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Latin and medical terminology

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This manual is meant for foreign students studying the course "Latin and Medical Terminology" at Medical Faculty and Dentistry Faculty (the language of instruction: English).

Content

Preface6
History of the Latin language
I. ANATOMICAL TERMINOLOGY
Unit 1 Latin alphabet. Pronunciation of vowels and consonants. Pronunciation of diphthongs and digraphs. Letter combinations
Unit 2 The stress. Duration and brevity of the syllable
Unit 3 Nouns. Grammatical categories of a noun. General rules of defining gender. Declensions. Structure of anatomical terms. Uncoordinated attribute
Unit 4 Adjectives. Grammatical categories of adjectives. Two groups of adjectives. Declination of adjectives. Coordination of adjectives with nouns
Unit 5 Morphologic and syntactic structure of compound anatomical terms
Unit 6 Degrees of comparison. Formation of the comparative degree. Defective degrees of comparison. Declension of adjectives in the comparative degree and coordination with nouns
Unit 7 The superlative degree. Declension of superlative forms and coordination with nouns
Unit 8 Training exercises
Did you know?
Unit 9 Nouns of the masculine gender of declension III. Exceptions from the masculine gender. Latin names of muscles
Unit 10 Nouns of the feminine gender of declension III. Exceptions from the feminine gender54
Unit 11 Nouns of the neuter gender of declension III. Exceptions from the neuter gender
Unit 12 Nouns of the III-V declensions. Revision. Training exercises

Unit 13 Nominative Plural of nouns and adjectives	65
Unit 14 Genitive Plural of nouns and adjectives.	69
Unit 15 Genitive plural of nouns and adjectives of declension III	72
Unit 16 Revision. Translation of anatomical terms in plural	75
II. CLINICAL TERMINOLOGY	
Unit 17 Word-building in clinical terminology. Greek and combined terminological elements. Common Latin and Greek suffixes	80
Unit 18 Structure of clinical terms. Greek-Latin duplicate designations of organs and tissues	83
Did you know?	87
Unit 19 Greek TE naming pathologic changes of organs and tissues, therapeutic and surgical methods. Suffixation in clinical terminology	89
Unit 20 Latin and Greek prefixes	93
Unit 21 Greek-Latin pairs naming tissues, organs, secretions, sex, age	96
Unit 22 Single TE denoting different physical properties, qualities, relations and other signs	100
Unit 23 Greek-Latin duplicates. Training exercises	102
Unit 24 Translation of diagnoses from main branches of medicine: therapy, surgery, nerve diseases and others	103
Unit 25 Training exercises.	106
III. PHARMACEUTICAL TERMINOLOGY	
Unit 26 General notion about pharmaceutical terminology. Nomenclature of medical preparations. Trivial names of medical substances.	108

Unit 27 The verb. Grammatacal categories. Imperativus and Conjunctivus	113
Unit 28 Accusativus and Ablativus in the prescription. Prepositions in prescription phrases	117
Did you know?	121
Unit 29 Structure of the prescription. Design of the Latin part of the prescription	122
Unit 30 Chemical nomenclature. Names of chemical elements, acids, oxides	127
Unit 31 Chemical nomenclature. Names of salts.	131
Unit 32 The most important prescription abbreviations.	135
Unit 33 Training tasks	139
Unit 34 Revision test.	142
Appendix 1	143
Appendix 2	144
Jusjurandum	145
Latin expressions in English	146
Gaudeamus	147
Latin-English Dictionary	148
English- Latin Anatomy Dictionary	169
Literature	192

Preface

Textbook "Latin and Medical Terminology" is designed to be used as the main source of information about Latin in medicine. The course "Latin and Medical Terminology" is a two-semester course that introduces students to the Latin and Greek medical terms that are important for medical students. The aim of the two-semester course is to learn main grammar rules, specific structures, terms and words of Latin and Greek origin to translate anatomical, clinical and pharmaceutical terms and promote further work with it. The textbook consists of three basic parts:

- 1. **Anatomical Terminology**: The primary rank is for anatomical nomenclature whose international version remains Latin in the full extent. Anatomical nomenclature is produced on the base of the Latin language. Latin as a dead language does not develop and does not belong to any country or nation. It has a number of advantages that classical languages offer, its constancy, international character and neutrality.
- 2. Clinical Terminology: Clinical terminology represents a very interesting part of the Latin language. Many clinical terms came to English from Latin and people got used to their meanings and do not consider about their origin. Medical terms sound like a foreign language because the vast majority of them have Greek and Latin origin. So, for example, the word "gastrectomy" is of a Greek origin and means "the total removal of a stomach". "Gastrectomy" comes from the Greek word "gaster" which means "stomach" and the Greek word "ectome", which means "cut out". The main reason of using these words is that medical terms provide one word that describes something that would otherwise take many words to say. For example, it is quicker to say "gastrectomy" than to say "the total removal of a stomach". You will be able to learn medical terms by understanding the origin of these words in Latin and Greek.
- 3. **Pharmaceutical Terminology**: In pharmaceutical terminology Latin has remained a functioning means of international communication, guaranteed by the European Pharmacopoeia (2008) and by the corpus of International Nonproprietary Names (2012). But even though there is no common rule for all countries. National languages are in usage to prescribe medicines in some countries, but in many other countries Latin has continued to be preferred and the standard international nomenclature of drugs is based on the Latin version. The Latin version of the pharmacopoeia has been used in Germany, Switzerland, Japan, China, etc.

