МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«ГОМЕЛЬСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ»

Кафедра иностранных языков

С. А. ЛИН, А. Ф. МАКСИМЕНКО

ЛАТИНСКИЙ ЯЗЫК
(КЛИНИЧЕСКАЯ ТЕРМИНОЛОГИЯ)

Учебно-методическое пособие
для студентов 1 курса факультета по подготовке
специалистов для зарубежных стран медицинских вузов

2-е издание, стереотипное

LATIN LANGUAGE
(CLINICAL TERMINOLOGY)

The educational methodological text-book
for 1st year English medium medical students
of the Faculty of General Medicine for overseas students
of medical university

Гомель
ГомГМУ
2014

УДК 807.1(072)=111
ББК 81.2 Лат(2Англ) я 7
Л 59

Рецензенты:

кандидат филологических наук, доцент кафедры белорусского языка Гомельского государственного университета имени Ф. Скорины
Е. Н. Воинова;
преподаватель кафедры иностранных языков Гомельского государственного медицинского университета
А. К. Ёжикова

Лин, С. А.

Л 59 Латинский язык (клиническая терминология): учеб.-метод. пособие для студентов 1 курса факультета по подготовке специалистов для зарубежных стран медицинских вузов = Latin language (clinical terminology): the educational methodological text-book for 1st year English medium medical students of the Faculty of General Medicine for overseas students of medical university / С. А. Лин, А. Ф. Максименко — 2-е изд., стер. — Гомель: ГомГМУ, 2013 — 36 с.

ISBN 978-985-506-675-1

Настоящее учебно-методическое пособие предназначено для студентов учреждений, обеспечивающих получение высшего медицинского образования на английском языке. Рассматривает закономерности образования клинических терминов и знакомит студентов с методикой их анализа.

Составлено в соответствии с программой по латинскому языку и основам медицинской терминологии.

Предназначено для студентов 1 курса факультета по подготовке специалистов для зарубежных стран.

Утверждено и рекомендовано к изданию научно-методическим советом учреждения образования «Гомельский государственный медицинский университет» 26 июня 2014 г., протокол № 6.

УДК 807.1(072)=111
ББК 81.2 Лат(2Англ) я 7

ISBN 978-985-506-675-1

CLINICAL TERMINOLOGY

The material of "Clinical terminology" division prepares students to study professionally oriented disciplines at a medical university and introduces special word-terms to be used actively. Taking care of bedridden patients, treatment, is *'klinike techne'* in Greek. Therefore, terminology of this field of medicine is called clinical.

Clinical terminology deals with various subjects, processes, phenomena associated with prophylaxis, diseases diagnostics, means of examination and treatment of patients. Clinical terminology also includes names of operations, methods of examination and treatment, medical devices, instruments, equipment and so on.

§1. Basic languages of clinical terminology

Medicine as a science was formed in ancient Greece in V century B. C. Hippocrates was an outstanding representative of this classical period field of science. It is considered that he was the first to generalize his great medical experience in the form of medical works: he described manifestations of pleuritis, intestinal bleeding, intestinal obstruction, mumps, tetanus, kidney lesions; he worked out a theory about treatment of fractures, dislocations and injuries of various kinds. His works have first information about anatomy of female genital system, data about abnormal fetal positions which required surgical intervention, and also ideas about women's diseases and their treatment. Hippocrates paid great attention to matters of diagnostics of various diseases and described their general manifestations and localization.

Works of Hippocrates and his followers were later joined into the so-called "Hippocrates' collection» — «Corpus Hippocraticum». In this collection, the authors rather logically employ for special use a definite group of words singled out from the living spoken language and this group includes questions of **physiology, pathology, symptomatology and nosology**[1]. Thus, we can speak about the beginning of scientific medical terminology formation. Up to our days doctors use as special terms many names first given in «Hippocrates' collection»: *bronchus, urethra, herpes, carcinoma, kyphosis, coma, nephritis, paresis, polyp, symphysis, typhus, cholera, epidemic* and many others.

Alexandrian scientists developing lexicon of medical science began to introduce neologisms into it — artificially formed words which had not existed in the language before to denote special concepts. They are *prostate, diastole, systole, parenchyma* and others. For the first time the term *pathology* was used regarding various kinds of diseases. They also edited scientific works of predeces-

[1] Greek. nosos *disease* + logia *study, science — different particular diseases with their own names*

sors and sorted out the existing professional vocabulary. Since then medical terminology began to form as a definite system.

Rome contributed little into the development of medicine, it was the center where mostly Greek doctors worked. However, it is necessary to mention the role of Cornelius Celsus in working out Latin scientific medical terminology. The special vocabulary used by the ancient Roman author almost completely got into the vocabulary of scientific medicine. For example, *abdomen, anus, articŭlus, caecum intestīnum, cartilāgo, cervix, cubĭtus, digĭtus, femur, humĕrus, index* and so on. Celsus widely used authoritative and precise Greek names, giving them as equivalents of Latin words. This parallelism, doublet denotation of the same medical concepts by Greek and Latin words or their stems became a characteristic feature of medical terminology. In further term formation process Greek words were preferably used in the field of pathology (pathos *disease* + logos *science*). Words of Latin origin prevailed in descriptive anatomy.

Thus, beginning from antiquity medical terminology began to form on bilingual Greek-Latin basis. Latin and Greek words and term-elements are basic for terminology of all sciences, and first of all medicine, they are used in everlasting process of neologisms formation.

Content and laconicism of the Latin and Greek languages make it possible to combine in one word information which has to be translated into English by some words, for example *stomatitis, itidis f* — inflammation of mucous lining of the oral cavity, *cholecystoscopia, ae f* — examination of the gall-bladder inner walls.

Learning the term-elements given in this manual will expand vocabulary of students and will give them possibility to understand many medical terms easily. Thus, about 50 terms are formed from the term-element *arteri-*, more than 150 terms are formed from the term-elements *haem-* and *-aemia*. The term-element *oste-* is a part of 100 terms (Шпак А. М. Методика изучения медицинской терминологии. — Винница, 1961). Along with words of Greek origin clinical terminology has terms of Latin origin, for example, resectio, onis f — *removal of a part of an organ*, ulcus, eris n — *ulcer*, tuberculosis, is f — *tuberculosis*, cancer, cri m — *cancer* and others. Besides, there are term-hybrids those are words which consist of Latin and Greek term-elements, for example dysfunctio, ōnis f — *impairment of a function*, tonsillītis, itĭdis f — *inflammation of palatine tonsils*.

The purpose of the new division is to study not individual meaning of each word but common, recurrent constituents which are in the structure and meaning of a wide range of similarly formed words.

§2. Structure of clinical terms

Clinical terms vary in their structure. They are divided into one-word and multiword terms. In its turn, one-word terms may be simple, compound and derivative.

Simple clinical terms are words of Latin or Greek origin which cannot be divided morphologically within the limits of modern terminology: stupor — *numbness*; trauma — *damage in tissues integrity under the influence of external factors*; infarction — *limited area of necrotizing tissue mortified as a result of blood supply stop*; contusion — *general affection of the organism as a result of instantaneous mechanical lesion* and others. More often they are not translated, but transliterated by means of national languages and are international:

Latin	*Russian*	*Belorussian*	*English*	*French*	*German*
infarctus	инфаркт	інфаркт	infarction	infarctus	Infarct
contusio	контузия	кантузія	contusion	contusion	Kontusion
pneumonia	пневмония	пнеўманія	pneumonia	pneumonie	Pneumonie
stupor	ступор	ступар	stupor	stupeur	Stupor
trauma	травма	траўма	trauma	traumatisme	Trauma

Compound clinical terms are formed by combining two or some roots. Greek roots are usually combined with the vowel **-o-** in compound words. For example: *gastr-o-scopia, cyst-o-plegia, vas-o-gramma.* The interfix **-i-** is used in words of Latin origin: *viv-i-ficatio (revivification).* But in artificial neologisms this linguistic regularity has not been followed any more, and the combining vowel -o- is preferably used to form new words: *cardi-o-lysis, nas-o-lacrimalis* and so on. Stems of compound words may be also combined without the combining vowel, if the first component finishes with a vowel or the second one begins with a vowel: *brady-cardia, hemi-plegia, neur-algia, hyster-ectomia* and so on.

Derivative terms consist of a root and a prefix: dia + *agnōsis — diagnosis, recognition*; a prefix, a root and a suffix: para- + nephr + -itis — *paranephritis, inflammation of paranephric cellular tissue*, peri- + nephr- + itis — *perinephritis, inflammation of kidney fibrous capsule*; or a root and a suffix: nephr + -itis — *nephritis, kidney inflammation*, nephr + -osis — *nephrosis, general name of kidney diseases with the lesion of renal tubules.*

Multiword clinical terms are formed according to principles of Latin grammar and are word combinations with agrreed or non-agreed attributes. For example, mastopathia fibrosa — *fibrous mastopathy*; gastrorrhagia profūsa — *profuse gastric bleeding*; vitium cordis — *heart disease*; tuberculōsis pulmōnum — *tuberculosis of the lungs*; cancer cervīcis utĕri — *cancer of the womb neck.*

§3. Concept «term-element». Independent words as TEs

Ancient Greek and Latin words make up the basis of international clinical terms. In many cases words of Greek origin are used only as a constituent part of compound words expressing widespread medical definitions and concepts. For example, the term *pathologia* — a field of medicine studying morbid processes

in the organism — dates back to the Greek words *pathos* — 'suffering, disease' and *logos* — 'study' (Eng. — pathology; Fr. — pathologie; Germ. — Pathologie; Russ. — патология). The first part of the word *path-* is also present in the words *pathogenus, pathogenesis, pathophysiologia* and some others. The second part *-logia* is found much more often and not only in medical terms: *biologia, histologia, gynaecologia, morphologia, antropologia* and so on. But in every case we can state that these parts preserve the original meaning of the language-basis.

