Contents

UNIT I. INTRODUCTION INTO MEDICAL TERMINOLOGY

In this unit

- General idea of Latin phonetics. Latin alphabet
- Pronunciation of vowels, consonants and diphthongs
- Letter combinations and Greek digraphs
- Long and short syllables and word stress

There are 25 letters used in modern medical terminology in the Latin alphabet.

The Latin Alphabet

Latin letters	Name	Pronunciation	Latin letters	Name	Pronunciation
A a	*a*	**a**	**N n**	*en*	**n**
B в	*be*	**b**	**O o**	*o*	**o**
C c	*tse*	**ts, k**	**P p**	*pe*	**p**
D d	*de*	**d**	**Q q**	*ku*	**k**
E e	*e*	**e**	**R r**	*er*	**r**
F f	*ef*	**f**	**S s**	*es*	**s, z**
G g	*ge*	**g**	**T t**	*te*	**t**
H h	*ha*	**h**	**U u**	*u*	**u**
I i	*i*	**i**	**V v**	*ve*	**v**
J j	*jot*	**j**	**X x**	*iks*	**ks, kz**
Kk	*ка*	**k**	**Y y**	*ipsilon*	**i**
L l	*el*	**l’**	**Z z**	*zet*	**z**
M m	*em*	**m**			

In the Latin alphabet there are 6 vowels **a, e, i, o, u, y** and 19 consonants: **b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, x, z.** The vowels can be used as monophthongs or form diphthongs.

Vowels

A is pronounced as **[a]**, e.g.: **cáput** [kaput] – *head,* **artéria** [arteria] – *artery*, **abdómen** [abdomen] – *abdomen, belly*.

E is pronounced as **[e]**, e.g.: **nérvus** [nervus] – *nerve,* **téndo** [tendo] – *tendon.*

I is pronounced as **[i]**, e.g.: **línea** [linea] – *line,* **tíbia** [tibia] – *tibia*.

O is pronounced as **[o]**, e.g.: **fóvea** [fovea] – *fovea,* **órganon** [organon] – *organ.*

U is pronounced as **[u]**, e.g.: **cútis** [kutis] **–** *skin,* **sutúra** [sutura] – *suture*.

Y is only met in the words of Greek origin and pronounced as **[i]**, e.g.: **týmpanum** [timpanum] – *tympanum,* **lárynx** [larinks] – *larynx.*

Diphthongs

The diphthong is a combination of two vowels, which are pronounced as one sound or one syllable:

AE and **OE** are pronounced as one sound **[e],** e.g.: **aegrótus [**egrotus**] –** *sick,* **diáeta [**dieta**] –** *diet,* **oedéma [**edema**] –** *edema,* **oesóphagus [**ezofagus**] –** *esophagus*.

AU is pronounced as **[au],** e.g.: **áuris [**auris**] –** *ear,* **aurícula [**aurikula**] –** *auricle.*

EU is pronounced as **[eu],** e.g.: **pléura [**pleura**] –** *pleura,* **pneumonía [**pneumonia**] –** *pneumonia.*

NB: if there is a diaeresis (the mark ¨ placed over the second of two adjacent vowels) it indicates that it is to be pronounced separately rather than to form a diphthong with the first, e.g.: **áloë** [aloe] – *aloe,* **áër** [aer] – *air.*

Consonants

C is pronounced as **[ts]** before the vowels **e, i, y** and before the diphthongs **ae, oe**, e.g.: **cérebrum** [tserebrum] – *cerebrum,* **cílium** [tsilium] – *eyelash,* **coerúleus** [tseruleus] – *dark blue*; it is pronounced as [**k**] in all other cases, e.g.: **cávitas** [kavitas] – *cavity,* **cósta** [kosta] – *rib,* **cútis** [kutis] **–** *skin,* **Cúprum** [kuprum] **–** *copper,* **lac** [lak] – *milk.*

H is pronounced as **[h]**, e.g.: **hépar** [hepar] – *liver,* **hámulus** [hamulus] – *hamulus.*

J is used at the beginning of the word or between the vowels and pronounced as [j]: **májor** – *greater,* **juguláris** – *jugular,* **júgum** – *jugum,* **junctúra –** *junction.*

K is pronounced as **[k]**; it is used in borrowings only, e.g.: **Kálium** [kalium] (Arabic) – *potassium,* **skéleton** [skeleton] **(**Greek**)** – *skeleton*.

L is always pronounced softly, e.g.: **lábium** [labium] **–** *lip*, **clavícula** [klavicula] **–** *clavicle.*

S is pronounced as **[s]**, e.g.: **sutúra** [sutura] – *suture*, **sínus** [sinus] – *sinus,* and as [**z**] between two vowels and between a vowel and **m** or **n**, e.g.: **platýsma** [platizma] – *platysma,* **básis** [bazis] – *base*; **SS** is always pronounced as **[s]**, e.g.: **fossa** [fosa] – *fossa*.

V is pronounced as **[v]**, e.g.: **nérvus** [nervus] – *nerve*, **véna** [vena] – *vein.*

X is pronounced as **[ks]** at the beginning and the end of the word, e.g.: **rádix** [radiks] – *root,* **fórnix** [forniks**] –** *fornix.* It is promounced as **[kz]** between two vowels, e.g.: **éxitus** [ekzitus] – *exit, outlet*, **plexus** (plékzus) **–** *plexus*.

Z is found in the words of Greek origin and pronounced as **[z]**, e.g.: **zóna** [zona] **–** *zone*, **zygóma** [zigóma] **–** *cheek-bone;* but it is pronounced as **[ts]** in the words **Zíncum** *– zink*, **influénza** *– grippe*, **Z.**

Letter Combinations

QU is pronounced as [**kv]**, e.g.: **áqua** [akva] **–** *water*, **Quércus** [kverkus] – *oak;* **Q** is used in this letter combination only.

NGU is pronounced as [**ngv]** before the vowel, e.g.: **lingu<u>a</u>** [lingva] **–** *tongue*, **sángu<u>i</u>s** [sangvis] – *blood* and as [**ngu**] before the consonants, e.g.: **ángu<u>l</u>us** [angulus] **–** *angle*, **língu<u>l</u>a** [lingula] – *lingual.*

SU is pronounced as [**sv]** before the vowels in the same syllable, e.g.: **suális** [svalis] – *pleasant,* **consuetúdo** [konsvetudo] – *habit.*

TI is pronounced as [**tsi]** at the end of a word if followed by a vowel, e.g.: **solútio** [solutsio] **–** *solution*, **palpátio** [palpatsio**]** – *palpation.* However, after the letters **X** and **S** letter combintaion **TI** is pronounced as [**ti], e.g.: óstium** [ostium] **–** *ostium, openin,* **míxti** [miksti] – *mixture,* **combústio** [kombustio] – *combustion.*

Greek Digraphs

These letter combinations are used only in the words of Greek origin.