History of the Latin language

The Latin Language (Lingua Latina) belongs to the Italian group of Indo-European languages. First it was spoken by Latini – a tribe living in the center of Italy as well as inhabitants of Ancient Rome and the tribes of the Apennine peninsula which had been conquered by Rome at the beginning of the 1 A.D.

Since the middle of the 3 B.C. the Latin language together with Roman legionaries penetrates into the countries with more ancient culture – Greece, Egypt, Syria and others. Latin becomes the dominating language of the huge Roman Empire occupying the territory from modern Romania to modern Portugal.

Especially Greek culture played a significant role. The Romans were under the influence of highly developed culture of Greece from the very beginning.

In the 5 B.C. the Greek science developed rapidly and successfully, including natural history and medicine. At that time Hippocrates, the "father" of scientific European medicine, lived and worked in Greece. The sources of scientific medical terminology were found in his works. Most of the terms used by Hippocrates are in the international dictionary of medicine.

The largest contribution to the formation of medical terminology after Hippocrates was made by the representatives of the so-called medical school of Alexandria (4 B.C.). A little later a lot of Greek words in Latinized or unchanged original form appeared in Latin. The Latin alphabet was increased due to introduction of the Greek letters "y" and "z".

The role of the Latin language increased. Works of the Roman scientists and doctors appeared. Greek and Latin terms were used as synonyms and doctors in ancient times had to know to languages: Latin and Greek. The terminology was formed on bilingual base. It is reflected in terms of different nomenclatures: the same anatomical formations in anatomical nomenclature are Latin but in disease nomenclature they are Greek.

After the fall of the Roman Empire the conversational Latin lost its official role. The Literary Latin language continued its artificial existence as bookish, "scientific" language for centuries. In the Middle Ages it was so-called Medieval Latin, and in Renaissance – Humanistic Latin. All scientific works and teachings were in Latin. Works of Old Greek and Arab doctors were translated into Latin.

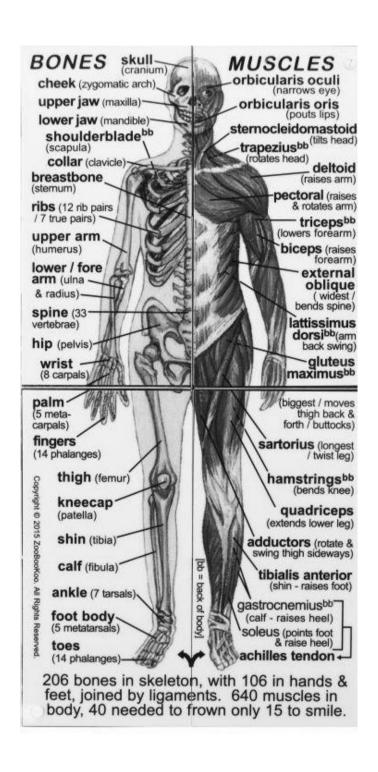
In Renaissance the Latin language became the international language of science, all scientists in all spheres of knowledge exchanged verbal and written information in Latin. At that time the bases of international medical terminology in Latin were laid.

The fundamentals of medical terminology

Medical terminology is a "system of systems". It consists of great number of separate terminological subsystems of medical, medicobiological and some other sciences connected with medicine. We distinguish three leading subsystems.

- 1. Anatomical and histological nomenclatures including all names of the known anatomical and histological formations.
- 2. Clinical nomenclature includes terms expressing different clinical specialties as well as pathologic anatomy and pathologic physiology. First of all, these are terms of therapy, surgery, names of diseases, pathologic processes and conditions, symptoms and syndromes, methods of examination and treatment.
- 3. Pharmaceutical nomenclature. There are terms of medical preparations of vegetable and chemical origin.

I. ANATOMICAL TERMINOLOGY



UNIT 1.

§1. LATIN ALPHABET. PRONUNCIATION OF VOWELS AND CONSONANTS. PRONUNCIATION OF DIPHTHONGS AND DIGRAPHS. LETTER COMBINATIONS.

The Latin alphabet is very similar to the English one and contains 25 letters: six vowels and nineteen consonants. Some consonant letters have peculiarities in pronunciation but most of them are pronounced like in the English language.

Letter	Name	Pronunciation	Examples – Latin (English)		
Aa	a	Λ	as in "cup": ála (wing)		
Bb	be	b	as in "book": brévis (short)		
Cc	tse	ts k	as in "plants": cérvix (neck) as in "corner": cósta (rib), crísta (crest)		
Dd	de	d	as in "danger": dórsum (back)		
Ee	e	e	as in "met": vértebra		
Ff	ef	f	as in "face": fácies (surface, face)		
Gg	ge	g	as in "get": génu (knee)		
Hh	ha	h (english like)	as in "hard": hérba (grass)		
Ii	Ι	i	as in "pick": dígitus (finger)		
Jj	yot	(j)	as in "yes": májor (large)		
Kk	ka	k	as in "key" : skéleton		
Ll	el	l (soft sound)	as in "lip": línea (line)		
Mm	em	m	as in "memory": márgo (border)		
Nn	en	n	as in "nose": nómen (nose)		
Oo	О	0	as in "possible": nódus (node)		
Pp	pe	p	as in "partner": pálatinus (palatine)		

Qq	ku	k	as in "quite": quádriceps (four-headed)		
Rr	er	r	as in "right": réte (network)		
Ss	es	S Z	as in "solve": símplex (simple) as in "nose": incisúra (slit or notch)		
Tt	te	t	as in "tiger": tráctus (tract)		
Uu	u	u	as in "put": púlmo (lung)		
Vv	ve	V	as in "very": véna (vein)		
Xx	iks	ks	as in "text": rádix (root)		
Yy	ypsilon (igrek)	i	as in "crystal": týmpanum (drum)		
Zz	zeta	Z	as in "zoo": zygóma (check-bone)		

Pronunciation of vowels and diphthongs

The Latin vowels are similar to the corresponding English vowels.