Thus, there exists practice to learn clinical terms not as a separate word, compared to anatomical vocabulary according to their consistuent parts grouping new words on the basis of identical structural elements which will be further called term-elements (TEs).

Term-element is any word part (a prefix, a root, a suffix) which has one and the same meaning in different words.

According to the place in a word TEs may be first and final. First TEs are given in tables with a little line after the last letter: *bio-; ophthalm-; ot-* and so on. Final TEs begin with such a line: *-logia; -scopia; -iatria* and so on. Final term-elements have grammatical ending by which we can determine gender and declension of a term. Although most TEs are of Greek origin, their endings are Latinized and coincide with the declension of Latin nouns according to grammatical signs: *pathologia, ae f; leucocytus, i m* and so on. In some cases TEs have two variants of use: as the first one with the little line at the end and as the final one beginning with the line and having the ending of masculine or feminine gender: *path-; -pathia*. The place of a term-element in a term does not change its meaning.

Some words having independent meaning may be used as final term-elements:

carcinōma, ătis n — *malignant tumor developing from scaly or glandular epithelium*	adenocarcinōma, ătis n — *malignant tumor from glandular epithelium*
diagnostica, ae f *1. science about diseases recognition; 2. process of a patient examination*	iridodiagnostica, ae f *diagnostics of diseases by the eye iris*
therapia, ae f — *science of internal diseases treatment*	hydrotherapia, ae f — *treatment with water*

Meaning of compound terms is determined by the meanings of their component TEs. Sometimes general meaning of a term is formed from separate TEs meanings, but in most words a TE is the only semantic help necessary for term understanding. Usually general meaning is wider or narrower than the word components meanings. For example, let's determine meaning of the terms *biologia, ophthalmologia* and learn the meaning of the term-elements composing these words: *bio-* — life; *ophthalm-* — eye; *-logia* — science, field of science, field of medicine.

The last term element has several variants of meaning that is why it is necessary to think over which of them is more appropriate for each word. First variant 'science' is more appropriate for the word *biologia* as we know that biology is a theoretical non-medical discipline. Ophthalmology is a medical speciality. Therefore, it is correct to say that it is a field of medicine. We also know that eye structure is studied by anatomy, so such definitions — as ophthalmology is a field of medicine dealing with eye diseases treatment, and biology is a science about life, living organisms — are correct.

Characteristic feature of Greek-Latin origin clinical terms is to give complex meanings in a short way. It explains why they are so actively used in modern medicine.

Methods of clinical terminology study presuppose learning the meaning of separate TEs and ways of forming derivative and multiword terms.

§4. Doublets — characteristic feature of medical terminology

Term-elements of Latin origin may be used along with Greek term-elements in clinical terminology. As a result of this the so-called doublet pairs have been formed. For example:

Greek term-element	Latin word	Translation
cyst-	vesīca urinaria	urinary bladder
proct-	rectum, i n	rectum
colp-	vagīna, ae f	vagina

Latin and Greek names of anatomical formations having absolutely identical meaning are called Greek-Latin doublets (from Latin *duplex* doubled). Doublet character of roots in terms formation sometimes leads to occurrence of doublet terms: *cystographia, vesicographia* — X-ray examination of the urinary bladder; *proctoscopia, rectoscopia* — rectum examination with the help of a special device; *colpitis, vaginitis* — inflammation of the vagina and so on. In these cases substitution of the derivating stem does not change the meaning of the derivative term.

§5. Stress in clinical terms

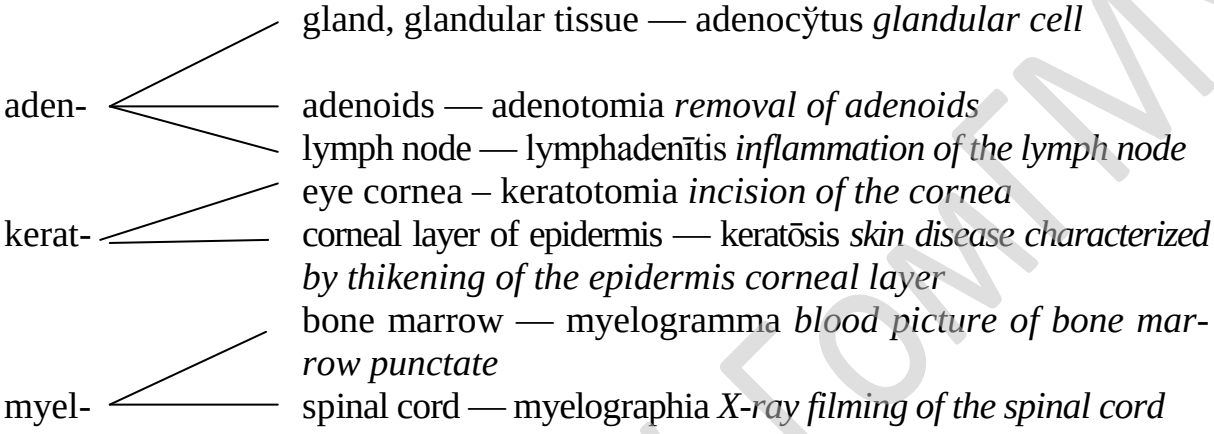
To stress medical terms may be difficult in many cases. On reading Latinized Greek words ending with *-ia*, the words with the final TE *-lógia* as well as *apáthia, sympáthia, agónia, artéria, anatómia, hérnia* are read according to the rule of the Latin language «a vowel before a vowel is short», that is the stress falls on the third from the end syllable. In other cases the second from the end syllable is stressed: *nephrectomía, hemiplegía, tachyphagía* and others.

The third from the end syllable must be stressed in terms with the final TEs *-cўtus, -genĕsis, -gĕnus, -lithiăsis, - lĭthus, - lŏgus, - lўsis, -stăsis, -stŏma*.

§6. Term-elements with multiple meaning, variation and many components

In most cases TEs are monosemantic, but some of them may have two or more meanings which cannot be divided into main and secondary and all of them must be learnt.

For example:



We should distinguish between multiple meanings and cases of TEs homonymy, when they are formed from different stems but coincided in spelling and reading. For example, the TE **arthr**- is the stem of the Greek noun *'arthr-on' — joint.* It is a constituent part of the terms: haem-arthr-osis — *accumulation of blood in the joint cavity;* arthr-algia — *pain in the joints;* arthr-osis — *chronic disease of a joint of distrophic character with articular cartilage lesion;* dys-arthr-osis — *a malformed joint, a false joint and others.* In the following terms the TE **arthr-** is the stem of the Greek verb *'arthroo' — to pronounce distinct sounds, to articulate*: dys-arthr-ia — *articulate speech disorder;* an-arthr-ia — *inability of distinct articulate speech, the gravest degree of dysarthria*. As we see, root TEs are identical in both cases.

In the terms *metrographia — X-ray examination of the uterine cavity after instillation of contrast medium*; *metroptosis — falling of uterus*; metrorrhagia — *acyclic uterine bleeding*; metrorrhexis — *rupture of the pregnant uterus*, the TE **metr-** dates from the Greek noun *'metr-a' — uterus*. But in the term hypermetropia — *farsightedness, anomaly of refraction characterized by focusing of the got into the eye parallel beams behind the retina*, the TE **metr-** is the stem of the Greek noun *'metr-on' — measure of distance*.

Some TEs have variants depending on the case form of the initial word of the language-basis. For example, the TEs *haem-, pneum-, derm-, stom-* originate from the form of Nominative case and their variants *haemat-, pneumat-, dermat-, stomat* — from the stem of Genitive case.

§7. Terminological meaning of the suffixes -ītis, -ōma, -ōsis, -iăsis, -ismus in clinical terminology. Grammatical characteristics of the terms with these suffixes

Suffixes have an important classifying function and some of them acquired clear terminological meaning. We refer nouns or adjectives to certain groups according to presence of this or that suffix in them.

Suffixes in clinical terminology are usually final term-elements (TEs) with or without joining nouns endings.

One of the most widespread suffixes in clinical terminology is **-ītis, itĭdis f.** French doctor Francoise Sovage (middle of 18 century) used it for the first time to form the term *peritonītis, itĭdis f.* Then in 1800 the term *bronchītis, itĭdis f* was formed. Since then the suffix has become the most productive in clinical terminology and formed microsystem of inflammatory diseases names. If the inflammation involves the organ covering membrane, the prefix **peri-** is added to a clinical term: *perimetrītis, itĭdis f — inflammation of the peritoneum covering the uterus*; if the inflammation involves the cellular tissue around the organ, the prefix **para-** is added: *parametrītis, itĭdis f — inflammation of the cellular tissue near the uterus*; if the inflammtion involves the inner organ covering, the prefix **endo-** is added: *endometrītis, itĭdis f — inflammation of the uterus mucous covering.*

Terms with this suffix are unequal III declension nouns of feminine gender.

