorful name for rodent ulcer (literally - do not touch me) |
| 47. Non compos mentis | A person who is not sufficiently sound of mind to manage his own affairs |
| 48. Nostrum | A quack remedy or a medicine the ingredients of which are kept secret |
| 49. Nullipăra | A woman who has not given birth to a child |
| 50. Ocŭlus dexter (OD, o. d.) | Right eye |
| 51. Omnĭbus alternis horis (o. alt. hor.) | Every other hour |
| 52. Omni mane (o. m.) | Every morning |
| 53. Omni nocte (o. n.) | Every night |
| 54. Per rectum (p. r.) | Per rectum (through the rectum) |
| 55. Post meridiem (p. m.) | Evening or afternoon |
| 56. Post mortem | After death |
| 57. Post partum | After childbirth |
| 58. Post prandum | After dinner |
| 59. Potentia coëundi | The capacity to have sexual intercourse |


| 60. Potentia concipiendi | The capacity to conceive |
| :---: | :---: |
| 61. Potentia generandi | The power to beget children |
| 62. Primigravĭda | One who is pregnant for the first time |
| 63. Primipăra | A woman who has had one child |
| 64. Prognōsis anceps | An uncertain prognosis |
| 65. Prognōsis fausta | A good prognosis |
| 66. Prognōsis infausta | An unfavorable prognosis |
| 67. Prognōsis quoad vitam | An opinion as to whether the patient will live |
| 68. Pro ratiōne aetātis (p. r. aet.) | According to age |
| 69. Pro re nata (p. r. n.) | Occasionally, when required |
| 70. Pubertas plena | The attainment of full sexual maturity |
| 71. Pubertas praecox | Puberty occurring at an abnormally early age |
| 72. Quantum libet (= quantum placet) | As much as you please |
| 73. Quaqua hora (q. q. h.) | Every hour |
| 74. Quater in die (q. i. d.) | Four times a day |
| 75. Secundigravĭda | A woman who is pregnant for the second time |
| 76. Secundipăra | A woman who has had 2 children, in two different pregnancies |
| 77. Status asthmatǐcus | A severe and continuous attack of asthma in which there is marked dispnoea and finally exhaustion and collaps |
| 78. Status convulsīvus sive epileptĭcus | Repeated and prolonged epileptic seizures without recovery of consciousness between attacks |
| 79. Status praesens | The present condition |
| 80. Ter de die (t. d. d.) | Thrice a day |
| 81. Unipăra | A woman who has given birth once only |
| 82. Vix conservātrix | The innate strength of an organism enabling it to withstand disease |
| 83. Vix medicātrix natūrae | The natural ability of the organism to prevail over disease without external assistance |
| 84. Vis vitae (vitālis) | The life force |

## LATIN PROVERBS AND QUOTATIONS

| 1. Aes debitōrem leve, grave inimīcum facit | If you want to keep a friend, never borrow, never lend |
| :---: | :---: |
| 2. Amīcus certus in re incerta cernĭtur | A friend in need is a friend indeed |
| 3. Amor non est medicabı̌lis herbis | No herb will cure love |
| 4. Amor tussisque non celantur | Love and cough cannot be hidden |
| 5. Aquîla muscas non captat | An eagle doesn't catch the flies |
| 6. Arte et humanitāte, labōre et scientia | By art and humanity, by labor and knowledge |
| 7. Audiātur et altěra pars | Let's hear the opposite side! |
| 8. Aurōra Musis amīca | He that will thrive, must rise at five |
| 9. Bis dat qui cito dat | He gives twice who gives in a trice |
| 10. Bona valetūdo melior est quam maxı̌mae divitiae | Good health is above wealth |
| 11. Cogitatiōnes posteriōres saepe sunt meliōres | Second thoughts are the best |
| 12. Cogĭto ergo sum | I think, therefore I am |
| 13. Consuetūdo est altěra natūra | Custom is second nature |
| 14. Copia non est inopia | Store is no sore |
| 15. Cum promisěras, facias | Promise is a debt |
| 16. De gustǐbus non est disputandum | Tastes are not to be argued |
| 17. De mortuis aut bene aut nihil | Speak nothing but good of the dead |
| 18. Diabŏlus non est tam ater, ac pingĭtur | The devil is not so black as he is painted |
| 19. Dictum - factum | Said and done |
| 20. Dies levat lucrum | Time heals most sorrows |
| 21. Divǐde et impěra | Divide and rule |
| 22. Domus propria domus optĭma | My house is my castle. (East or west, home is best) |
| 23. Dum spiro spero | As long as I breathe, I hope |
| 24. Duos qui lepōres sequĭtur, neutrum capit | If you run after two hares, you will catch neither |
| 25. Dura lex sed lex | The law is the law and must be obeyed |
| 26. Experientia est optĭma magistra (= usus est optǐmus magister) | Experience is the best teacher |
| 27. Ebriětas est voluntaria insania | Drunkenness is nothing but voluntary madness |
| 28. E cantu dignoscǐtur avis | A bird may be known by its song |
| 29. Equi donāti dentes non sunt inspiciendi | Don't look a gift horse in the mouth |