Aa as in "cup": ála (wing)

Ee as in "met": vértebra

Ii as in "pick": digitus (finger)

Yy as in "crystal": týmpanum (drum). This letter is a sign of Greek origin of a word

Oo as in "possible": nódus (node)

Uu as in "put": púlmo (lung)

Remember that there is no sound [ai] in the Latin language.

<u>Diphthong</u> is a combination of two vowel that are pronounced together in one syllable. There are 4 diphthongs in the Latin language:

ae is pronounced as [æ] in "angle": costae (ribs)

oe is pronounced as [ə:] in "curtain": oedema (swelling)

au is pronounced as [au] in "down": áuris (ear)

eu is pronounced [eu] : pléura (pleura)

Two dots placed over the letter $\underline{\mathbf{e}}$ indicate that $\underline{\mathbf{ae}}$ or $\underline{\mathbf{oe}}$ are not diphthongs and their letters denote different sounds: $\mathbf{\acute{aer}}$ / Λ -er/ - air; $\mathbf{\acute{diploe}}$ /diploe/ - spongy substance.

Pronunciation of consonants and digraphs

The Latin consonants are also similar to the corresponding English consonants, except \underline{c} , \underline{g} , \underline{j} , \underline{l} , \underline{s} , \underline{x} and \underline{z} .

One of the main differences between English and Latin consonants is that in Latin <u>p, t, k</u> are not aspirated (i.e. there is no puff of breath after them) as in English.

Letter **Cc** can be pronounced in two different ways. It depends on the letters that are after **Cc**:

• C is pronounced as [ts] + e, i, y, ae, oe:

```
cérvix /tserviks/ –neck;
cýstis /tsistis/ – bladder;
caécum /tsekum/ – cecum.
```

• C is pronounced as [k] + a, o, u, before consonants, at the end of the word:

```
cáput /kʌput/ – head;
cósta /kostʌ/ – rib;
cutis /kutis/ – skin;
búcca /bukʌ/ – cheek;
lac /lʌk/ – milk.
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 $\mathbf{G}\mathbf{g}$ is always pronounced as /g/: gingiva /gingiva/ – gum. There is no sound [d3].

Jj is pronounced as /j/ in English words "yes, you, young": major /mʌjor/- greater.

Ll is always palatalized and soft.

Ss can be pronounced as [z] between vowels and between a vowel and consonants "m/n" in the words of Greek origin:

- vowel + s + vowel: incisura /intsizura/ notch
 but: vowel + ss + vowel sounds [s]: fossa /fossa/ fossa
- vowel + \mathbf{s} + m/n: chi**asm**a /hi \wedge zm \wedge / crossing

In all other combinations **Ss** is pronounced as [s].

Zz is always pronounced as

- [z] in Greek words: zygomaticus /zigomʌtikus/ zygomatic;
- [ts] in words of other origin: Zíncum /tsinkum/ zinc.

Xx is usually pronounced as [ks] but between vowels it sounds [kz]: radix /rʌdiks/ – root; exitus /ekzitus/ – end.

<u>Digraph</u> is a group of two consonant letters representing one sound. Their presence in a word shows its Greek origin.