Some inflammatory diseases preserve their traditional names: *pneumonia – lungs inflammation, panaritium — acute suppurative inflammation of periungual finger tissues.*

The siffix **-ōma** added to the stem of the tissue name forms names of tumors which arise from this tissue: *fibrōma, ătis n — benign tumor from fibrous connective tissue; osteōma, ătis n — benign tumor from bony tissue.*

Malignant tumors of some tissues have traditional names: *carcinōma – cancerous tumor, carcinoma; cancer — malignant tumor from epithelium; sarcōma – malignant tumor of mesenchymal origin* (from Greek *'sarcōma' fleshy outgrowth, tumor*).

The suffix **-ōma** is also used in some diseases names which are not related to tumors: *glaucōma, ătis n — eye disease characterized with elevated intraocular pressure.*

The suffix **-ēma** is also found in clinical terms. It has no clear motivational basis and occurs in the names of different diseases: *emphysēma, ătis n — widening of the air space in the lungs; empyēma, ătis n — accumulation of pus in a natural cavity; erythēma, ătis n — limited or diffuse redness of the skin because of hyperaemia, sometimes with lumps formation.*

Terms with the suffixes **-ōma**, **-ēma** are III declension nouns of neuter gender.

The suffix **-ōsis** has general meaning «pathological process, disease of non-inflammatory character»: *nephrōsis, is f — degenerative disease of the renal tubules; arteriosclerōsis, is f — sclerosis of the arterial vessels.*

If the stem of the word denotes a blood corpuscle or a tumor, the terms gain the meaning «increase in quantity, multiplicity of manifestation»: *leucocytōsis, is f — increase in the number of leucocytes in the blood; angiomatōsis, is f — multiple angiomas.*

The suffix -ōsis is also a component part of many clinical terms of general content performing word-fomation function only: *diagnōsis, is f — diagnosis, recognition of a disease; prognōsis, is f — prognosis, foreseeing the development of events (literally "fore-knowing"); anastomōsis, is f — connection of two tubular organs*.

Terms with the suffix -osis are equal III declension nouns of feminine gender.

The suffix **-iăsis** means diseases of non-inflammatory character with a long course: *nephrolithiăsis, is f — kidney stones disease*; *psoriăsis, is f — skin disease*.

Terms with this suffix are III declension equal nouns of feminine gender.

The suffix **-ismus** means phenomenon, property, fact marked with the sign named by the stem: *infantilismus, i m — underdevelopment of the organism stopped at an infantile degree of bodily or intellectual development* (*infans, ntis m, f — baby, child*); *alcoholismus, i m — immoderate consumption of alchoholic beverages and addiction to them.*

Terms with the suffix -ismus are II declension nouns of masculine gender.

Active vocabulary of a future doctor

acūtus, a, um *acute*
anamnēsis, is *f anamnesis — the information about the beginning and development of a disease received by questioning the patient or his relatives*
disseminātus, a, um *disseminated — scattered, widespread*
epicrĭsis, is f *epicrisis — a conclusion containing explanation about possible disease causes, description of the disease course, treatment and the disease outcome*
infarctus, us *m infarction — a limited area of the tissue mortification in blood supply stop*
infectiōsus, a, um *infectious*
insufficientia, ae *f insufficiency*
insultus, us *m stroke is an acute blood supply disturbance in the brain or spinal cord*
ischemĭcus, a, um *ischemic*
medicamentōsus, a, um *medicamentous, medicinal, officinal*
morbus, i m *disease*
multĭplex, ĭcis *multiple*
necrōsis, is *f necrosis is mortification of tissues*
oedema, ătis *n oedema is accumulation of fluid in tissue spaces*
sclerōsis, is *f sclerosis is hardening of tissues*
stenōsis, is *f stenosis is morbid narrowing of canals or openings*
symptōma, ătis *n symptom is a sign, characteristic manifestation of a disease*
syndrŏmum, i *n syndrome is combination of symptoms which make up a certain clinical presentation*

Exercises

1. Translate multiword terms into English language:

morbus contagiōsus (infectiōsus, medicamentōsus, professionālis, psychĭcus, radiatiōnis); infarctus renis; syndrŏmum nervi radiālis; insufficientia valvae aortae; syndrŏmum hepatolienāle; stenōsis arteriae renālis; sclerōsis disseminăta (multĭplex); sclerōsis arteriārum coronariārum cordis; syndrŏmum insufficientiae hepatĭcae; syndromum nervi occipitālis minōris.

2. Translate multiword terms into Latin language:

ischemic heart disease; acute infarction of the myocardium (kidney; kidneys; intestine; brain); cerebral stroke; syndrome of ulnar (optic) nerve; insufficiency of the mitral (atrioventricular) valve; heart disease; mitral valvular disease; congenital (acute) valvular insufficiency; acute kidney failure; sclerosis of the brain vessels; oedema of the lungs; acute necrosis of the pancreas.

3. Translate multiword terms into Latin language and then substitute them for one word:

narrowing of the oesophagus; narrowing of the pyloric portion of the stomach; narrowing of the trachea; mortification of the bone.

4. Learn the following professional expressions:

1. Anamnēsis morbi. *Information about a disease*. 2. Anamnēsis vitae. *Information about life*.

§8. Term-elements used in the formation of names of medical specialities and related disciplines, specialists, methods of primary diagnostic control, appliences and instruments

Final term-elements

Term-element	*Meaning*
-dermia	skin
-logia	science, field of science, field of medicine
-logus	specialist in the field of some science
-metria	measuring , determining (according to size, quantity)
-paedia	teaching, correction of defects
-scopia	examination, investigation of the organs inner walls and surfaces by special instruments
-scopium	optic appliance for examination of the organs inner walls and inner surfaces
-iater	doctor
-iatria	science of diseases treatment
-therapia	treatment with the use of conservative and other non-surgical methods

First term-elements

Greek term-element	*Latin noun*	*Meaning*
bio-	vita, ae *f*	life
derm-; dermat-	cutis, is *f*	skin
geri-; geront-	senex, senis *m,f*	old man, old woman
gynaec-	femĭna, ae *f*	woman
morph-	forma, ae f	appearance
noso-	morbus, i *m*	disease
ophthalm-	ocŭlus, i *m*	eye
ot-	auris, is *f*	ear
paed-	infans, ntis *m, f*	child, baby
phon- (-phonia)	vox, vocis *f*	voice
phthisi-	tuberculōsis, is *f*	tuberculosis
physi-	natūra, ae *f*	nature
psych-	anĭmus, i *m*	soul, consciousness
rhin-	nasus, i *m*	nose
stomat-	os, oris *n*	mouth
Prefix term-element		
endo-	inside	

Active vocabulary of a future doctor

acquisītus, a, um *acquired*
aetiologia, ae *f etiology — studies about diseases courses, nature of these courses*
benignus, a, um *benign*
chronĭcus, a um *chronic*
congenĭtus, a um *congenital*
diagnōsis, is *f diagnosis — recognition, determining of a disease on the basis of anamnesis and investigation*
diagnostica, ae *f 1. science about diseases recognition; 2. process of a patient's examination*
ictĕrus, i *m jaundice*
malignus, a, um *malignant*
physiologĭcus, a, um *normal, observed in a healthy organism, physiological*
senīlis, e *senile*
therapia, ae *f therapy — a science about treatment of internal diseases*
toxĭcus, a, um *toxic — associated with poisoning; causing poisoning*
tumor, ōris *m tumor*
ulcerōsus, a um *ulcerative*
ulcus, ĕris *n ulcer — local destruction of the main skin layer or mucous lining, usually healing slowly and infected with pyogenic microorganisms*
varicōsus, a, um *varicose (from* varix, icis m, f *— limited vein distention, distended coiled vein)*
vitium, i *n defect, deformity*

Exercises:

1. Make up terms with the following term-elements, explain their meaning:

1) dermat(o) -logia; (-logus);
2) ophthalm(o) -logia; (-logus; -metria; -scopia; scopium);
3) physi(o) -logia; (-logus; -therapia);
4) psych(o) -logia; (-logus; -iatria; -iater; -therapia);
5) stomat(o) -logia; (-logus; -scopia);
6) paed- -iatria; (-iater);
7) phthisi- iatria; (-iater).

2. Make up and write down Latin terms with the following meaning:

1) science which studies life (normal vital processes in the organism; man's psyche; embryo development; process of aging; external shape and inner structure of the human body); studies about forms and classification of diseases; 2) field of medicine dealing with treatment of eye diseases (diseases of a female genital system; skin diseases; diseases of the oral cavity; old age diseases; psyche diseases (mental diseases); children diseases); 3) treatment with the help of influence on psyche (with the help of physical natural and artificial factors); 4) examination of the oral cavity (nose; fundus of the eye; ear; interior of the hollow organs or tubular formations); 5) a doctor who treats and prevents tuberculosis (who treats ear, throat, nose; psychiatric diseases; eye diseases; skin diseases; oral cavity diseases).

3. Explain the meaning of the following terms:

nosologia; morphologia; dermatologia; dermatolŏgus; geriatria; gerodermia; gerontologia; ophthalmolŏgus; otolaryngolŏgus; otorhinolaryngologia; otoscopia; phonendoscopium; phthisiater; physiologia; physiologus; psychiater; rhinoscopia; rhinoscopium; stethoscopium; stomatoscopia.