CH is pronounced as **[h]**, e.g.: **chóle** [hole] – *bile*, **cóncha** [konha] – *concha*, **chórda** [*horda]* – chord.

PH is pronounced as **[f]**, e.g.: **phárynx** [farinks] – *pharynx*, **phálanx** [falanks] – *phalanx*, **sphenoidális** [sfenoidalis] – *sphenoidal*.

RH is pronounced as **[r]**, e.g.: **rháphe** [rafe] – *raphe*; **rhomboídeus** [romboideus] – *rhomboid*.

TH – is pronounced as **[t]**, e.g.: **thórax** [toraks] – *thorax, chest*, **ethmoidális** [etmoidalis] – *ethmoidal*, **thyroídeus** [tyroideus] – *thyroid*.

📖 **Exercise 1. Read, pay attention to pronunciation of vowels and consonants:**

Aditus – aditus, **búlla –** bulla, **vómer –** vomer, **forámen –** foramen, **vertebra –** vertebra, **nérvus –** nerve, **túber –** tuber, **téndo –** tendon, **trigónum –** trigone, **fóvea –** fovea, **fíbra –** fiber, **sutúra –** suture, **ríma –** rima, **méntum –** chin, **zygóma –** zygoma, **spína –** spine, **régio –** region, **dúrus** – hard, **púlmo –** lung, **rádix –** root, radix, **plána –** plane, **rámus –** branch, ramus.

📖 **Exercise 2. Read, explain pronunciation of *<u>i</u>* or *<u>j</u>* in the following words:**

Juníperus – juniper, **júgum** – jugum, **iáter** (Gr.) – physician, **vitamínum** – vitamin, **junctúra** – junction, **jejúnum** – jejunum, **línea** – line, **ilíacus** – iliac, **ligaméntum** – ligament, **lámina** – plate; **májor –** greater, **juguláris** – jugular.

📖 **Exercise 3. Read, explain pronunciation of *c*:**

Víscera – viscera, internal organs, **túnica –** tunic, **córpus –** body, **tubérculum –** tubercle, **trúncus** – trunk, **crísta** – crest, **canális** – canal, **cósta** – rib, **cóllum –** neck, **cartilágo –** cartilage, **fácies –** face, surface**, músculus** – muscle, **súlcus** – sulcus, groove, **súlci** – sulci, grooves, **cránium** – cranium, skull, **búcca** – cheek, **búccae** – cheeks, **scápula** – scapula, **scéleton (skéleton)** – skeleton, **cérebrum** – brain.

📖 **Exercise 4. Read, pay attention to pronunciation of *s* or *ss*:**

Ala óssis sácri – ala of the sacrum, **ángulus cóstae** – costal angle, **átlas –** atlas, the first cervical vertebra, **básis cránii extérna** – external cranial base, **dens moláris** – molar (tooth), **dórsum séllae** – dórsum séllae, **fáscia cervicális –** cervical fascia, **fissúra orbitális inférior –** inferior orbital fissure, **fóssa condyláris –** condylar fossa, **impressiónes digitátae –** digitate impressions, **incisúra ulnáris –** ulnar notch, **mássa laterális atlántis –** lateral mass of the atlas.

📖 **Exercise 5. Read, pay attention to pronunciation of the vowels, consonants and diphthongs:**

Márgo supraorbitális – supraorbital margin**, meátus acústicus extérnus –** external acoustic meatus, **músculus serrátus postérior superior –** superior posterior serratus muscle, **órganum olfactórium –** olfactory organ, **os cuneifórme mediále –** medial cuneiform bone, **óssa mémbri inferióris –** bones of the inferior limb, **palátum ósseum –** bony palate, **papíllae fungifórmes –** fungiform papillae, **pars anuláris vagínae fibrósae –** anular part of the fibrous sheath, **pléxus myentéricus –** myenteric plexus, **pléxus submucósus –** submucous plexus, **plícae aláres –** alar folds, **plícae gástricae –** gastric folds, **rámus mandíbulae –** ramus of the mandible, **régio auriculáris –** auricular region, **ríma óris –** rima oris (opening of the mouth).

Vértebra próminens – prominent vertebra, **procéssus transvérsus –** transverse process, **os sácrum –** sacrum, **procéssus spinósus –** spinous process, **forámina sacrália dorsália –** dorsal sacral foramina, **os coccýgis –** coccygeal bone, **vértebrae coccýgeae –** coccygeal vertebrae, **tubérculum postérius –** posterior tubercle, **súlcus artériae vertebrális –** groove for the vertebral artery, **procéssus articuláris inférior atlántis –** inferior articular process of the atlas, **córpus vértebrae –** body of a vertebra, **incisúra vertebrális inférior –** inferior vertebral notch, **procéssus coracoídeus –** coracoid process, **procéssus accessórius –** accessory process, **líneae transvérsae –** transverse lines, **básis óssis sácri –** base of the sacrum.

Length and Brevity of a Syllable

In the Latin language the stress is connected with the length and brevity of a syllable. It may be short or long depending on the length and brevity of a vowel. Ancient Greek and Roman might have pronounced a long vowel in a more drawling manner than a short one. In a written form length is expressed with a *macron* (sign ‘¯’ over the vowel), and brevity with a *caron* (sign ‘˘’ over it), e.g. ā, ă, ē, ĕ, *etc*. In Latin syllables are counted from the end of a word, e.g.:

li-	ga-	mēn-	tum	la-	mĭ-	na
4	3	2	1	3	2	1

Rules of Length:

The syllable is **long** if:

1. it contains a diphthong, e.g.: **diāeta** – diet, **glutāeus** – gluteal;

2. two or three consonants are preceded by a vowel, e.g.: **ligamēntum –** ligament**, maxīlla –** maxilla, upper jaw (*bone*). However, if a vowel precedes combination of **B, P, D, T** plus **R** or **L**, it is short, e.g.: **palpĕbra** – eyelid, **vertĕbra** – vertebra;

3. **x** or **z** are preceded by a vowel, e.g.: **reflēxus** – reflex, **Glycyrrhīza** – Liquorise (*name of a plant*).