```
    ch as /h/: núcha /nuhʌ/ – neck
    ph as /f/: ráphe /rʌfe/ – suture
    rh as /r/: rhéxis /reksis/ – rupture
    th as /t/: thórax /torʌks/ – chest
```

Pronunciation of letter combinations

These letter combinations are pronounced as follows:

Ngu:

- as /ngv/ before vowels: língua /lingva/ tongue, language;
- as /ngu/ before consonants: ángulus / \(\lambda \) angle

Qu as /kv/ áqua /ΛkvΛ/ – water

Su:

- as /sv/ before vowels a,e: suávis /svʌvis/ pleasant;
- as /su/ in different syllables: súlcus /sulkus/ furrow or groove

Ti:

- as /tsi/ before vowels: spátium /spʌtsium/ space; articulátio /ʌrtikuliatsio/ joint;
- as /ti/ before consonants, after s,t,x: tíbia /tibiλ/ shinebone; óstium /ostium/ opening.

§2. EXERCISES

Exercise 1. Read the following words paying special attention to the vowels:

Ála (wing), mínor (small), artéria (artery), lámina (plate), abdómen (belly), fóvea (pit), fíbula (fíbula; long, thin outer bone from knee to ankle), fémur (thighbone), línea áspera (rough line), pálma (palm), infundíbulum (funnel), régio (region), inférior (lower), antérior (situated in front of), membrána (membrane), manúbrium stérni (fírst or upper part of breast-bone), véna (vein), húmerus (bone of upper arm), gingíva (gum), úlna (medial bone of forearm), úvula (lingula), hépar (liver), hílus (hilus).

Exercise 2. Read the following words paying special attention to the vowels "i" and "j":

Intestínum (intestine), iáter (physician, doctor), páries inférior (lower wall), ínsula (island), junctúra (junction), júgum (eminence), juguláris (jugular), canális palatínus májor (greater palatine canal), fóssa infratemporális (infratemporal fossa), tubérculum május (greater tubercle), jejúnum (jejunum), ilíacus (iliac).

Exercise 3. Read and explain the pronunciation of the sound "c":

Cáput (head), cóllum (neck), cávitas (cavity), ócciput (occiput), trúncus (trunk), fácies (face), caécus (blind), cérebrum (brain), claviculáris (clavicular), scápula (scapula), accessórius (accessory, additional), músculus (muscle), scéleton (skeleton, body, framework), ceméntum (cement), cávum (cavity), cránium (skull), sáccus lacrimális (lacrimal sac), cartilágo (cartilage), cóndylus (condyle), bíceps (biceps),

céllula (cell), córpus (body), súlcus palatínus (palatine sulcus), vértebra cervicális (cervical vertebra), vértebra sacrális (sacral vertebra), os coccýgis (coccyx), búcca (cheek), búccae (cheeks).

Exercise 4. Read the following words paying particular attention to the consonant "s":

Fóssa (cavity), húmerus (bone of upper arm), mesentérium (mesentery), impréssio (impression), sínus (holow curvature or cavity), sigmoídeus (sigmoid), séptum nási (nasal septum), canális hypoglossális (hyppoglossal canal), procéssus styloídeus (styloid process), básis cránii (base of skull), segméntum (segment), pars petrósa (petrosal part), chiásma (chiasm), fissúra (fissure, slit), dens incisívus (incisor tooth), platýsma (subcutaneous neck muscle), mesogástrium (middle part of abdomen), mucósus (mucosal), nasolacrimális (nasolacrimal), súlcus sínus transvérsi (groove of the transverse sinus).

Exercise 5. Read the following words paying attention to the consonants \underline{x} and \underline{z} :

Fléxio (flexion), áxis (axis), extérnus (external), maxilláris (maxillary), fórnix (fornix), índex (forefinger), pléxus (plexus), lárynx (larynx), déxter (right), maxílla (upper jaw), circumfléxus (circumflexus), rádix (root), extrémitas (extremity, limb), zygomáticus (zygomatic), zóna orbiculáris (orbicular zone).

Exercise 6. Read the following words paying special attention to Latin diphthongs:

Áuris (ear), Áurum (gold), pléura (pleura), neurológia (neurology), pneumonía (inflammation of the lungs), cóstae (ribs), oedéma (swelling), anaemía (anemia), gangraéna (gangrene), áër (air), Áloë (aloe), aërophobía (fear of fresh air), vértebrae (vertebrae), caécus (cecal), oesóphagus (oesophagus), auriculáris (auricular), córpus vesícae félleae (body of gallbladder), aponeurósis (aponeurosis), pseudomembrána (false membrane), uropoëticus (urogegenus), díploë (diploe), aurícula (auricle), haematopoëticus (hemopoietic), dýspnoë (dyspnea), régio glutaéa (gluteal region), peronaéus (fibular), neurocránium (skull), caudális (caudal).

Exercise 7. Read the following words paying particular attention to the pronunciation of qu and ngu:

Squáma occipitális (occipital scale), lámina quadrigémina (quadrigeminal plate), quadrátus (square), vértebra quínta (the fifth vertebra), línea oblíqua (oblique line), língua (tongue, language), língula (small tongue), inguinális (inguinal), únguis (nail), squamósus (scale-like), os tríquetrum (trihedral bone), sublinguális (sublingual), ángulus (angle), sánguis (blood), sanguíneus (bloody).

Exercise 8. Read the following words paying particular attention to the pronunciation of <u>ti</u>:

Addúctio (adduction), abdúctio (abduction), periodóntium (peridontium), supinátio (supination), articulátio (joint), eminéntia (eminence), tíbia (shinbone), óstium (mouth, aperture), spátia intercostália (intercostal space), digéstio (digestion), distántia trochantérica (trochanteric distance), substántia spongiósa (spongy substance), forámina nutrícia (nourishing openings), míxtio (mixture), masticátio (chewing).