4. Translate multiword terms into English:

vitium cordis acquisītum (congenĭtum); ulcus varicōsum; tumor nasi benignus; psychōsis acūta (chronĭca); glaucōma malignum; ulcus varicōsum; morbus cordis ischemĭcus.

5. Translate multiword terms into Latin:

defect of the mitral valve; acute (chronic) ulcerative disease; malignant (benign) tumor; ulcerative disease of the stomach (duodenum); medicamentous (malignant, physiological, caused by poisonous substances) jaundice; congenital pylorostenosis; physiological jaundice of newborns.

6. Learn the following professional expressions:

1. Diagnōsis certa. *Definite diagnosis*. 2. Diagnōsis dubia. *Doubtful diagnosis*. 3. Diagnōsis ex juvantĭbus. *Diagnosis on the basis of adjuvant means effect*. 4. Diagnōsis ex observatiōne. *Diagnosis on the basis of observation*. 5. Diagnōsis probabĭlis. *Probable, preliminary diagnosis*.

§9. Formation of terms denoting various psychosomatic pathologies, methods of electro- and roentgenographic control

Final term-elements

Term-element	*Meaning*
(path-)-pahtia	1) general name of the diseases associated with similar pathological changes 2) related to pathological condition 3) related to sensitivity
-gramma	record of the examination result or X-ray picture
-graphia	1) roentgenography, method of organs examination by X-rays 2) electrography, method of organs examination by electric current 3) graphic registration of various examination methods
-algia	pain
-odynia	
-phobia	obsessive fear
-mania	abnormal addiction to something
Suffix term-elements	
-ītis, itĭdis *f*	inflammation, inflammatory disease
-ōsis[1], is *f*	1) chronic or functional disease of non-inflammatory character; 2) increased amount of blood corpuscles; multiplicity of manifestation

First term-elements

Greek element	*Latin noun*	*Meaning*
angi-	vas, vasis *n*	vessel
arthr-	1) articulatio, ōnis *f*	joint
	2) articulāre	to articulate, to pronounce distinctly
cardi- (-cardia)	1) cor, cordis *n*	heart
	2) cardia, ae *f*	cardiac opening of the stomach, entry of the oesophagus into the stomach
cephal-; -cephalia	caput, ĭtis *n*	head
cholecyst-	vesīca fellea	gall-bladder
cyst-	1) vesīca urinaria 2) cysta, ae *f*	urinary bladder cyst
encephal-	cerĕbrum, i *n*	brain
hydr-	aqua, ae *f*	water
my-, myos-	muscŭlus, i *m*	muscle
myel- (myelia)	1) medulla spinālis 2) medulla ossium	spinal cord bone marrow

[1] See §7

Greek element	*Latin noun*	*Meaning*
neur-	nervus, i *m*	nerve
odont-	dens, dentis *m*	tooth
oste-	os, ossis *n*	bone
phleb-	vena, ae *f*	vein
pyr-	febris, is *f*	1. fever 2. fire
somat-	corpus, ŏris *n*	body
spondyl-	vertĕbra, ae *f*	vertebra, backbone
tox-, toxic-	venēnum, i *n*	poison

Active vocabulary of a future doctor

abscessus, us *m abscess — boil, pyogenic abscess*
angīna, ae *f quinsy — acute infectious disease of pharyngeal lymphadenoid ring*
ascītes, ae *m ascites — dropsy of the abdominal cavity*
asthenia, ae *f asthenia — general weakness, characterized by exhaustion of nervous and mental processes in the organism*
curatio, ōnis *f curing — care, taking care of the patient, treatment*
cysta, ae *f cyst — hollow tumor with liquid or semi-liquid contents*
habitus, us *m habitus — combination of external signs, body-build*
hydrops, ōpis *f hydrops — accumulation of fluid in some body cavity*
latens, ntis *latent — hidden*
pathogenĕsis, is *f pathogenesis — origin and development of a disease or morbid process*
pathologia, ae *f pathology — 1) deviation from norm; 2) field of medicine, studying regularities of morbid processes arising*
pathologĭcus, a, um *pathologic, morbid, caused by pathology*
purulentus, a, um *purulent, containing pus*

Exercises:

1. Make up terms with the following term-elements, explain their meaning:

1) angi-(o)- gramma; (-logia);
2) arthr-(o) -pathia; (-gramma; -logia; -algia);
3) cardi-(o) -pathia; (-gramma; logia; logus);
4) cholecyst-(o) -pathia;(-gramma; -itis);
5) cyst-(o) -pathia; (-gramma; -itis);
6) encephal-(o) -pathia;(-gramma; -itis);
7) my-(o), myos -algia;(-odynia; -logia; -oma; -pathia; -itis);
8) myel-(o) -pathia; (-itis; -gramma);
9) neur-(o) -algia; (-itis; -logia; -pathia);
10) odont(o) -algia; (-logia);

11) phleb-(o) -graphia;(-gramma; -itis);
12) spondyl-(o) -itis;(-osis; -pathia);
13) toxic- (o) –osis; (-logia; -phobia; mania);
14) hydr-(o) –arthrosis; (-cephalia; -phobia; -ophthalmus; -therapia).

2. Make up and write down in Latin terms with the following meaning:

1) general name of the diseases of the eyes (gall-bladder; bones; nervous system; nose; backbone; psyche; heart; brain; vessels; spinal cord; joints); 2) examination of the venous network (gall-bladder; urinary bladder; heart; vessels; spinal cord) with the help of X-rays or electric current; 3) inflammation of the gall-bladder (urinary bladder; skin; nose; oral cavity; joint; brain; peritoneum); 4) chronic or functional disease of non-inflammatory character of joints (skin; phyche; nervous system; vertebrae); 5) obsessive fear of women (poisoning with toxins; water; fire); 6) pathological addiction to poisonous substances and drugs (setting fire); 7) pain in joints; toothache; headache; muscle pain; pain in the chest; pain in the muscles of the chest.

3. Explain the meaning of the following terms:

angiocardiographia; cholecystitis; angiologia; cephalgia; encephalitis; encephalomyelitis; myocarditis; myositis; neurodermitis; neuropathologia; osteoarthritis; osteoarthropathia; osteoarthrōsis; osteomyelitis; osteologia; pathologia; peritonitis; phlebogramma; thoracodynia; thoracomyodynia; thrombophlebitis; neurasthenia; toxicōsis; psychōsis; psychopathia.

4. Translate multiword terms into English:

cysta pancreatis; cysta ossea benigna; hydrops cardiăcus; cysta ductus choledŏchi congenĭta; abscessus apicālis; hydrocephalia congenĭta (acquisīta); colitis ulcerosa; pharyngitis purulenta; cysta ductus choledŏchi congenĭta.

5. Translate multiword terms into Latin:

deviation from norm; senile osteoporosis; infectious hepatitis; purulent pleurisy; congenital encephalopathy; congenital ascites; latent psychosis; abscess of the liver; abscess of the lung; acute retropharyngeal abscess; dental root cyst; phlegmonous quinsy; gall-bladder dropsy; cyst of the pancreas.

6. Learn the following professional expressions:

1. Diagnōsis bona — curatio bona. *Correct diagnosis — correct treatment*.
2. Habĭtus aegrōti. *Patient's appearance*.

§10. Term-elements used in the formation of terms denoting surgical manipulations, ways of surgical help

Final term-elements

Term-element	*Meaning*
-cele	hernia, evagination, cyst
-centēsis	puncture

Term-element	*Meaning*
-ectomia	operation of complete organ or tissue removal, excision
-pexia	fixation, attachment of some inner organ
-plastĭca	plastic surgical operation, operative restoring of organ form or functions
-ptōsis	falling of any organ
-rrhagia	bleeding
-rrhēxis	tissues rupture
-rrhaphia	operation of suturing
-schĭsis	congenital splitting, dividing into two parts
-stŏma	fistŭla, ae *f*; artificial opening (fistula)
-stomia	operation of making a fistula or anastomosis
-tomia	1) dissection, operative opening, incision 2) partial removal of small anatomical formations
Suffix term-element	
-ōma, ătis n	tumor (usually benign) from the tissue, named by the term stem

First term-elements

Greek term-element	*Latin noun*	*Meaning*
aden-	glandŭla, ae *f*	gland, glandular epithelium
cheil- (-cheilia)	labium, i *n*	lip
col-, -colon	crassum, i *n*	large intestine, more often — colon
colp-	vagīna, ae *f*	vagina
enter-	intestīnum, i *n*	small intestine, bowels
gastr-	ventricŭlus, i *m*	stomach
hepat-	jecur, ŏris *n*	liver
kerat-	cornea, ae *f*	cornea, corneal layer of epiderm[1]
lapar-	abdomen, ĭnis *n*	abdomen
mast- (-mastia)	mamma, ae *f*	mammary gland
metr-, hyster-	utĕrus, i *m*	uterus
nephr-	ren, renis m	kidney
proct-	rectum, i *n*	rectum
pyel-	pelvis renālis	renal pelvis
salping-	tuba uterīna	uterine tube
splen- (-splenia)	lien, liēnis *m*	spleen
typhl-	caecum, i *n*	blind intestine (caecum)

[1] kerat- also indicates processes of skin keratinization: keratoma, atis n — keratoma, benign skin new growth with excessive keratinization