Rules of Brevity:

The syllable is **short** if:

1. one vowel precedes another vowel, e.g.: **linĕa** – line, **arterĭa** – artery;

2. a vowel precedes Greek digraphs **CH, PH, RH, TH**, e.g.: **stomăchus** – stomach;

3. a syllable in a word has always been short, e.g.: **lamĭna** – lamina.

Long and short suffixes. Memorize them to be able to read fluently and correctly.

Suffixes with a long vowel:	**Suffixes with a short vowel:**
-ūr (noun) – sutū̲ra, fissū̲ra	**-ĭc** (adj.) – thoracĭc̲us, tympanĭc̲us
-āl (adj) – costā̲lis, vertebrā̲lis	**-ŭl** (noun)– tubercŭ̲lum, muscŭ̲lus
-ār (adj.) – mandibulā̲ris, angulā̲ris	**-ŏl** (noun) – alveŏ̲lus, foveŏ̲la
-āt (adj.) – cuneā̲tus, arcuā̲tus	
-īn (adj.) – palatī̲nus, pelvī̲nus	
-īv (adj.) – incisī̲vus, auditī̲vus	
-ōs (adj.) – petrō̲sus, squamō̲sus	

Rules of Word Stressing:

Usually the first syllable from the end of a word is not stressed. In words consisting of two syllables the second syllable from the end is stressed, e.g.: **cósta** – rib, **násus** – nose.

If a word consists of two or more syllables it is stressed either on the second or the third syllable from the end. A word is stressed on the second syllable from the end if it is long, e.g.: **procēssus** – process**, medūlla** – medulla. A word is stressed on the third syllable from the end if the second syllable is short, e.g.: **tibia** – tibia, **tubércŭlum** – tubercle.

However, if the second vowel from the end precedes one consonant, it can be either short or long, so consult the dictionary**: forámen lacérum** – lacerated foramen.

Exercise 6. Read the two-syllable words, stress the appropriate syllable*:*

fossa – fossa, facet, **collum –** neck**, ala –** wing**, pelvis –** pelvis**, septum –** septum**, apex –** apex, tip, **spina –** spine**, sulcus –** sulcus**,** groove**, vomer –** vomer**, zona –** zone**, tendo –** tendon**, tractus –** tract**, sinus –** sinus**, sternum –** sternum**.**

Exercise 7. Determine whether the second syllable from the end is long or short:

Ligamentum – ligament, **fascia** – fascia, **maxilla** – maxilla, upper jaw, **articulatio** – articulation, joint, **gangraena** – gangrene, **hyoideus** – hyoid, **tuberculum posterius** – posterior tubercle, **foramen transversarium** – transverse foramen, **arcus posterior atlantis** – posterior arch of atlas, **lineae transversae** – transverse lines, **processus xiphoideus** – xiphoid process, **ossa digitorum manus** – bones of hand fingers, **radius** – radius, **cavum cranii** – cranial cavity, **patella** – patella, kneepan, **substantia compacta** – compact substance.

Exercise 8. Mark the stress, underline suffixes with short vowels with <u>one line</u> and with long vowels with <u>two lines</u>:

Os front<u>a</u><u>l</u>e – frontal bone, **scap<u>u</u>la** – scapula, **vertebra lumbalis** – lumbar vertebra, **fovea articularis superior** – superior articular facet, **tuberositas sacralis** – sacral tuberosity, **angulus sterni** – angle of sternum, **sulcus arteriae vertebralis** – groove for vertebral artery, **vertebra thoracica** – thoracic vertebra, **pediculus arcus vertebrae** – pedicle of the arch of a vertebra, **os palatinum** – palatine bone, **squama occipitalis** – occipital squama, **sulci arteriosi** – arterial grooves.

Self-Assessment

Exercise 8. Fill in the table with pronunciation of the letters of the Latin alphabet and provide English words where there is a similar sound. If there is no such a sound in English, think of examples in Russian!

Latin letters	Name	Pronunciation	Latin letters	Name	Pronunciation
A a	*a*	***/a/*** as in *f**a**ther*	**N n**	*en*	/__/ as in
B в	*be*	/__/ as in	**O o**	*o*	/__/ as in
C c	*tse*	/__/ as in or /__/ as in	**P p**	*pe*	/__/ as in
D d	*de*	/__/ as in	**Q q**	*ku*	/__/ as in
E e	*e*	/__/ as in	**R r**	*er*	/__/ as in
F f	*ef*	/__/ as in	**S s**	*es*	/__/ as in or /__/ as in
G g	*ge*	/__/ as in	**T t**	*te*	/__/ as in
H h	*ha*	/__/ as in	**U u**	*u*	/__/ as in
I i	*i*	/__/ as in	**V v**	*ve*	/__/ as in
J j	*jot*	/__/ as in	**X x**	*iks*	/__/ as in or /__/ as in
Kk	*ka*	/__/ as in	**Y y**	*ipsilon*	/__/ as in
L l	*el*	/__/ as in	**Z z**	*zet*	/__/ as in
M m	*em*	/__/ as in			

Exercise 9. Read, explain pronunciation of digraphs and letter combinations:

Vértebra thorácica – thoracic vertebra, **os íschii** – ischial bone, **os sphenoidále** – sphenoid bone, **substántia spongiósa** – spongy substance, **substántia compácta** – compact substance, **sutúra sphenozygomática –** sphenozygomatic suture, **protuberántia mentális** – mental protuberance, **concha nasális inférior** – inferior nasal concha, **lámina perpendiculáris óssis ethmoidális** – perpendicular plate of ethmoid bone, **squáma temporális** – temporal squama, **márgo squamósus** – squamous margin, **fóvea trochleáris** – trochlear fossa, **synchóndrosis sphenooccipitális** – sphenooccipital synchondrosis, **língula sphenoidális** – sphenoidal lingula, **sutúra sphenoethmoidális** – sphenoethmoid suture, **fissúra petrosquamósa –** petrosquamous fissure, **eminéntia arcuáta** – arcuate eminence, **apertúra extérna aquaedúctus vestíbuli –** external opening of vestibular aqueduct.