Exercise 9. Read the following words paying particular attention to the pronunciation of digraphs and letter combinations:

Núcha (nape of neck), thyreoídeus (thyroid), thórax (chest), línea núchae supérior (upper nachal line), tubérculum pharyngéum (pharyngeal tubercle), os sphenoidále (wedge-shaped bone), fóssa hypophysiális (hypophysial cavity), labyrínthus ethmoidális (cribriform labyrinth), kyphósis (hump back (arterior curvature)), hemisphérium (hemisphere), sectiónes hypothálami (sections of hypothalamus), splanchnológia (splanchnology), sphíncter (sphincter), brónchus (main branch of trachea), dúctus cholédochus (common bile duct), os scaphoídeum (boat-shaped bone), phalánges (bones of fingers), sýmphysis (symphysis), synchondrósis (synchondrosis), ísthmus (isthmus), trúncus brachicephálicus (brachiocephalic trunk), artéria ophthálmica (ophthalmic artery), véna saphéna (saphenous vein), nódus lympháticus (lymphatic node), dúctus thorácicus (thoracic duct), spinothalámicus (spinothalamic), pars sympáthica (sympathetic part), cávum subarachnoidále (subarachnoidal cavity), os íschii (ischial bone), incisúra ischiádica májor (major ischiadic notch), aquaedúctus mesencéphali (aqueduct of midbrain).

§3.VOCABULARY

Nouns:

atlas – atlas encephalon – brain, encephalon

axis - axis homo - man caput - head os - bone

cerebrum – cerebrum skeleton (sceleton) – skeleton, bony

collum – neck framework

 $\begin{array}{ccc} columna-column & substantia-substance \\ corpus-body & thorax-chest, thorax \end{array}$

cranium – skull truncus – trunk dorsum – back vertebra – vertebra

Adjectives:

dexter – right ventralis – ventral distalis – distal medialis – medial

dorsalis – dorsal medianus – median, central

externus – external (on the outside) minor – lesser internus – internal (interior) sinister – left

major – greater profundus – deep

II. CLINICAL TERMINOLOGY



UNIT 17.

§49. WORD-BUILDING IN CLINICAL TERMINOLOGY. GREEK AND COMBINED TERMINOLOGICAL ELEMENTS. COMMON LATIN AND GREEK SUFFIXES

Structure of clinical terms

Clinical terminology is a complex of medico-biological knowledge including problems related to a sick organism.

The terminology of the modern medicine is the most complicated terminological system of the modern science. The total amount of medical terms remains unknown, but its estimated amount exceeds one million terms.

The meaning of a medical term can be understood by dividing into its three basic component parts: *prefix*, *root and suffix*. So, there are two types of word-building: some terms are formed by adding suffixes and another terms are compound because they consist of two or more bases.

In anatomical terminology, we mostly build terms with the help of suffixes. They can change a meaning and a part of speech.

Common suffixes that form *nouns*

Suffixes	Meaning	Example		
-ŭl-; -cŭl-;	little, small	foss ŭl a – small hole, small foss		
		cuti <i>cŭl</i> a – ''little'' skin, a horny		
		secreted layer		
-ŏl-		arteri <i>ŏl</i> a – small artery		
-īn-	occupation	medic īn a – medicine		
		offic īn a – drugstore		
-ūr-	result of activity	sut ūr a – suture		
		apert ūr a – aperture		
-io	activity, process	flex io – flexion		
-or	a thing that fulfills a function	musculus adduct <i>or</i> – leading muscle		

Common suffixes that form adjectives

	y			
Suffixes	Meaning	Examples		
-ōs-	sufficiency	fibr ō sus, a, um – fibrous		
		ven ōs us, a, um – venous		
		nerv ō sus, a, um – nervous		
-āl-/ -ār-	belonging	lingu āl is, e – lingual		
-īn-		palat īn us, a, um – palatine		
-ĭc-		thorac ĭc us, a, um – thoracic		
		gastr ĭc us, a, um – gastric		
-e-	tissue	osseus, a, um – osseous		
		coccygeus, a, um – coccygeal		

(o)-īde-	similarity	arachnoideus, a, um – arachnoid
		pteryg <i>oide</i> us, a, um – pterygoid
-gen-(us)	1. caused by (pathological	Enterogenus – caused by intestine
	process in an organ);	disease
	2. causes (pathological	Cancero <i>gen</i> us – causes cancer
	process)	_

§ 50. EXERCISES

Exercise 1. Find out the dictionary form of the derivatives, explain the meaning of the suffixes:

Cuticula, tuberculum, mammilla, frenulum, glomerulum, ossiculum, venrticulus, corpusculum, lingula, lingualis, redicula, ventralis, dorsalis, tympanicus, caninus, meningēus, membranosus, cardiogěnus, spongiosus, analis, femoralis, geniculum, maxillaris, mandibularis, mucosa, serosa, granulosus, alveolaris, glutēus, carpēus, phalangēus, caroticus, pubicus, neurogěnus.

Exercise 2. Translate the given terms into English, pay attention to the meaning of the suffixes:

Ductus pancreaticus, fossa condylaris, fossula petrosal ossis temporalis, incisura fibularis, processus styloideus, ductus hepaticus, os scaphoideum, palātum osseum, vena gastrica, musculus gluteus, arteria meningea, fossa canina maxillae, cavĭtas medullaris, cornu sacrale, apex ossis sacri, tuber ischiadicum, systema nervosum centrale.

Exercise 3. Form adjectives with the meaning "belonging to" from the given nouns:

Chest, drum, diaphragm, carotid artery, stomach, lymph.

Exercise 4. Form nouns with the meaning "a thing that fulfills a function" from the bases of the verbs:

Constrictum (to compress), depressum (to lower), supinatum (to upturn), monĭtum (to remember), excavātum (to hollow), acceptum (to accept), receptum (to get), ordinatum (to make an order).

Exercise 5. Form nouns with the meaning "result of activity" from the bases of the verbs:

Junctum (to connect), strictum (to compress), curvātum (to bend), fissum (to split), sutum (to sew), fractum (to break).

Exercise 6. Translate the given terms:

Hepatic coma, lymphogenous cyst of the neck, transverse fracture, longitudinal fracture, diffuse abscess, diabetic coma, varicose ulcer, chronic ulcer, femoral hernia, diaphragmatic hernia, hernia of white line, apical tooth cyst, acute caries of a tooth, cancer of a lung.

§ 51. VOCABULARY

Nouns

abscessus, us m – abscess cancer, cri m – cancer caries, ēi f – caries colĭca, ae f (Gr.) – colic coma, ătis n (Gr.) – coma cysta, ae f (Gr.) – cyst diabētes, ae f (Gr.) – diabetes eczema, ătis n (Gr) – eczema fractūra, ae f – fracture gangraena, ae f – gangrene glaucōma, ătis n (Gr.) – glaucoma hernia, ae f – hernia icterus, i m (Gr.) – hepatite (jaundice)

ileus, i m (Gr.) – intestinal blockage infectio, ōnis f – infection inflammatio, ōnis f – inflammation morbus, i m – disease oedēma, ătis n (Gr.) – edema paralysis, is f (Gr.) – paralysis parēsis, is f (Gr.) – paresis pneumonia, ae f (Gr.) – pneumonia spasmus, i m (Gr.) – spasm trauma, ătis n (Gr.) – injury ulcus, ĕris n – ulcer, sore varix, icis m, f – venous node A volvulus, i m – volvulus

Adjectives

comatōsus, a, um – comatose cystōsus, a, um – cystic diabeticus, a, um – diabetic gangrenosus, a, um – gangrenous infectiōsus, a, um – infectious paralytĭcus, a, um – paralytic spasticus, a, um – spastic, convulsive traumaticus, a, um – traumatic ulcerōsus, a, um – ulcerative varicosus, a, um – varicose acūtus, a, um – acute benignus, a, um – benign diffūsus, a, um – diffused infantīlis, e – infantile juvenīlis, e – juvenile, youthful malignus, a, um – malignant senīlis, e – senile, aged

III. PHARMACEUTICAL TERMINOLOGY



UNIT 26.

§ 72. GENERAL NOTION ABOUT PHARMACEUTICAL TERMINOLOGY. NOMENCLATURE OF MEDICAL PREPARATIONS. TRIVIAL NAMES OF MEDICAL SUBSTANCES.

Pharmaceutical terminology is a complex that contains terminology of a number of special disciplines combined under the general name "pharmacy" which study innovations, production and usage of the medicinal preparations.

A nomenclature of the medicinal substances plays a main role in this complex.

General pharmaceutical terms:

- *Remedium*, *medicamentum* medicinal remedy (a substance or a mixture of substances allowed for prevention, treatment or diagnostic of a disease);
- *Materia medica* medicinal substance (individual chemical or biological compound);
- *Forma medicamentorum* medicine form (different remedy types, shapes);
- *Praeparatum* preparation (remedy in a specific medicine form).

Trivial names of the medicinal substances

Many chemical compounds used as medicines preserve the same names they have in chemical nomenclature. For example, sodium chloride, iron lactate. But in nomenclature of the medicinal preparations the chemical compounds are given not in their scientific, systematic names but in trivial names.

Systematic names are not suitable as names of the medicinal substances. They are substituted for trivial ones because they are short, simple for professional and everyday use. For example, Analginum is a trivial name, its systematic is 1-Phenil-2,3-dimethyl-4-methylamino-pirasolon-5-N-metansulfonate of sodium.

Trivial names of medicinal substances are derivatives from different word-building structures. The base word is mostly systematic name of the chemical compounds. The sources for formation of trivial names are the words, word-building elements, roots and so called word sections of ancient Greek and Latin origin.

All Latin drug names are nouns of neuter gender 2nd declension ending by - um. To translate them from English to Latin, it is necessary to add ending -um,

- e.g. English: Aspirin Latin: Aspirinum.
- A few exceptions to this rule are drug names by -a: No-spa, Do-pa (1st declension).

Remember, the names of medicines, chemical elements, medicinal plants are written with the first capital letter.

Names of main pharmaceutical forms

Liquids					
Solutio, ōnis f	solution				
Mucilāgo, ĭnis f	mucilage				
Emulsum, i n	emulsion				
Suspensĭo, ōnis f	suspension				
Infūsum, i n	infusion				
Decoctum, i n	decoction				
Tinctūra, ae f	tincture				
Extractum, i n (fluĭdum, siccum)	extract (fluid, dry)				
Mixtūra, ae f	mixture				
Linimentum, i n	liniment				
Gutta, ae f	drop				
Sirŭpus, i m	syrup				
Olěum, i n	oil				
Semisolids					
Unguentum, i n	ointment				
Pasta, ae f	paste				
Suppositorĭum, i n	suppository				
Suppositorĭum rectāle (vagināle)	rectal (vaginal) suppository				
Emplastrum, i n	plaster				
Solids					
Tabuletta, ae f (obducta)	tablet (coated)				
Dragée	dragée				
Pulvis, ěris m	powder				
Granŭlum, i n	granule				
Pilŭla, ae f	pill				
Specĭes, ērum (plural) f	species, herbal blend				
Other drug forms					
Capsŭla, ae f	capsule				
Capsule is a drug in powdered or pellet form that has been enclosed in					
a soluble gelatin-like capsule.					
Aërosōlum, i n	aerosol				