Active vocabulary of a future doctor

amputatio, ōnis *f amputation — operation of cutting off an extremity, its part or some organs*
cancer, cri *m malignant tumor, cancer*
carcinōma, ătis *n carcinoma — malignant tumor developing from scaly or glandular epithelium*
cirrhōsis, is *f cirrhosis — replacement of the liver or lung parenchyma for fibrous tissue*
descensus, us *m falling*
distorsio, ōnis *f — distention*
hernia, ae *f hernia — evagination of an organ or its part through openings in the anatomical formations*
herniotomia, ae *f herniotomy — hernia repair*
perforatio, ōnis *f perforation*
prolapsus, us *m prolapse — falling, displacement of an inner organ through a natural opening*
resectio, ōnis *f resection — removal of an organ part or an anatomical formation, usually with connection of its preserved parts*
ruptūra, ae *f rupture*
sarcōma, ătis n *sarcoma — malignant tumor consisting of immature connective tissue*
totālis, e *total — all, whole, general*

Exercises:

1. Make up terms with the following term-elements, explain their meaning:

1) aden(o) -tomia; (-itis; -oma; -pathia; -carcinoma);
2) cheil(o) -itis; (-osis; -schisis; -plastica);
3) col(o) -tomia; (-ptosis; -stomia; -itis; -pexia);
4) colp(o) -itis; (-ptosis; -scopia; -rrhaphia);
5) enter(o) -itis; (-pexia; -ptosis; -rrhagia; -rrhaphia; -plastica; -colitis; -pathia);
6) gastr(o) -algia; (-itis; -ectomia; -cele; -ptosis; - rrhagia; -rrhaphia; -scopia; -tomia);
7) mast(o) -itis, (-pathia; -ectomia);
8) hyster(o) -ectomia; (-rrhaphia; -pexia; -ptosis; -tomia);
9) kerat(o) -itis; (-ectomia; -tomia; -osis; -plastica);
10) lapar(o)-centesis; (-scopia; -tomia);
11) metr(o) -pathia; (-ptosis; -rrhagia; -tomia);
12) salping(o)-ectomia; (-tomia; -itis; -graphia);
13) nephr(o) -pathia; (-pexia; -ptosis; -rrhagia; -osis; -tomia);
14) pyel(o) -nephritis; (-cystitis; -graphia; -tomia);
15) proct(o) -algia; (-itis; -logus; -logia; -ptosis; -scopia; -rrhagia; -ectomia; -pexia);
16) splen(o) -itis; (-ptosis; -tomia);
17) typhl (o) (-itis; -tomia);
18) hepat (o) -itis; (-pathia; - pexia; -ptosis);
19) ot (o) -itis; (-rrhagia; -scopia).

2. Determine term-elements common to each word row. Explain the meaning of the terms:

1) galactocēle; gastrocēle; rectocēle; laryngocēle;

2) cardiocentesis; laparocentesis; thoracocentesis;

3) cheiloschisis; palatoschisis; onychoschisis; schizophrenia;

4) appendectomia; tonsillectomia, keratectomia; mastectomia; cystectomia;

5) enterocolitis; gastroduodenitis; gastroenteritis; gastroenterocolitis; lymphadenitis; glomerulonephritis;

6) myoma; odontoma; osteoma; neuroma;

7) gastroptosis; hysteroptosis; colpoptosis; nephroptosis.

3. Explain the meaning of the terms:

colpohysterotomia, colpohysteropexia; gastroenterologia; lymphadenoma; myotomia; nephroptosis; metro(hystero)salpingographia; hydrosalpinx; endometritis; parametritis; perimetritis; endocarditis; endophthalmitis; pericarditis; perinephritis; paranephritis; pyelonephritis; paracolitis; paraproctitis; periadenitis; periarteriitis; periarthritis; perichondritis; periduodenitis; peritonitis; periostitis; perisalpingitis.

4. Make up and write down in Latin terms with the following meaning:

1) operation of removal of the stomach (mammary gland; kidney; lung; rectum; spleen; uterus); 2) operative opening, partial removal of the adenoids (colon; vagina; stomach; eye cornea; uterus; rectum; abdominal wall); 3) fixation, attaching pathologically floating uterus (small intestine; colon; rectum); 4) bleeding from the eye (nose; lip; tooth socket after removal of a tooth; ear; uterus; rectum); 5) suturing of the intestine; uterus; suturing the ends of the ruptured nerve together; 6) benign tumor from bone tissue (from blood or lymph vessels; from muscular tissue); 7) benign tumor from glandular epithelium (from bone tissue; from blood or lymph vessels; from lymph vessels; from muscle fibres; from muscular and fibrous tissue); 8) congenital splitting of the upper jaw (upper lip; palate; nails).

5. Tell in what cases the TE -stomia means making a fistula and in what cases — making anastomosis: gastrostomia, gastroenterostomia, gastroduodenostomia, enterostomia, gastrooesophagostomia, nephropyelostomia, colostomia, laryngostomia, cholecystoenterostomia, cholecystocolostomia, proctostomia.

6. Translate multiword terms into Latin:

removal of the stomach portion; amputation of a mammary gland; hydrops of the gall-bladder; cyst of the pancreas; inguinal hernia; operation for inguinal hernia; congenital ascites; amputation of the uterus; cancer of the tongue (vagina; upper jaw); perforation of the ulcer of the duodenum (stomach); transverse fracture of the foot; fracture of the neck of the left shoulder; fracture of the base of the skull; resection of the right lung; rupture of the ligaments of the liver; (internal)

rupture of the heart, the spleen; sprain of the ligaments of a foot; resection of the large intestine; atrophic (portal) cirrhosis of the liver; purulent (infectious, acute, chronic) enterocolitis.

7. Translate multiword terms into English:

hernia abdominālis externa (interna); hernia lineae albae; herniotomia abdominālis; herniotomia umbilicālis; cystotomia vaginālis; abscessus tonsillāris; nephrosclerōsis chronĭca; colītis ulcerōsa; enterocolītis (pyelonephrītis) chronĭca; adenōma glandŭlae thyreoideae toxĭcum; descensus vagīnae (utĕri); prolapsus vagīnae (utĕri); abscessus haemorrhagĭcus; haemorrhagia cerebrālis (pulmonālis); nephrosclerōsis chronĭca; rhinītis allergĭca (chronĭca).

§11. Term-elements used in the formation of the names of laboratory-diagnostic definitions

Final term-elements

Term-element	*Meaning*
-lўsis	1) breakdown, dissolution, destruction; 2) freeing from adhesions by surgical way
-aemia	presence in the blood
-ectăsis (-ectasia)	pathological widening
-genĕsis	process of arising and development
lith-; -lithus	stone
-lithiăsis	stone disease, stone formation
-penia	deficient number of some blood corpuscles
-philia	tendency, susceptibility
-poësis	formation
-necrōsis	mortification
-rrhoea	outflow of secretion, mucus
-menorrhoea	monthly uterine bleeding (menstruation)
-stăsis	flow stop; congestion of physiological fluid

First term-elements

Greek term-element	*Latin noun*	*Meaning*
chole- (-cholia)	1) fel, fellis *n* 2) bilis, is *f*	bile in the gall-bladder bile outside the gall-bladder
chyl-	1) succus gastrĭcus 2) lympha, ae *f*	gastric juice lymph
cyt- (-cytus)	cellŭla, ae *f*	cell, blood corpuscle
erythr-	ruber, bra, brum	red, related to erythrocytes

Greek term-element	*Latin noun*	*Meaning*
glyk-, glucos-	dulcis, e	sweet, presence of sugar, glucose
haem-, haemat-	sanguis, inis *m*	blood
hidr-	sudor, ōris *m*	sweat
hygr-	humor, ōris *m*	moisture, humor, fluid
leuc-	albus, a, um	white, related to leucocytes
lith- (-lithus)	concrementum, i *n* calcŭlus, i *m*	stone
onc-	tumor, ōris *m*	tumor
pneum-, pneumat-	aër, aëris *m*	air or gas in the organ or cavity
pneum-, pneumon-	pulmo, ōnis *m*	lung
py-	pus, puris *n*	pus
sero-	serum, i *n*	blood serum
thyr-	glandŭla thyr(e)oidea	thyroid gland
trich- (-trichia)	pilus, i *m* capillus, i *m*	hair
thorac-, -thōrax	thorax; also denotes pleural cavity in compound words	
thromb-	thrombus, i *m* blood clot	
ur- (-uria)	urīna, ae *f*	urine condition, diseases of urinary organs

Active vocabulary of a future doctor:

asthma, ătis *n asthma — suffocation attacks of different origin*
dilatatio, ōnis *f dilation — widening*
ductus bilifĕri, ductuum biliferōrum — *bile ducts*
exstirpatio, ōnis *f extirpation — complete removal of an organ*
exsudatīvus, a, um *exudative, related to exudation process*
exsudātum, i *n exudate — inflammatory fluid which comes out from small vessels walls in inflammation*
glaucōma, ătis *n glaucoma — eye disease characterized by elevated intraocular pressure*
leucōsis, is *f leucosis — general name of tumors arising from hematogenic cells*
panaritium, i *n panaritium — acute purulent inflammation of the finger periungual tissues*
polўpus, i *m polyp — pathologic formation protruding above the organ surface and connected to it with a pedicle*
struma, ae f *goiter — enlarged thyroid gland as a result of iodine deficiency*
transfusio, ōnis *f transfusion*

Exercises:

1. Make up terms with the following term-elements, explain their meaning:

1) chol(e)- (-aemia, -stăsis, -lithiăsis, -cystītis, -cystogramma; -angītis);
2) chyl(o) -stăsis; (-thōrax; -uria);
3) cyt(o) -logia; (-gramma; -diagnōsis);
4) erythr(o) -cўtus; (-dermia; -poēsis; -cytōsis);
5) haem(o)-rrhagia; (-lўsis; -philia; -thōrax);
6) haemat(o) -oma; (-lŏgus; -uria);
7) kerat(o) -ītis; (-plastĭca; -ōsis; -tomia; -ectomia);
8) hidr(o) -adenītis; (-adenoma, -cystoma; -osis);
9) laparo -tomia; (-scopia; -centesis);
10) leuc(o) -cўtus; (-cytōsis; -ōsis; -derma; -lўsis; poēsis);
11) myel(o) -itis; (-cўtus; -graphia; -pathia; -tomia);
12) thromb(o) -cўtus; (-phlebītis; -philia; cytōsis; -ōsis);
13) py(o) -dermia; (-metra; -salpinx; -thōrax; -uria);
14) sero- diagnōsis; (-hepatītis; -logia; -therapia);
15) ur(o) -logia; (-aemia; -graphia; -lithiasis; -lithus; -logus; -poēsis; -sepsis);
16) pneum(o) -tomia; (-lўsis; -thōrax; -peritoneum);
17) lip- oma; (-aemia);
18) thorac(o) -algia; (-centēsis; -scopia; -odynia; -tomia; -plastĭca).

2. Determine term-elements common to each word row. Explain the meaning of the terms:

1) rhinorrhoea; trichorrhoea; otorrhoea; diarrhoea;
2) cardiolўsis; pneumolўsis; meningolўsis; osteolўsis; hydrolўsis;
3) uropoësis; erythropoësis; leucopoësis; haemopoësis;
4) haemorrhagia; haemolўsis; haemophilia; haemothōrax; haematolŏgus;
5) glucosuria; glykaemia;
6) hydrothōrax; hydropneumothōrax; pneumothōrax; haemothōrax;
7) thoracocentēsis; cardiocentēsis; laparocentēsis;
8) uropoësis; erythropoësis; leucopoësis; haemopoësis.

3. Explain the meaning of the terms:

strumectomia; typhlectasia; leucocyturia; oncologia; thyreotoxicōsis; albuminuria; hidradenītis; hidradenōma; hygrōma; hygroscopĭcus; thyreoidectomia; thyreoidītis; thyreotoxicōsis; strumectomia; strumītis.

4. Make up and write down in Latin terms with the following meaning:

1) freeing of the heart (lung; brain membranes) from adhesions with surrounding tissues by surgical way; method of renal failure treatment by means of the apparatus “artificial kidney”; 2) presence of urea and other nitrous substances (poisonous substances, bile) in the blood; 3) presence of glucose (pus; lymph; blood; protein; leucocytes above norm) in the urine; 4) decrease in the

number of leucocytes (lymphocytes; monocytes; thrombocytes; blood corpuscles; erythrocytes) in the blood; 5) increase in the number of erythrocytes in the blood; increase in the number of thrombocytes in the blood; increase in the number of leucocytes in the blood; 6) process of tumor arising and development (of disease or morbid process arising and development; of cartilagineous tissue arising and development); 7) formation of erythrocytes (monocytes; leucocytes) by the red bone marrow; blood formation; urine formation; 8) rupture of pregnant uterus (heart; eyeball); 9) tendency to bleeding (to clots formation); 10) puncture of the chest (heart; abdominal wall) for diagnostics or treatment; 11) venous stone; urinary stone; nose stone; intestinal stone; 12) mortification of a portion of a bone.

5. Translate multiword terms into English:

adenōma glandŭlae thyreoideae toxĭcum; enteropathia exsudatīva; asthenia totālis (infectiōsa, physicālis); amnesia retrogrăda; hypoxia acūta (chronĭca); diarrhoea epidemĭca; psychōsis uraemĭca (endogĕna); leucōsis monocytĭca (acūta, chronĭca); haemophilia renālis; meningītis serōsa (otogĕna, haemorrhagĭca); haematuria vesicālis.

6. Translate multiword terms into Latin:

infectious (pathologic, toxic) leukocytosis; abscess (cancer) of the lung; transfusion of blood; malignant (benign) tumor; focal (chronic) pneumonia; polyp of the nose (larynx, rectum); dry (exudative, purulent) pleurisy.

7. Learn the following professional expressions:

1. Ubi pus, ibi evacua. Evacuate, if there is pus. 2. Ubi pus, ibi incisio. If there is pus, there is an incision. 3. Situs viscĕrum inversus. *Abnormal position of viscera*. 4. Facies Hippocratĭca. *Hippocrates' face (face of a dying man)*. 5. Rubor, tumor, calor, dolor et functio laesa. *Redness, tumor, fever, pain and impaired function (classic signs of inflammation).*

§12. Final term-elements used in the formation of names of biochemical, physiological processes in the human body

Final term-elements

Term-element	*Meaning*
-aesthesia	sence, sensitivity
-ergia; -urgia	work, activity, reactivity
-kinesia	movement
-mnesia (mnem-)	memory
-pepsia	digestion
-phagia (phag-)	1) swallowing; 2) eating up

Term-element	*Meaning*
-plasia	formation of an organ or tissue
-plegia	paralysis of muscles group
-tensio	pressure in the vessels or hollow organs
-thermia	temperature changing, heating
-tonia	tension, tonus (of muscles, vessels)
-trophia	tissues and organs nutrition
optic-; -opia, -opsia	1) related to eyesight; 2) diagnostic investigation

§13. Latin and Greek prefixes in clinical term formation

There are many terms in medical terminology, biology which are formed by prefixal means. Latin prefixes prevail in anatomical nomenclature and prefixes of Greek origin prevail in terminology of pathologic anatomy, physiology, clinical disciplines. As a rule, Latin prefixes are added to Latin roots and Greek ones are added to Greek roots.

In anatomical terminology Latin and Greek doublet prefixes indicate organs location in anatomical space: inside, higher, lower, in front of, behind.

Clinical terminology uses more abstract concepts and employs more often secondary, figurative meanings of prefixes which developed on the basis of their direct meanings.

Prefix		*Meaning*	*Examples of use*
a-, an- (before a vowel)	Latin	absence	adentia — *absence of some or all teeth*
		deprivation	anaesthesia — *method of blocking pains in surgical operations*
		inability	aphagia — *inability to swallow*
in- (**im-, ir-**)	Greek	absence	impotens — *impotent, strenghtless*
		deprivation	immobilisatio — *immobilization, making immobile with the help of a plaster cast or a splint*
		inability	insanabĭlis — *incurable*
dys-	Greek	disorder, impairment	dysplasia — *disorder of organs or tissues development during embryogenesis*
		difficulty	dysphagia — *difficulty in swallowing*
		disturbance	dysphonia — *disturbance of voice formation*
ec-	Greek	out (of)	ectopia = ec- + topos *place (literally 'out of place') congenital organ displacement*
in-	Latin	in, into	invasio — *invasion of the disease causative agents, parasites into an organism*
im- before b, m			implantatio — *implantation*
ir- before r			irradiatio — *radial spreading of pain to nearby body parts*

Prefix		*Meaning*	*Examples of use*
endo-	Greek	layer, membrane lining the inner surface of a hollow organ	endometrium — *mucous tunic of the uterus*
hyper-	Greek	increase, elevation	hyperaesthesia — *increased sensitivity*
hypo-	Greek	decrease	hypotensio — *decreased arterial pressure*
		reduction	hypoplasia — *underdevelopment of an organ or body part*
		weakening of the main concept	hypomnesia — *weakening of memory*
meta-	Greek	change, transition from one place or state into another	metaplasia — *transformation of one tissue kind into another one;* metastăsis — *spreading of pathological material from one organism place to another*
para-	Greek	cellular tissue near or around some organ; deviation from norm, false; from both sides	parametrium — *parauterine cellular tissue;* paramnesia — *pseudorecollections, «recollection» of events which never occurred;* paraplegia — *paralysis of the same extremities*
peri-	Greek	capsule, tissue, peritoneum covering an organ; external coat	perimetrium — *serous uterus covering;* periosteum — *external coat that covers bones*
pro-	Greek	forward, in advance	prognōsis = pro *forward* + agnos *recognition, cognition — foreseeing; scientifically well-grounded supposition about further disease course*
re-	Latin	reccurence, restoration	recidivum *recidivation — relapse, reccurence of a disease in its typical or not fully manifestated form;* replantatio *replantation — operation of reattachment of the amputated in trauma part of an organ or extremity*
		reverse action	refluxus *reflux — reverse flow*

Prefix		*Meaning*	*Examples of use*
sub-	Latin	less, in a lesser degree	subacūtus — *subacute (about a disease which has no acute and no chronic course);* subfebrilis — *subfebrile, with slightly elevated temperature (subfebrile temperature — 37,1–38 °C);* subictĕrus — *subicterus — the slightest degree of jaundice*
super-	Latin	more, excess	superacūtus — *extremely acute (about a disease)* superinfectio — *new, repeated contamination while the primary infection slill persists*
syn-, sym-	Greek	connection	syndactylia — *fusion of fingers or toes*
		joint action	synergismus — *joint activity of organs in the same direction*
Greek numerals as prefixes			
hemi-		half-, one-sided	hemiplegia — *hemiplegia, paralysis of muscles of one body side*
mono-		one-, one, single	monoplegia — *monoplegia, paralysis of one extremity*
di-		two-, double	diplegia — *diplegia, bilateral paralysis of the same body parts (both legs, both halves of the face)*