Exercise 10. Determine whether the second syllable is long or short, and mark the stress:

A. Foramen caecum – foramen caecum, **lamina cribrosa** – cribriform plate, **jugum sphenoidale** – sphenoid jugum, **sutura sphenofrontalis** – sphenofrontal suture, **ala minor** – lesser wing, **canalis opticus** – optic canal, **foramen rotundum** – round foramen, **incisura parietalis** – parietal notch, **foramen ovale** – oval foramen, **margo zygomaticus** – zygomatic margin**, fissura petrosquamosa** – petrosquamous fissure, **sulcus sigmoideus** – sigmoid sulcus, **crista occipitalis externa** – external occipital crest, **foveolae granulares** – granular pits, **lamina perpendicularis** – perpendicular plate.

B. Crista galli – crista galli, **pars orbitalis ossis frontalis –** orbital part frontal bone, **lamina horizontalis** – horizontal plate, **sulcus chiasmatis** – chiasmatic groove, **tuberculum sellae** – tuberculum sellae, **dorsum sellae** – dorsum sellae, **sulcus caroticus** – carotic groove, **foramen lacerum** – foramen lacerum, **fissura petrooccipitalis** – petrooccipital fissure, **porus acusticus internus** – internal acoustic pore, **foramen jugulare** – jugular foramen, **squama ossis occipitalis** – squama of occipital bone, **sutura lambdoidea** – lambdoid suture, **angulus occipitalis** – occipital angle, **incisura sphenopalatina** – sphenopalatine notch.

Exercise 11. Divide the words into the syllables, determine the length of the second syllable, put the stress mark:

Cós|ta prí|ma, processus spinosus, arcus vertebrae, processus articularis superior, corpus vertebrae, tubercula anterius et posterius, facies articularis tuberculi costae, facies costalis, ligamentum costotransversarium, crista capitis costae, discus intervertebralis, ligamentum capitis costae radiatum, nucleus pulposus, membrana atlantooccipitalis posterior, incisurae costales, hiatus aorticus, collum anatomicum, musculus cutaneus, pars optica hypothalami.

Exercise 12. Read the following Latin proverbs, mark the stress and find their translation into English. Memorize at least two or three proverbs:

Dum spiro spero. – *While I breathe, I hope.*

Res, non verba. – _____

Carpe diem. – _____

Usus est magister optimus. – _____

Errare humanum est. – _____

UNIT II. TERMINOLOGIA ANATOMICA-1

In this unit

- General idea of anatomical terms
- Nouns and its grammatical categories. Noun entries in dictionaries
- Genitive complement (Genitive case of nouns)
- Nouns of the 1st declension

Anatomical terms are the vocabulary of medicine. **Anatomy** began as a descriptive science in the days when Latin was the universal scientific language. Early anatomists described the structures they saw in that language, *comparing them to common and familiar objects* (e.g. *clavicula* 'small key', diminutive of *clavis* (because of its shape)), or borrowing terms from the *Greek* and *Arabic* masters before them (*chorda*, from Greek *khordē* 'gut, string of a musical instrument').

Anatomical terms usually include **one** to **five** words: e.g. ***caput*** – 'head'; ***pars intraocularis arteriae centralis retinae*** - intraocular part of central retinal artery

Exercise 1. Provide your own examples of anatomical terms. Use Terminologia Anatomica 1998 on-line version as a reference if necessary.

Number of Words	Latin	English
1		
2		
3		
4		
5		

The ***basis*** of any anatomical term is its first component, usually a ***noun***. **The noun (Nomen Substantivum)** is a word used to identify any of a class of people, places, or things. All Latin nouns have **gender, number** and **case**.

Gender.

In English, the feminine and masculine gender of a noun is determined by its sex, while most nouns determining objects are of neuter gender. In Latin a noun naming an object may be classified in any of three genders:

- genus masculinum (m) – masculine gender (e.g., *nucleus*);
- genus femininum (f) – feminine gender (e.g., *arteria*);
- genus neutrum (n) – neuter gender (e.g., *tuberculum*).

Therefore, the best way **to learn the gender** of a Latin noun is **to memorize it.**

Number

Number simply indicates whether the noun is singular (one) or plural (more than one): **Numerus singularis (Sg.)** – **singular** (e.g., *focus, vena, ligamentum*) and **Numerus pluralis (Pl.)** – plural (e.g., *foci, venae, ligamenta*).

Case

Case refers to the formal markers (in Latin they are endings added to the stem of a noun or adjective) that tell you about the function of a noun or adjective in relation to other words in the sentence. There are six distinct cases in Latin: Nominative, Genitive, Dative, Accusative, Ablative, and Vocative (see Grammar Reference for more information). As nouns of only two cases are used in anatomical terminology, we will focus on them:

The **nominative case (Casus Nominativus)** is the case for the subject of the sentence and, as far as anatomy is concerned, for the first (or only) and key word in an anatomical term (answers the question ***what?***).

The **genitive case (Casus Genitivum)** is most familiar to English speakers as the case that expresses possession: "my hat" or "Harry's house." In Latin it is used to indicate relationships that are most frequently translated into English by the preposition "of" (answers the question ***of what?***), e.g. *angulus* (**Nom**.) *costae* (**Gen**.) – *angle of rib*

Declension

A declension is a class of nouns or adjectives with the same or similar system of inflections (endings).There are **five** declensions of nouns in Latin. The key sign of a declension is **the ending of Genitive singular** (See Table 1).

Exercise 2. Study Table 1 and answer the following questions. Use both a full form and an abbreviation where possible. The first one is made for you:

1. Which declensions comprise the nouns of one gender only? **I** and **V**. What gender is it? **Femininum (f)**.

2. To which declension can the nouns of all three genders belong? ____.

3. To which declensions may the nouns of the masculine and neuter genders belong? ___, ___ and ___.

4. Why is it important to know not only the declension, but also the gender of the noun? Because _____.

5. The ending of which form (gender and number) is the same for all the nouns within one declension? _____.

6. Which declension and gender may the nouns having the following endings belong to?

-us: _____, or _____, or _____;

-er: _____, or _____;

-es: _____, or _____, or _____;

-a: _____, or _____.

Stem

To **decline** a noun, you should add the corresponding endings to the **stem**. To find the stem, remove the ending of the noun in the Genitive singular.