| 30. Errāre humānum est | It's human to err |
| :---: | :---: |
| 31. Est avis in dextra melior guam quattuor extra | A bird in the hand is worth one hundred in flight |
| 32. Facîle dictu, difficĭle factu | Easier said than done |
| 33. Facta, non verba | Better to do well than to say well |
| 34. Festīna lente | Make haste slowly |
| 35. Finis corōnat opus | All is well that ends well |
| 36. Fronti nulla fides | Appearences are deceitful |
| 37. Fortes fortūna adjŭvat | Fortune favours the brave |
| 38. Homǐnes amplius oculis credunt quam auríbus | A picture is worth a thousand words |
| 39. Homo a se ortus | A self-made man |
| 40. Homo doctus in se divitias habet | The wealth of the mind is the only true wealth |
| 41. Homo est anĭmal sociāle | Man is by nature a political animal |
| 42. Homo homĭni lupus est | Man is a wolf to man |
| 43. Homo propōnit, sed Deus dispōnit | Man proposes but God disposes |
| 44. Homo sum, humāni nihil a me alienum esse puto | I am a man, I count nothing human alien to me |
| 45. Ignorantia non est argumentum | Lack of knowledge is no excuse (= Ignorance is no argument) |
| 46. In medio stat virtus | Virtue stands in the middle |
| 47. Ira furor brevis est | Anger is short madness |
| 48. Labor et patientia omnia vincunt | Diligence is the mother of success |
| 49. Mala herba cito crescit | Great weeds grow apace |
| 50. Manus manum lavat | One hand washes the other |
| 51. Mare verbōrum, gutta rerum | Great boast, small roast |
| 52. Medĭcus curat, natūra sanat | The physician heals, nature convalesces |
| 53. Mens sana in corpŏre sano | A healthy mind in a healthy body |
| 54. Nemo sine vitio est | No one is without a fault |
| 55. Ne diffěras in crastīnum | Never put off till tomorrow what you can do today |
| 56. Ne noceas, si juvare non potes | Do no harm, if yon can not help |
| 57. Nomen est omen | The name is the sign |
| 58. Ne Juppiter quidem omnǐbus placet | He who pleased everybody died before he was born |
| 59. Nihil volenti difficîle est | Anything is possible if you wish hard enough |
| 60. Non est fumus absque igne | There is no smoke without fire |


| 61. Non est via in medicīna sine lingua Latīna | There is no way in medicine without Latin |
| :---: | :---: |
| 62. Non scholae, sed vitae discirmus | We learn not for school but for life |
| 63. Nulla aetas ad discendum sera | It is never too late to learn |
| 64. Nulla regŭla sine exceptione | There is no rule without exception |
| 65. Nulla dies sine linea | Not a day without a line |
| 66. Nullum malum sine aliquo bono | No great loss without some small gain |
| 67. Omnia fluunt, omnia mutantur | Everything flows and everything changes |
| 68. Omnia mea mecum porto | All I have, I carry with me |
| 69. O tempŏra, o mores! | What times! What customs! |
| 70. Otium post negotium | Work done, have your fun |
| 71. Pacta sunt servanda | Agreements should be obeyed |
| 72. Paulātim summa petūntur | Learn to creep before you leap |
| 73. Per aspěra ad astra | Through the thorns (hard-ships) to the stars! |
| 74. Pigritia est mater vitiōrum | Idleness is the mother of all evil |
| 75. Plenus venter non studet libenter | A fill stomach is deaf to learning |
| 76. Potius sero quam nunquam | Better is late than never |
| 77. Primum noli nocēre | First, do no harm |
| 78. Principium dimidium totīus | Well begun is half done |
| 79. Procul ex ocŭlis - procul ex mente | Out of sight, out of mind |
| 80. Quem Deus perděre vult, dementat prius | Whom God wishes to ruin, he first deprives him of reason |
| 81. Quidquid latet apparēbit | What is done by night appears by day |
| 82. Quidquid Latīne dictum sit, altum vidētur | Anything said in Latin sounds profound |
| 83. Qui non est nobiscum adversus nos est | He that is not with us is against us |
| 84. Qui quaerit, repěrit | He will find who is searching |
| 85. Qui scribit, bis legit | He who writes reads twice |
| 86. Qui semĭnat mala, metet mala | The ill you do will rebound upon you |
| 87. Qui tacet consentīre vidētur | Silence gives consent |
| 88. Quod erat demonstrandum | Which was to be proved |
| 89. Quod licet Jovi, non licet bovi | What Jupiter is allowed to do cattle are not |
| 90. Quot capita, tot sententiae | So many men, so many minds |
| 91. Radīces litterārum amārae, fructus dulces | Whatever is good to know is difficult to learn |
| 92. Repetitio est mater studiōrum | Repeating is the mother of learning |
| 93. Saltāre ad tibiam alicūjus | To dance after sambody's tune |