Active vocabulary of a future doctor

consilium, i n *consultation — council of some physicians to reveal patient's disease character*

endogĕnus, a, um *endogenic — arising inside the organism*

exogĕnus, a, um *exogenic — arising under the influence of external effects*

implantatio, ōnis *f implantation of materials foreign to the organism (plastic, metals and others) and implants of living nature (cartilages, bones, valves and others)*

invasio, ōnis f *invasion — 1. penetration of pathogenic agents into the organism; 2. contamination with animal parasites*

irradiatio, ōnis f — *radial spread of pain to nearby body parts*

metabolismus, i *m metabolism — exchange of substances: combination of chemical transformations taking place in a living organism;*

paralysis, is *f paralysis — total absence of voluntary movements*

recidivum, i *n recidivation — relapse of a disease in its typical or not fully manifestated form*

refluxus, us *m reflux — reverse flow*

rehabilitatio, ōnis *f rehabilitation — restoration for working activities*

remissio, onis *f remission — temporal relief of a disease*
replantatio, ōnis *f replantation — operation performed for reattachment of the amputated in trauma organ or tissue area back to its place*
transplantatio, *ōnis f transplantation — grafting of organs or tissues*

Exercises:

1. Make up terms with the following term elements, explain their meaning:

1) a- (an-) -aesthesia; (-aesthesiologus; -pathia; -phagia; -plasia; -tonia; -trophia; -arthria; -phonia; -vitaminosis; -trichosis; -menorrhoea);

2) dys- -arthria; (-kinesia; -phagia; -plasia; -tonia; -trophia;-arthrosis; -enteria; -ostosis; -phonia; -hidrosis; -menorrhoea);

3) hyper- -aesthesia; (-kinesia; -plasia; -thermia; -tonia; -trophia; -keratosis; -thyreosis; hidrosis; -ergia);

4) hypo- -plasia; (-aesthesia; -kinesia; -thermia; -tonia; -thyreosis; -hidrosis; -ergia; -vitaminosis);

5) sym- (syn-) biosis; (-pathia; -chondrosis; -ostosis; -desmosis; -ergismus);

6) para- -metritis; (-nephritis; -proctitis; -mnesia; -plegia; -spasmus);

7) peri- -arthritis; (-carditis; -chondritis; -metritis; -nephritis; -ostitis);

8) endo- -scopia; (-metritis; -cervicitis; -carditis; -ophthalmitis);

9) hydr(o)- -arthrosis; (-lysis; -phobia; -ophthalmus; -salpinx; -therapia; -thorax).

2. Determine term elements common to each word row. Explain the meaning of the terms:

1) glucosuria; glykaemia; hyperglykaemia; hypoglykaemia;

2) hyperaesthesia; anaesthesia; anaesthesiologia; anaesthesiologus; hypaesthesia;

3) hemialgia; hemianopsia; hemiatrophia; hemicrania; hemiplegia;

4) monoplegia; monophobia; mononeuritis; monodactylia; monocytus;

5) glossoplegia; ophthalmoplegia; diplegia; cystoplegia; hemiplegia.

3. Make up and write down in Latin terms with the following meaning:

1) inflammation of cellular tissue near colon ...*colitis*; 2) inflammation of serous membrane covering the uterus ...*metritis*; 3) inflammation of mucous tunic of the uterus ...*metritis*; 4) eversion of the eyelids out ...*tropion*; 5) changed reactivity of the organism *all...*; 6) disturbance of quantity and composition of normal microflora of the organism ...*bacteriosis*; 7) abnormality of organs or tissues development during embryogenesis ...*plasia*; 8) organism overheating *...thermia*; 9) organism supercooling *...thermia*; 10) increased function of the thyroid gland *...thyreosis*; 11) decreased function of the thyroid gland *...thyreosis*; 12) decreased arterial pressure *...tensio*; 13) transformation of one kind of tissue into another ...*plasia*; 14) untimely organism aging *...geria*; 15) heating of deep lying body tissues by high-frequency and great strength currents ...*thermia*; 16) field of medicine dealing with operative and manual treatment of

diseases *chir …*; 17) disturbance of voice formation ...*phonia*; 18) disturbance of digestion *…pepsia*; 19) disorder of muscles and vessels tonus *…tonia*; 20) lower jaw and chin sharply protruding forward *…genia*; 21) living of various organisms together ...*biosis*; 22) fusion of fingers or toes *…dactylia*; 23) enhanced formation of some tissues cellular elements *…plasia*; 24) partial or complete memory loss ...*mnesia*; 25) excessive thickening of epidermis corneal layer ...*keratosis.*

4. Explain the meaning of the terms:

desmurgia; ectopia; hyperglykaemia; hypermetropia; hypoglykaemia; metamorphosis; metaplasia; paracystitis; parodontosis; periarthritis; pericarditis; periodontitis; periostitis; peritonitis; subfebrilis; subicterus; dysmenorrhoea; amenorrhoea; progeria.

5. Translate multiword terms into English:

transplantatio medullae ossium (renis, vasōrum, cutis); implantatio ovocўti; replantatio manus dextrae; resectio recti; paralўsis progressiva; keratoplastĭca totālis (subtotālis); replantatio digĭti; anuria calculōsa; dyspepsia toxĭca (nervōsa, hepatĭca, physiologĭca); hemiplegia cerebrālis; ophthalmoplegia interna (externa, congenĭta, totālis); dystrophia hepătis flava (rubra); asthenia totālis (infectiōsa, physicālis).

6. Translate multiword terms into Latin:

hyperplasia of renal artery; fibrous dysplasia of bones; replantation of the left foot; acute purulent parametritis; acute posthaemorrhagic anaemia; resection of the large intestine; hypoplasia of the bone marrow.

7. Learn the following professional expressions:

1. In vivo. *On a living organism*. 2. In vitro. *In laboratory conditions*. 3. Per os. *Through mouth, perorally*. 4. Per rectum. *Through rectum*. 5. Per se. *As it is*. 6. Per vagīnam. *Through vagina*. 7. Per vias naturāles. *Through natural ways*.

§14. Term-elements used in the formation of terms denoting properties, qualities, relations, various signs

Final term-elements

Term-element	*Meaning*
-gĕnus, a, um	related to birth, origin, development; causing, being caused
-phrenia	spirit, mind, intellect (‘phren’ — diaphragm , «location of the soul»)
-prīvus, a, um	conditioned by absence of an organ named by the stem
-trōpus	selectively directed to something, influencing onsomething

First term-elements

Term-element	*Meaning*
acr-	extreme, distant, related to distal body parts
aetio-	cause
auto-	self-
bradi-	slow
chlor(o)-	green; yellow-green
chrom(o)-; chromat(o)-; -chromia	color; coloration
cyan(o)-	blue
heter(o)-	differently formed, of another type, another
hom(o)-	identical, the same, similar
iso-	identical, equal, similar
macr(o)-	large (in size), big
mega-, megal-, -megalia	large, enlarged
melan(o)-	black
micr(o)-	small (in size), fine
noos-	thought, thinking
olig(o)-	scanty, small (in quantity)
orth(o)-	straight, correct, corresponding to normal position
pan-	all, whole
poli(o)-	gray, related to gray substance of the brain
poly-	numerous, multiple
tachy-	rapid, frequent
xanth(o)-	yellow
xen(o)-	another's
xer-	dry

Active vocabulary of a future doctor

aetiologia, ae f *etiology — study of diseases causes, nature of these causes*
allotransplantatio, ōnis *f allotransplantation — transplantation of organs or tissues from a human being to a human being*
autotransplantatio, ōnis *f autotransplantation — transplantation of own tissues or organs*
focālis, e *focal — related to focus (point) of lesion*
iatrogenia, *ae f iatrogenia, iatrogenic disease — phychogenic disease or neurosis arising as a result of imprudent remark of a doctor about the diagnosis*
isotonĭcus, a, um *of the same osmotic pressure (osmosis — equating two solutions concentrations)*
isotransplantatio, ōnis *f isotransplantation — transplantation of organs or tissues from the genetically identical organisms*
locālis, e *local, topical*

medicamentum, i *n medicament, drug, pharmaceutical substance*
paroxismus, i *m paroxysm — bad attack, bad fit*
paroxysmālis, e *paroxysmal — arising as attacks*
progrediens, entis *progressing*
progressīvus, a, um *progressive*
remedium, i *n remedy, substance having therapeutic action*
vulgāris, e *ordinary, usual*
xenotransplantatio, ōnis *f xenotransplantation — transplantation of organs or tissues from an animal to a human being (xenos — another's) or from an animal to an animal*

Exercises:

1. Make up terms with the following term-elements, explain their meaning:

1) brady- (arthria; -cardia; -kinesia; -phagia);
2) tachy- (-cardia; -phagia);
3) hetero- (-genus; -morphus; -chromia);
4) macr- (-cheilia; -glossia; -genia; -mastia);
5) micr- (-genia; -gastria; -scopia; -gnathia;-chirurgia);
6) acr- (o) -aesthesia; (-phobia; -dermatitis; -odynia; -neurosis);
7) olig- (-uria; -cytaemia; -dactylia; -dentia; -kinesia; -phrenia; - menorrhoea);
8) orth- (-paedia; -odontia,; -optĭca);
9) poly- (-neuritis; -avitaminosis; -uria);
10) xero- (-dermia; -ophthalmia; -stomia);
11) melano- (-dermia; -oma; -uria);
12) xantho- (-opsia; -dermia; -chromia);
13) xeno- (-transplantatio; -phobia).
14) pan- (vasculitis; -hysterectomia; -carditis; -algia).