Determining the Stem

Noun in Nom. sing.	**Noun in Gen. sing.**	**Stem**
incisura (notch)	incisur**ae** f (of the notch)	**incisur-**
sulcus (groove)	sulc**i** m (of the groove)	**sulc-**
tuber (tuber)	tuber**is** n (of the tuber)	**tuber-**
sinus (sinus)	sin**us** m (of the sinus)	**sin-**
facies (surface)	faci**ei** f (of the surface)	**faci-**

NB: Pay particular attention to the stems of the nouns of the 3rd declension because most of them do not coincide with the form of the Nominative case: *corpus, corpor**is*** n – *body* (**corpor-**); *apex, apic**is*** m – *apex* (**apic-**).

Noun Entries (Dictionary Forms)

You should memorize Latin nouns as they are presented in a dictionary. The **Dictionary Form (Noun Entry)** provides **three** pieces of information:

1. The full form of the **Nominative singular**, which is used to list, or name, words in a dictionary;

2. The ending or the full form of the **Genitive singular**, which is used to find the stem of the noun and to determine its declension;

3. An abbreviation **m, f,** or **n**, which is a reference to the noun's gender.

e.g.: *ligamentum, i* n – *ligament; pulmo, onis* m – *lung; cor, cordis* n – *heart.*

Compound anatomical terms and their structure

Attributes expressed by nouns in the Genitive case

A term is a word or a word combination used to express a specific concept in some fields of science, technology or art. Most Latin terms used in medicine consist of a

noun – the nucleus of a term – and one or several attributes. An attribute is a word or phrase syntactically subordinate to another word (noun) that it modifies; it may be **non-agreed (**nouns in the Genitive and not depending on the form of the nucleus), or **agreed** (adjectives, corresponding with the nucleus in number, gender and case).

Thus, the non-agreed attribute answers the question **of what?** and is expressed by a noun in the Genitive case, singular or plural: a noun in Nom. + a noun in Gen., e.g.: *angulus **sterni** – angle **of the sternum**; collum **costae** – neck **of the scapula**.*

NB: In some cases, an attribute can be translated into English with an adjective, e.g.: *cavum **tympani** – **tympanic** cavity; cavitas **oris** – **oral** cavity,* etc. There are no special rules of translation, so just memorize the answers.

Exercise 3. Determine the declension of the following nouns:

fovea, **ae** f __	facies, **ei** f__	aditus, **us** m__	encephalon, **i** n__
ramus, **i** m__	meatus, **us** m__	genu, **us** n__	cornu, **us** n__
arcus, **us** m__	tendo, in**is** m__	paries, et**is** m__	papilla, **ae** f__
nasus**, i** m__	ligamentum, **i** n__	crus, crur**is** n__	ostium, **i** n__
angulus, **i** m__	processus, **us** m__	septum, **i** n__	crista, **ae** f__

Exercise 4. Complete the dictionary forms of the nouns, e.g. *fonticulus, i* m. Why is the declension mentioned just for some of the nouns?

encephalon, ….	ramus, …. (2)	crus, …… (3)
nasus, ….	maxilla, ……	eminentia, ……
species, …. (5)	recessus, …. (4)	sinus, … (4)
palatum, ……	humerus, …. (2)	vena, ……
concha, ….	dorsum, …….	corpus, … (3)

Exercise 5. Determine the stem of the nouns, decline them and translate into English:

	Latin	***English***	***Latin***	***English***
Entry	*ala, ae* f		*musculus, i* m	
Nom. Sg.	*al**a***	***a** wing*		
Gen. Sg	*al**ae***	***of a** wing*		
The stem	*al-*	**-**		
Nom. Pl.	*al**ae***	*wing**s***		
Gen. Pl.	*al**arum***	***of** wing**s***		

	Latin	*English*	*Latin*	*English*
Entry	*canalis, is* m		*facies ,ei* f	
Nom. Sg.				
Gen. Sg				
The stem				
Nom. Pl.				
Gen. Pl.				

Exercise 6. The dictionary forms are given. Translate into Latin:

1**. head of the radius** – caput, itis n radius, i m The answer:	2. **apex of the tongue –** apex, icis m lingua, ae f The answer:
3. **arch of a vertebra –** arcus, us m vertebra, ae f The answer:	4. **carpal canal –** canalis, is m carpus, i m The answer:
5. **angle of a rib** – angulus, i m costa, ae f The answer:	6. **head of the humerus** caput, itis n humerus, i m The answer:

Exercise 7. Learn the key vocabulary, complete the dictionary forms, and translate the terms into Latin:

1. apex of the patella- apex, ……. patella, …… The answer:	4. wing of the nose- ala, …… nasus, …. The answer:
2. sternal angle- angulus, …. sternum, …… The answer:	5. base of the patella- basis, …. patella, …. The answer:
3. tonsillar capsule- capsula, …… tonsilla, …. The answer:	6. mandibular canal- canalis, …. mandibula, …… The answer:

Self-Assessment

Exercise 8. Check your progress! Determine the declension of the following nouns without using the Table:

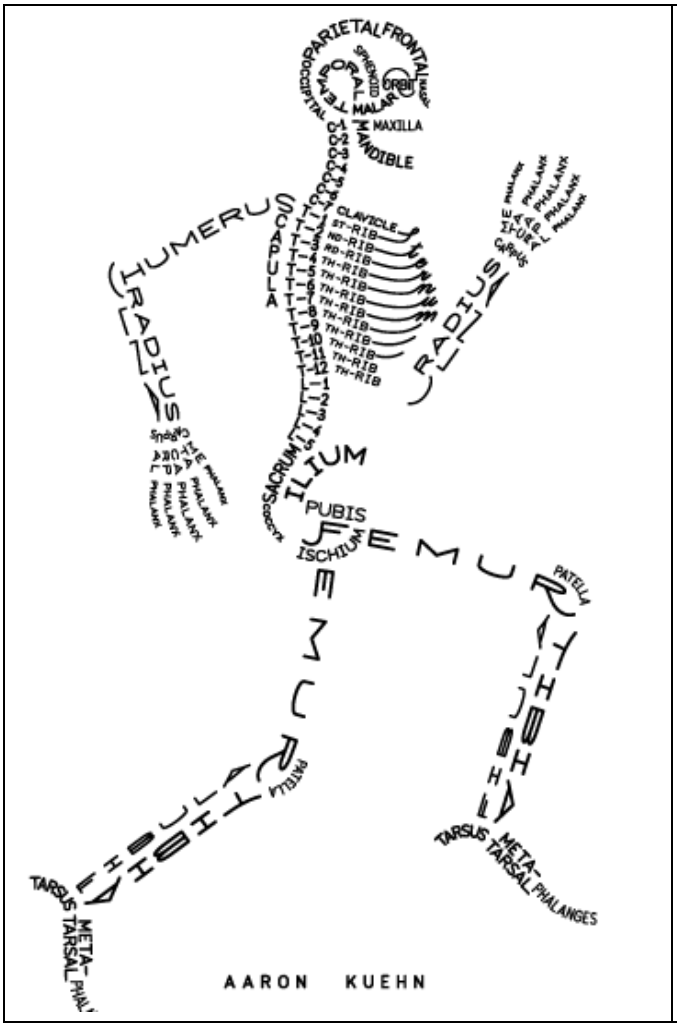
maxilla, ae f	femur, oris n	genu, us n	tuberculum, i n	tuberositas, atis f
os, ossis n	processus, us m	angulus, i m	clavicula, ae f	corpus, oris n
sulcus, i m	digitus, i m	arcus, us m	dens, dentis m	metacarpus, i m
tuber, eris n	ligamentum, i n	tibia, ae f	pediculus, i m	impressio, onis f
carpus, i m	facies, ei f	caput, itis n	foramen, inis n	dorsum, i n