Membranŭla (ae f) ophthalmĭca (us, a,	ophthalmic film				
um) (Lamella ophthalmĭca)					
Ophthalmic films are absorbable gelatin films containing drug					
substances					

Translation of pharmaceutical terms

1. If the drug preparation name includes a pharmaceutical form:

Pharmaceutical form is used on the first place: e.g. solutĭo, unguentum, tinctūra etc. The drug or plant name is placed after the pharmaceutical form and starts with the capital letter. As it is the second noun, it is used in Genitive case:

I declension	II declension	III declension	IV declension	V declension
-ae	-i	-is	-us	-ei

e.g. solution of streptocide – *solutio Streptocīdi*ointment of tetracycline – *unguentum Tetracyclīni*tincture of mint – *tinctūra Menthae*

Pay attention that in the English language it can be "tetracycline ointment" or "ointment of tetracycline" but there is only one way of translation in the Latin language (pharm. form + medicine/plant).

2. Trade or combined drug names are prescribed as follows: the drug name is placed after the pharmaceutical form in Nominative case and it is in inverted commas:

e.g. suppositories "Anaesthesol" – Suppositoria "Anaesthesōlum" tablets "Aevit" – Tabulettae "Aëvitum".

3. Pharmaceutical terms with adjectives:

Adjectives are written at the end of the prescription line. If it characterizes medical form, it is used in the same gender, number and case as the form

e.g. oily solution of synoestrol – **Solutĭo** (f, Nom.sing) *Synoestrōli oleōsa* (f, Nom.sing)

coated glutaminic acid tablets – *Tabulettae* (f, Nom.pl) acidi glutaminici obductae (f, Nom.pl).

4. Names of decoctions and infusions:

Names of plants parts are used in names of decoctions and infusions. In this way, a term starts with a pharmaceutical form (Nom. case) + part of plant (Gen. case) + name of plant (Gen. case). Names of plants are started with a capital letter. Pay attention that part of plant can be used in plural form (roots, leaves, flowers) but name of plant is used in singular form.

e.g. decoction of matricary flowers – decoctum florum (Gen.pl.) Chamomillae.

§ 73. EXERCISES

Exercise 1. Read aloud, translate into English:

- 1. Solutio Strophanthini, tabulettae Prednisoloni, granula Orasi, tabulettae Pantocrini, unguentum «Psoriasinum», species antiasthmaticae, solutio Camphorae oleosa, emplastrum Epilini, Streptocidum solubile, solutio Streptocidi solubilis.
- 2. Suspensio «Cindolum», suppositoria vaginalia «Osarbonum», unguentum Tetracyclini ophthalmicum, linimentum «Sanitas», flores Calendulae, solutio Glucosi, dragée «Aevitum».
- 3. Tabulettae olei Menthae, folium Farfarae, radix Althaeae, sirupus Althaeae, solutio Dicaini, cortex Frangulae, emplastrum Plumbi compositum, tabulettae Barbamyli, extractum Leonuri fluidum, suppositoria «Anaesthesolum», tabulettae Aloës obductae, infusum foliorum Digitalis, fructus Crataegi.

Exercise 2. Translate into Latin:

- 1. Syrups, extracts, solutions, oils, infusions and decoctions, suppositories, composite powders, seeds, flowers, roots, white rhizome, white bark, drops, tablets of rutin, tablets of promeran, liniment of lutenurine, vaseline oil, tablets of monomycin, tablet of myelosan, flowers of matricary, tablet of nitroglycerine, tablet «Pyramein», ointment of dibiomycin.
- 2. Granules, anise oil, solution of novocain, drops «Undevit», liniment of streptocide, heparin ointment, flowers of arnica, extract of flowers of arnica, tincture of valerian, tincture of motherwort, decoction of oak bark, leaves of nettle.
- 3. tetracycline ointment, solution of dactinomycin, alcohol solution of iodine, aerosol «Camphomen», solution of folliculin in oil (oily), tablets of amidopyrine, extract of valerian root, tablet of extract of valerian, grass of lily of the valley.

§ 74. VOCABULARY

Parts of medicinal plants

cortex, ĭcis m – cortex, bark

flos, floris m – flower

folĭum, i n – leaf

fructus, us m – fruit

gemma, ae f – bud

herba, ae f – herb, grass

radix, īcis f – root

rhizōma, ătis n – rhizome

semen, ĭnis n – seed

Names of medicinal plants

Aloë, ës f − aloe

Anisum, i n – anise

Arnica, ae f – arnica

Calendula, ae f – calendula

Chamomilla, ae f – matricary

Convallarĭa, ae f – lily of the valley

Crataegus, i f – hawthorn

Digitālis, is f – foxglove

Farfăra, ae f – coltsfoot

Other words

fluĭdus, a, um – fluid

compositus, a, um - composite

oleōsus, a, um – oily, in oil

spirituosus, a, um – alcohol

albus, a, um – white

Frangŭla, ae f – buckthorn

Leonūrus, i m − motherwort

Mentha, ae f - mint

Quercus, us f – oak

Urtīca, ae f – nettle

Valeriāna, ae f – valerian

Names of medicines

Amidopyrinum, i n – amidopyrine

Camphomenum, i n – camphomen

Dactinomycinum, i n – dactinomycin

Dibiomycinum, i n – dibiomycin

Iodum, i n – iodine

Folliculinum, i n – folliculin

Heparinum, i n – heparin

Lutenurinum, i n – lutenurine

Monomycinum, i n – monomycin

Myelosanum, i n – myelosan

Nitroglycerīnum, i n – nitroglycerine

Novocainum, i n – novocain

Promeranum, i n – promeran

Pyrameinum, i n – pyramein

Rutinum, i n – rutin

Streptocidum, i n – streptocide

Tetracyclīnum, i n – tetracycline

Undevitum, i n – undevit