2. Make up and write down in Latin terms with the following meaning:

1) selectively directed to the nervous system (psychic processes; intellectual abilities; disease cause; affecting the skin); 2) heterogenous; homogenous; disease causing; arising inside the organism; arising under the influence of external effects; of aural origin; of dental origin; causing suppuration; causing cancer; occurring in the blood; 3) inflammation of gray substance of the spinal cord; 4) insufficient (scanty) number of corpuscles in the blood.

***3. Explain the meaning of the terms*:**

heterometropia; neurotropus; nootropus; isometropia; thyreogenus; thyreotropus; thyreoprivus; isotonia; megalomania; megacolon; splenomegalia; megalosplenia; hepatosplenomegalia;, megalomania; tachycardia; poliomyelitis; achromatopsia; achromatosis; isometropia; isotonia; gastrogenus; psychogenus; pathogenus; haematogenus; nephrogenus; autotransplantatio; homogenus; schizophrenia.

4. Translate multiword terms into English:

tachycardia paroxysmālis; medicamentum psychotropum (aetiotropus, a, um; dermotropus, a, um; somatotropus, a, um); solutio isotonica; autotransplantatio cutis; encephalītis subacūta (allergĭca); autotransplantatio vasis; allergia gastrointestinālis; splenomegalia haemolytĭca; dysplasia cerĕbri polycystōsa; hyperaemia arteriālis (venōsa, medicamentōsa); allotransplantatio renis; tachycardia ventricŭli dextri; oligophrenia microcephalĭca; oliguria renālis; oligophrenia angiodystrophĭca (xerodermĭca).

5. Translate multiword terms into Latin:

medicines influencing on the nervous system (thyroid gland, disease cause); psychogenic aphonia; paroxysmal tachycardia; progressing hemiatrophy of the face; progressive psychosis; latent psychosis; autotransplantation of the skin; allotransplantation of the liver; xenotransplantation of the spleen; allotransplantation of the lung; haemolytic oligophrenia.

6. Learn the following professional expressions:

1. Status commūnis. *General condition*. 2. Status locālis. *Local condition*. 3. Status naturālis. *Natural condition.* 4. Status praesens aegrōti. *Present condition of a patient*. 5. Contra vim mortis non est medicamen in hortis. *There is no remedy against power of death in gardens*.

ЛИТЕРАТУРА

1. *Авксентьева, А. Г.* Латинский язык и основы медицинской терминологии / А. Г. Авксентьева. — Минск: Экоперспектива, 1999.

2. *Арнаудов, Г. Д.* Медицинская терминология на шести языках / Г. Д. Арнаудов. — София: Медицина и физкультура, 1964.

3. *Бабичев, Н. Т.* Словарь латинских крылатых слов / Н. Т. Бабичев, Я. М. Боровский. — М.: Русский язык, 1982.

4. *Васильева, Л. И.* Пособие по латинскому языку. Клиническая терминология / Л. И. Васильева. — Минск: Галаксис, 1997.

5. *Гончарова, Н. А.* Из античной мудрости / Н. А. Гончарова, И. М. Щербакова. — Минск: Выш. шк., 1995.

6. *Гончарова, Н. А.* Латинский язык: практическое пособие по лексике и грамматике / Н. А. Гончарова. — Минск: Выш. шк., 1989.

7. Даведнік напісання дыягназаў асноўных захворванняў унутраных органаў на беларускай, расійскай і лацінскай мовах / Н. І. Арцішэўская [і інш.]. — Мінск: МДМІ, 1994.

8. *Казаченок, Т. Г.* Античные афоризмы / Т. Г. Казаченок, И. Н. Громыко. — Минск: Выш. шк., 1987.

9. Латинский язык и основы медицинской терминологии / Ю. Ф. Шульц [и др.]. — 3-е изд., стер. — М.: АНКО, 1995.

10. Латинско-русский словарь / авт. сост. К. А. Тананушко. — М.: АСТ; Минск: Харвест, 2002.

11. Латинско-русский словарь. — 3-е изд., испр. — М.: Рус. яз., 1986.

12. *Подосинов, А. В.* LINGUA LATINA. Введение в латинский язык и античную культуру: в 5 ч. / А. В. Подосинов, Н. И. Щавелева. — 11-е изд. — М.: Наука, 2009. — Ч. 1.

13. *Подосинов, А. В.* LINGUA LATINA. Введение в латинский язык и античную культуру: в 5 ч. / А. В. Подосинов, Н. И. Щавелева. — 6-е изд. — М.: Наука, 2010.

14. *Подосинов, А. В.* LINGUA LATINA. Введение в латинский язык и античную культуру: в 5 ч. / А. В. Подосинов, Н. И. Щавелева. — 2-е изд., испр. — М.: Наука, 2009. — Ч. 3.

15. *Подосинов, А. В.* LINGUA LATINA. Введение в латинский язык и античную культуру: в 5 ч. Грамматика латинского языка. — 6-е изд. — М.: Наука, 2010. — Ч. 5.

16. Пособие по латинскому языку / Под ред. Т. Г. Казаченок. — Минск: Выш. шк., 1989.

17. *Розенталь, Д. Э.* Словарь-справочник лингвистических терминов / Д. Э. Розенталь, М. А. Теленкова. — 2-е изд., испр. и доп. — М.: Просвещение, 1976.

18. *Станкевіч, А. А.* Лацінская мова: падруч. / А. А. Станкевіч, С. А. Лін. — Мінск: Універсітэцкае, 1999.

19. *Ходорковская, Б. Б.* Учебник латинского языка / Б. Б. Ходорковская, М. Н. Чернявский. — М.: Медицина, 1964.

20. *Цисык, А. З.* Латинский язык: учеб. / А. З. Цысык — Минск: ТетраСистемс, 2006.

21. *Цисык, А. З.* Латинский язык с основами медицинской терминологии / А. З. Цисык, Е. С. Швайко. — Минск: Новое знание, 2003.

22. *Чернявский, М. Н.* Латинский язык и основы медицинской терминологии / М. Н. Чернявский. — М.: Медицина. 1997.

23. *Акжигитов, Г. Н.* Англо-русский медицинский словарь. Ок. 70 000 терминов / Г. Н. Акжигитов, М. С. Бенюмович, А. К. Чикорин. — М.: Рус. яз., 1989.

24. Англо-русский медицинский словарь. Составители: М. П. Мультановский, А. Я. Иванова. — 2-е изд., доп. и исп. — М.: Медицина, 1969.

25. Большой русско-английский медицинский словарь. Ок. 70 000 терминов. — М.: РУССО, 2005.

CONTENTS

§1. Basic languages of clinical terminology 3
§2. Structure of clinical terms 4
§3. Concept «term-element». Independent words as Tes 5
§4. Doublets – characteristic feature of medical terminology 7
§5. Stress in clinical terms 7
§6. Term-elements with multiple meaning, variation and many components 8
§7. Terminological meaning of the suffixes -ītis, -ōma, -ōsis, -iăsis, -ismus in clinical terminology. Grammatical characteristics of the terms with these suffixes 9
§8. Term-elements used in the formation of names of medical specialities and related disciplines, specialists, methods of primary diagnostic control, appliences and instruments 11
§9. Formation of terms denoting various psychosomatic pathologies, methods of electro- and roentgenographic control 14
§10. Term-elements used in the formation of terms denoting surgical manipulations, ways of surgical help 16
§11. Term-elements used in the formation of the names of laboratory-diagnostic definitions 20
§12. Final term-elements used in the formation of names of biochemical, physiological processes in the human body 23
§13. Latin and Greek prefixes in clinical term formation 24
§14. Term-elements used in the formation of terms denoting properties, qualities, relations, various signs 28

Учебное издание

Лин Светлана Антоновна
Максименко Алла Федоровна

ЛАТИНСКИЙ ЯЗЫК
(КЛИНИЧЕСКАЯ ТЕРМИНОЛОГИЯ)
(на английском языке)

Учебно-методическое пособие
для студентов 1 курса факультета по подготовке
специалистов для зарубежных стран медицинских вузов

2-е издание, стереотипное

Редактор *Т. М. Кожемякина*
Компьютерная верстка *Ж. И. Цырыкова*

Подписано в печать 18.09.2014.
Формат 60×84$^{1}/_{16}$. Бумага офсетная 65 г/м^{2}. Гарнитура «Таймс».
Усл. печ. л. 2,09. Уч.-изд. л. 2,29. Тираж 50 экз. Заказ № 323.

Издатель и полиграфическое исполнение:
учреждение образования «Гомельский государственный медицинский университет».
Свидетельство о государственной регистрации издателя,
изготовителя, распространителя печатных изданий № 1/46 от 03.10.2013.
Ул. Ланге, 5, 246000, Гомель.