1st Declension (Declinatio Prima)

Most nouns of the first declension end in ***-a*** in Nom. Sing. and ***-ae*** in Gen. Sg. and are feminine,

e.g.: arteri**a ,ae, f** (artery); cost**a,ae f** (rib); scapul**a,ae f** (scapula).

Exercise 9. Study the typogram of the skeleton. Write out the terms (translate from English into Latin, if necessary) which belong to the 1st declension (in their dictionary forms).



vertebra, ae f

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Greek nouns of the first declension

 Many medical terms are of Greek origin. Most of them were Latinized, that is took the form of Latin words, while some nouns keep the Greek inflections. There are three declensions of nouns of Greek origin in Latin.

Masculine nouns: diabet**es**, **ae** m – diabetes

Feminine nouns: diastol**e**, **es** f – diastole

Declension of Greek nouns (singular)

	Sg., **m**	Sg., **f**	Pl., **m**	Pl., **f**
Nom.	diabet**es**	diastol**e**	diabet**ae**	diastol**ae**
Gen.	diabet**ae**	diastol**es**	diabet**arum**	diastol**arum**

 **Exercise 10. Translate the following nouns of the 1st declension into Latin. Pay attention to their form!**

English	*Latin*	*English*	*Latin*
***of a** pulp*	*pulp**ae***	*clavicle**s***	
*mandible**s***		***a** crest*	
of** vertabr**ae		***of a** capsule*	
*wing**s***		***of a** diastole*	
***a** rib*		***of** diabetes (Sg.)*	

  **Exercise 11. Complete and <u>learn</u> the dictionary forms of the nouns, translate the terms into Latin:**

1. <u>vertebral process</u> – processus, …. vertebra, ……	4. <u>spine of the scapula</u> – spina, …. scapula, ….
2. <u>dental pulp</u> – pulpa, …… dens, ……	5. <u>muscle of the uvula</u> – musculus, …. uvula, ……
3. <u>root of the tongue</u> – radix, …. lingua, ……	6. <u>costal groove</u> – sulcus, …. costa, ….

7. <u>lingual septum</u> – septum, …. lingua, ….	9. <u>tuberculum sellae</u> – tuberculum, …… sella, ….
8. neck of a rib – collum, … costa, … The answer:	10. body of the tongue – corpus, … lingua, … The answer:

Exercise 12. Translate the terms and learn them by heart:

1. apex capitis fibulae – **The answer:**	6. caput costae – **The answer:**
2. basis mandibulae – **The answer:**	7. crista capitis costae – **The answer:**
3. corpus claviculae – **The answer:**	8. crista galli – **The answer:**
4. corpus costae – **The answer:**	9. collum scapulae – **The answer:**
5. pediculus arcus vertebrae – **The answer:**	10. collum radii – **The answer:**

Key Vocabulary

ala, ae f – wing	**crista, ae f** – crest	**processus, us m –** process
angulus, i m – angle	**capsula, ae f** – capsule	**pulpa, ae f –** pulp
basis, is f – base	**dens, dentis m –** tooth	**radius, i m** – radius
apex, icis m – apex	**fibula, ae f –** fibula	**scapula, ae f** – scapula
arcus, us m – arch	**gallus, i m** – gallus	**sella, ae f –** sella
canalis, is m – canal	**humerus, i m** – humerus	**septum, i n –** septum
caput, itis n – head	**lingua, ae f** – tongue	**spina, ae f –** spine
clavicula, ae f – clavicle	**mandibula, ae f** – mandible	**sulcus, i m –** sulcus, groove
collum, i n – collum, neck	**nasus, i m** – nose	**tonsilla, ae f** – tonsil
corpus, oris n – body	**patella, ae f** – patella	**tuberculum, i n –** tubercle
costa, ae f – rib	**pediculus, i m –** pedicle	**vertebra, ae f –** vertebra

Latin sayings and aphorisms

Via est vita – Road is the life.

Persona grata – An acceptable person.

Cognitio, scientia, medicina in unitate (CSMU) – Cognition, science and medicine in unity (the motto of Medical Academy named after S.I. Georgievsky)

UNIT III. TERMINOLOGIA ANATOMICA-2

In this unit

- Adjectives and its grammatical categories
- Classes of adjectives
- Adjective entries in dictionaries
- Agreed attributes. Anatomical terms consisting of nouns and adjectives

 **An adjective** is a member of a class of words functioning as modifiers of nouns, typically by describing, delimiting, or specifying quantity, as *nice* in a ***nice*** *day*, or *first* in *the* ***first*** *class.* In English, an adjective usually appears before the noun it modifies. In Latin, on the contrary, adjectives usually, though not always, follow the nouns they modify.

An adjective following a noun is called an **agreed attribute** which means it **must agree** with the noun it modifies **in gender, number and case.**

 **Exercise 1. Read the following terms. Note which of the words are nouns and which are adjectives. Underline nouns with a straight line and adjectives with a squiggly line. Determine the gender of each adjective.**

Ligamentum supraspinale (***n***), *lamina cribrosa (___), hamulus pterygoideus (___), colon ascendens (___), arteriae sigmoideae (___), processus pyramidalis (___), sutura sagittalis (___), trigonum pectoral (___), ganglion acusticum (___).*

According to their type of declension, all the adjectives are divided into two groups: the adjectives of the first and second noun declensions (I class) and the adjectives of the third noun declension (II class).