topical – topicālis, e tympanal, tympanic – tympanicus, a, um topographic – topographicus, a, um tympanomastoid – tympanomastoideus, a, um tympanosquamous – tympanosquamōsus, a, torso – truncus, i m torus – torus, i m trabecula – trabecŭla, ae f tympanum – tympănum, i n type – typus, i m trachea, windpipe – trachēa, ae f tracheal – tracheālis, e typhlon – caecum, i n tract, way – tractus, us m typhus – typhus, i m tragus – tragus, i m transfusion – transfusio, ōnis f -IJtransplantation – transplantatio, ōnis f ulcer – ulcus, ĕris n transversal – transversālis, e ulcerous – ulcerosus, a, um transverse – transversus, a, um ulna – ulna, ae f trapezoid – trapezoideus, a, um ulnar – ulnāris, e trauma – trauma, ătis n umbilical – umbilicālis, e traumatic - traumatĭcus, a, um umbilicus, navel – umbilicus, i m tree – arbor, ōris m unciform – unciformis, e triangle – trigōnum, i n unguent, ointment – unguentum, i n triangular – 1) triangulāris, e; 2) trigonālis, e; 3) unicellular – unicellulāris, e unilateral – unilaterālis, e triquetrus, a, um triceps (muscle) – triceps, cipĭtis uniaxial – uniaxiālis, e tricuspid – tricuspidālis, e upper – superior, ius trigeminal – trigeminālis, e upper arm – brachium, i n trigonal - trigonālis, e upper jaw – maxilla, ae f trilateral – trilaterālis, e ureter – urēter, ēris m triple – triplex, ĭcis ureteric, ureteral – uretericus, a, um triquetrous – triquetrus, a, um urethra – urethra, ae f trochanter - trochanter, ēris m urethral – urethrālis, e trochanteric, trochanterian urinary – urinarius, a, um urine – urīna, ae f trochanterĭcus, a, um trochlea – trochlea, ae f urogenital – urogenitālis, e urtica, nettle – Urtīca, ae f trochlear – trochleāris, e trochoid - trochoideus, a, um usage, use – usus, us m trophic – trophicus, a, um uterine – uterīnus, a, um trunk – truncus, i m uterine tube – tuba (ae f) uterīna (us, a, um) uterovaginal – uterovaginālis, e tubal – tubarius, a, um tube – tuba, ae f uterovesicālis, e uterine tube – tuba (ae f) uterīna (us, a, um) uterus (womb) – utěrus, i m tuber – tuber, ĕris n uvea – uvea, ae f tubercle, small rounded swelling uvula – uvŭla, ae f tubercŭlum, i n tubercular – tuberālis, e -Vtuberculosis – tuberculosis, is f vaccine – vaccīnum, i n tuberculous, tubercular – tuberculōsus, a, um vagina, sheath – vagīna, ae f tuberosity – tuberositas, ātis f vaginal – vaginālis,e tuberous – tuberōsus, a, um vagus – vagus (nervus) tubo-ovarian – tuboovariālis, e vallecula – vallecŭla, ae f tubular – tubulāris, e vallum – vallum, i n valve -1) valva, ae f; 2) valvula, ae f tubule – tubŭlus, i m tubulose, tubulous – tubulōsus, a, um valvular – valvulāris, e vinillin – Vinylīnum, i n tumour – tumor, ōris m tunic – tunĭca, ae f varicella, chickenpox – varicella, ae f turbinate – nasālis, e varicosis – varicōsis, is f tussis, cough – tussis, is f variola, smallpox – variŏla, ae f twig - ramŭlus, i m various – varius, a, um

varix – varix, ĭcis m/f -Wvascular – vasculāris, e wall – paries, ĕtis m vaselin(e) – Vaselīnum, i n water duct – aquaeductus, us m vault - fornix, ĭcis m wedge-shaped, sphenoid -1) cuneiformis, e; 2) veil – velum, i n sphenoidalis, e vein – vena, ae f white - albus, a, um portal vein – vena (ae f) portae (us, a, um) wide – latus, a, um vegetative - vegetatīvus, a, um widest – latissĭmus, a, um velum – velum, i n venom, poison – venēnum, i n windpipe – trachēa, ae f venous – venōsus, a, um wine - vinum, i n venter – venter, tris m wing – ala, ae f ventral – ventrālis, e wing-shaped, pterygoid – pterygoideus, a, um ventricle – ventriculus, i m wisdom tooth – dens (dentis m) sapientiae (a, ae ventricular – ventriculāris, e f) (dens serotīnus (us, a, um)) venule, veinlet – venŭla, ae f woman – femĭna, ae f vermiform, vermicular -1) vermiformis, e; 2) womb – utěrus, i m lumbricālis, e wonderful - mirabĭlis, e vermis, worm – vermis, is m wrist - carpus, i m verruca, wart - verrūca, ae f vertebra (pl. vertebrae) – vertěbra, ae f -Xvertebral – vertebrālis, e xeroform - Xeroformium, ii n vertebral column – columna (ae f) vertebrālis xerosis – xerōsis, is f (is, e) xiphoid – xiphoideus, a, um vertex, sinciput – vertex, ĭcis m vertical – verticālis, e -Yvesica, blladder – vesīca, ae f yellow – flavus, a, um vesical – vesicālis, e vesicle – vesicula, ae f -7.vesicorectal – vesicorectālis, e zinc – Zincum, i n vesicouterine – vesicouterīnus, a, um zone - 1) zona, ae f; 2) area, ae f vesicovaginal – vesicovaginālis, e zonule – zonŭla, ae f vessel – vas, vasis n zygoma – zygōma, ătis n vestibule – vestibulum, i n zygomatic – zygomatĭcus, a, um vestibular – vestibulāris, e zygomaticofacial – zygomaticofaciālis, e vestibule – vestibulum, i n zygomaticoorbital – zygomaticoorbitalis, e vestibulocochlear – vestibulocochleāris, e zygomaticotemporal – zygomaticotemporālis,e vestibulospinal – vestibulospinālis, e villus – villus, i m vinylin - Vinylinum, i n viral – virālis, e virus - virus, i n visceral – viscerālis, e viscus (pl. viscera) – viscus, ĕris n vision -1) visus, us m; 2) visio, onis f vitreous – vitreus, a, um vivarium – vivarium, i n vocal, vocalic – vocālis, e voice - vox, vocis f volar – palmāris, e volvulus – volvŭlus, i m vomer – vomer, ĕris m vomiting – vomĭtus, us m vulva – vulva, ae f

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