| 94. Scientia potentia est | Knowledge is power |
| :---: | :---: |
| 95. Scio me nihil scire | I know that I know nothing |
| 96. Sero venientibus ossa | There is nothing left for the late-comers |
| 97. Sine ira et studio | Without ill-will and without favor |
| 98. Sine labōre non erit panis in ore | No pains, no gains |
| 99. Si vis amari, ama! | To be loved, love! |
| 100. Suae quisque fortūnae faber est | Each man is the maker of his own fortune |
| 101. Sudōre et sanguĭne, opera et studio | By blood, toil, tears and sweat |
| 102. Suis quaeque temporibus | There is a time and place for everything |
| 103. Suum cuīque | To each his own |
| 104. Tamdiu discendum est, quamdiu discendum vivis | Live and learn |
| 105. Tantum possŭmus, quantum scimus | We can do as much as we know |
| 106. Temperantia est custos vitae | Excesses destroy our powers |
| 107. Tempŏra mutantur et nos mutāmur in illis | The times change and we are changing with them |
| 108. Temporris filia veritas | Truth is a daughter of time |
| 109. Totus mundus agit histrionem | All the world's a stage |
| 110. Ubi concordia ibi victoria | Where is the unity, there is the victory |
| 111. Umbram suam timēre | He is afraid of his own shadow |
| 112. Una hirundo non facit ver | One swallow makes no summer |
| 113. Ut salūtas, ita salutaběris | As the call, so the echo |
| 114. Verba docent, exempla trahunt | Words are teaching, examples are pulling |
| 115. Verum amīcum pecunia non parābis | Money cannot buy friendship |
| 116. Vincuntur molli pectǒra dura prece | A word warmly said gives comfort even to a cat |
| 117. Vox popŭli - vox Dei | The voice of the people is the God's voice |

## THE INTERNATIONAL STUDENTS" ANTHEM "GAUDEAMUS"

Gaudeāmus igitur, Juvěnes dum sumus! Post jucundam juventūtem, Post molestam senectūtem Nos habēbit humus. (bis)

Ubi sunt qui ante nos
In mundo fuêre?
Transeas ad supěros, Transeas ad infěros, Hos si vis vidēre. (bis)

Vita nostra brevis est, Brevi finiētur:
Venit mors velociter, Rapit nos atrociter, Neminni parcētur. (bis)

## Vivat Academia!

Vivant professōres!
Vivat membrum quodlĭbet,
Vivant membra quaelĭbet, Semper sint in flore! (bis)

Vivant omnes virgĭnes,
Graciles, formōsae!
Vivant et muliĕres, Teněre, amabiles, Bonae, laboriōsae. (bis)

Vivat et Respublĭca
Et qui illam regunt!
Vivat nostra civitas, Maecenātum carǐtas, Qui nos hic protēgunt! (bis)

Pereat tristitia, Pereant dolōres! Pereat diabŏlus, Quivis antiburschius
Atque irrisōres!

Let us rejoice therefore
While we are young!
After a pleasant youth,
After a trobling old age
The earth will have us.
Where are they who before us
Were in the world?
You may go up to the gods, You may cross into the underworld, If you wish to see them.

Our life is brief, It will shortly end:
Death comes quickly, Snatches us cruelly, It spares no one.

Long live the academy!
Long live the teachers!
Long live each student!
Long live all students!
May they always florish!
Long live all girls,
Slender and beautiful!
Long live wives as well,
Tender, loveable,
Good and productive.
Long live the state as well
As they who rule it!
Long live our city
[And] the charity of benefactors
Who protect us here!
Let sadness perish, Let sorrows perish!
Let the devil perish,
Let [perish] whoever who is anti-student.
As well those who mock us!

The most popular stanzas nowdays are typed in black type

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