The adjectives of I class are declined according to the corresponding declension of nouns, so the adjectives of I class have the same endings as **the nouns of the 1st and the 2nd declensions**:

- masculine **-us, -er,** e.g.: *transvers**us,** dext**er;***
- feminine **-a,** e.g.: *transvers**a,** dex**tra;***
- neuter **-um,** e.g.: *transvers**um,** dex**trum.***

e.g. *muscul**us**, i* **m** – *musculus transvers**us**; line**a**, ae* **f** – *linea transvers**a**; ligament**um**, i* **n** – *ligamentum transvers**um***.

The dictionary entry for the adjective of I class includes the endings for the Nominative case Singular of all three genders: masculine, feminine, neuter (in this very order!). To determine the stem of an adjective, remove the ending from the feminine form, which always appears second:

e.g. ***thoracicus, a, um*** – *thoracica* – the stem *thoracic-*; ***sinister, tra, trum*** (left) – *sinistra* – the stem *sinistr-*.

Exercise 2. Determine the stem of the adjectives of I class and decline them: *longus, a, um* (long)

	m	**f**	**n**
Nom. Sg.	*long**us***		
Gen. Sg.	*long**i***		
Nom. Pl.	*long**i***		
Gen. Pl.	*long**orum***		

dexter, tra, trum (right)

	m	**f**	**n**
Nom. Sg.			
Gen. Sg.			
Nom. Pl.			
Gen. Pl.			

The adjectives of the second class correspond to the nouns of **the 3rd declension.** However, the dictionary forms of this group may differ as to the number of the endings presented, namely, one, two or three:

Adjectives of II class

	three endings*:	**two** endings:	**one** ending:
Number of Endings	masculine **-er** feminine **-is** neuter **–e**	masculine **-is** feminine **-is** neuter **-e**	masculine **-r, -s, -x** feminine **-r, -s, -x** neuter **-r, -s, -x**
Examples	**m** – salub**er** **f** – salubr**is** **n** – salubr**e**	**m** – occipital**is** **f** – occipital**is** **n** – occipital**e**	**m** – simple**x**, tere**s** **f** – simple**x**, tere**s** **n** – simple**x**, tere**s**
Entry	**saluber, is, e**	**occipitalis, e**	**simplex, icis; teres, etis**

* The adjectives with three endings are used very rarely.

To determine the stem of an adjective of II class, remove the ending from the feminine form for the adjectives with three or two endings. To determine the stem for the adjectives with one ending, remove the ending from the Genitive Singular:

e.g. ***saluber, bris, bre*** (healthy) – *salubris* – the stem *salubr-;* ***facialis, e*** – *facialis* – the stem *facial-*; ***simplex, icis*** – *simplicis* – the stem *simplic-*.

Exercise 3. Determine the stem of the adjectives of II class and decline them: *cervicalis, e*

	m	**f**	**n**
Nom. Sg.	*cervical**is***		
Gen. Sg.	*cervical**is***		
Nom. Pl.	*cervical**es***		
Gen. Pl.	*cervical**ium***		

teres, etis **(**round)

	m	**f**	**n**
Nom. Sg.			
Gen. Sg.			
Nom. Pl.			
Gen. Pl.			

In medical terminology, we use some of the adjectives not in the positive, but in the **comparative degree**. Their endings mostly correspond to the endings of the adjectives of II class:

masculine, feminine **-(i)or**, e.g.: super**ior**, anter**ior**, maj**or**;

neuter **-ius**, e.g.: super**ius**, anter**ius**, maj**us**.

The entries for the adjectives in the comparative degree include two endings, e.g.: *super**ior, ius;** poster**ior, ius;** min**or, us***.

Exercise 4. Determine the stem of the adjective in the comparative degree and decline it: *anterior, ius*

	m	**f**	**n**
Nom. Sg.			
Gen. Sg.			
Nom. Pl.			
Gen. Pl.			

Exercise 5. Determine the class of the adjectives and complete the dictionary forms:

accessorius, ….	major, ….	dexter, ….
lateralis, ….	abdominalis, ….	inferior, ….
anatomicus, ….	sinister, ….	minor, ……
superior, …	medialis, ….	posterior, ….
cruciatus, ….	pyramidalis, ….	abdominalis, ….

Exercise 6. Determine the declension and gender of the nouns and choose the correct endings for the adjectives:

1. palatum /**II, n**/ (durus, a, um) – *palatum dur**um***
2. sulcus /__,__/ (obturatorius, a, um) –
3. papilla /__,__/ (incisivus, a, um) –
4. tuberculum /__,__/ (major, jus) –
5. processus /__,__/ (articularis, e; inferior, ius) –
6. vena /__,__/ (angularis, e) –
7. septum /__,__/ (fibrosus, a, um) –
8. apertura /__,__/ (superior, ius) –
9. spina /__,__/ (nasalis, e; anterior, ius) –
10. arteria /__,__/ (gastricus, a, um; sinister, tra, trum) –

Exercise 7. Divide the following anatomical terms into groups according to the patterns:

collum anatomicum, collum radii, apertura superior, glandula lacrimalis, dorsum linguae, facies articularis, tuberculum minus (**Attention**!), lamina externa, linea obliqua, musculus subclavius, nucleus inferior, foramen mandibulae, pelvis major, tuberculum costae, ligamentum patellae, labium mediale.

Noun + Adj. of I class	1. _____ 2. _____ 3. _____ 4. _____
Noun + Adj. of II class	1. _____ 2. _____ 3. _____ 4. _____
Noun + Adj. in the Comp. Degree	1. _____ 2. _____ 3. _____ 4. _____
Noun + Noun in Gen. Case	1. _____ 2. _____ 3. _____ 4. _____

Exercise 8. Choose the corresponding endings (that is agree the nouns and adjectives) and translate the terms into Latin:

1. frontal angle – angulus, i **m** frontal**is**, e angulus frontal**is**	6. articular surface – facies, ei **f** articularis, e facies articular….
2. mastoid canaliculus – canaliculus, i **m** mastoideus, a, um canaliculus mastoide……	7. posterior fontanel – fonticulus, i **m** posterior, ius fonticulus poster……
3. costal arch- arcus, us **m** costalis, e arcus costal……	8. femoral ring – anulus, i **m** femoralis, e anulus femoral….
4. external occipital crest- crista, ae **f** occipitalis, e externus, a, um crista occipital……extern….	9. anterior longitudinal ligament – ligamentum, i **n** longitudinalis, e anterior, ius ligamentum longitudinal…. anter…….
5. articular disc – discus, i **m** articularis, e discus articular….	10. cardiac opening – ostium, i **n** cardiacus, a, um ostium cardiac…….

Exercise 9. Without using the dictionary, translate the terms on the theme "Skeleton of the body" into English. Mind the word order:

1. columna vertebralis (rhachis – Gr.)-	5. vertebra cervicalis prima-
2. processus spinosus-	6. vertebra cervicalis secunda-
3. processus articularis superior-	7. vertebra lumbalis-
4. processus articularis inferior-	8. tuberculum posterius-

Self-Assessment

Exercise 10. Determine the declension of the nouns and the class of the adjectives, decline the terms and translate each form into English:

sutura (___ declension) palatina (_____class)

	Latin	***English***
Nom. Sg.		a
Gen. Sg.		of a
Nom. Pl.		s
Gen. Pl.		of s

ramus (___ declension) articularis (_____class)

	Latin	***English***
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

ligamentum (___ declension) posterius (_____)

	Latin	***English***
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

arteria (___ declension) ethmoidalis (_____group) anterior (_____)

	Latin	***English***
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

Exercise 11. Determine the declension of the nouns and the class of the adjectives and put the terms into Genitive Singular:

Nom. Sg.	***Gen. Sg.***
arteria (**1st**) angularis (**II class**)	_____
ala (___) major (_____)	_____
nervus (___) palatinus (_____)	_____
angulus (___) inferior (_____)	_____
septum (___) interlobulare (_____)	_____

Exercise 12. The dictionary forms are given. Agree the nouns and adjectives and translate the terms into Latin:

1. posterior nasal spine – spina, ae f nasalis, e posterior, ius	6. greater palatine sulcus – sulcus, i m palatinus, a, um major, jus
2. transverse head – caput, itis n transversus, a, um	7. central tendon – centrum, i n tendineus, a, um
3. femoral trigone – trigonum, i n femoralis, e	8. visceral cranium – cranium, i n visceralis, e
4. fibrous ring- anulus, i m fibrosus, a, um	9. palatoglossal arch – arcus, us m palatoglossus, a, um
5. superior mesenteric artery – arteria, ae f mesentericus, a, um superior, ius	10. inferior orbital fissure – fissura, ae f orbitalis, e inferior, ius

Exercise 13. Complete the dictionary forms, translate the terms into Latin:

1. inferior aperture – apertura, …. inferior, ……	3. alar lamina – lamina, …… alaris, …….
2. medial arcuate ligament – ligamentum, …. arcuatus, …… medialis, ……	4. first cervical vertebra – vertebra, …. cervicalis, ……. primus, …….

5. auditory tube – tuba, …. auditivus, …….	7. accessory vein – vena, ……. accessorius, ……
6. superior dental arch – arcus, … dentalis, … superior, ….	8. carotid tubercle – tuberculum, …… caroticus, ……

Exercise 14. Determine the case and number of the terms from exercises 12 and 13 and provide their appropriate forms:

English	*Latin*
of a posterior nasal spine **(Gen., Sg.)**	*spin**ae** nasal**is** posterior**is***
central tendons (_____, _____)	
inferior orbital fissures (_____, _____)	
of a fibrous ring (_____, _____)	
of medial arcuate ligaments (____, ____)	
of the first cervical vertebra (____, ____)	
of dental arches (_____, _____)	
carotid tubercles (_____, _____)	
of an inferior aperture (_____, _____)	
of auditory tubes (_____, _____)	

Exercise 15. Memorize the terms and translate them into English:

1. arteria gastrica dextra-	6. facies articularis posterior-
2. concha nasalis inferior-	7. fissura petrosquamosa-
3. condylus occipitalis-	8. incisura ischiadica major-
4. crista ethmoidalis-	9. lamina perpendicularis-
5. eminentia arcuata-	10. medulla spinalis-

Exercise 16. Complete and learn the dictionary forms, translate:

1. greater wing – ala, …. major, ….	6. lateral head – caput, … lateralis, ….
2. occipital angle – angulus, …. occipitalis, ….	7. dorsal chord – chorda, …. dorsalis, ….
3. zygomatic arch – arcus, …. zygomaticus, ….	8. surgical neck – collum, … chirurgicus, ….
4. lingual artery – arteria, …. lingualis, ….	9. sphenoid crest – crista, …. sphenoidalis, ….
5. tympanic canaliculus – canaliculus, …. tympanicus, ….	10. medial surface – facies, …. medialis, ….

Key Vocabulary

arcuatus, a, um – arcuate	**ethmoidalis, e –** ethmoidal	**medialis, e –** medial
arteria, ae f – artery	**facies, ei f –** surface, face	**medulla, ae f –** medulla
articularis, e – articular	**fissura, ae f –** fissure	**nasalis, e –** nasal
canaliculus, i m – canaliculus	**gastricus, a, um –** gastric	**occipitalis, e –** occipital
chirurgicus, a, um – surgical	**incisura, ae f –** notch	**perpendicularis, e –** perpendicular
chorda, ae f – chord	**inferior, ius –** inferior	**petrosquamosus, a, um –**
concha, ae f – concha	**ischiadicus, a, um –** sciatic	**posterior, ius –** posterior
condylus, i m – condyle	**lamina, ae f –** lamina, plate	**sphenoidalis, e –** sphenoid
dexter, tra, trum – right	**lateralis, e –** lateral	**spinalis, e –** spinal
dorsalis, e – dorsal	**lingualis, e –** lingual	**tympanicus, a, um –** tympanic
eminentia, ae f – eminence	**major, jus –** greater	**zygomaticus, a, um –** zygomatic

Latin sayings and aphorisms

Persona non grata – An unacceptable person

Pro captu meo – From my point of view

UNIT IV. TERMINOLOGIA ANATOMICA-3

In this unit

- Morphological characteristics of two- and multi-word anatomical terms
- Syntax of two- and multi-word anatomical terms
- Nouns of the 2nd declension

As it has been mentioned above, anatomical terms may consist of one to five words. These words can be arranged in a number of ways but still they follow certain rules. The **key patterns** are:

1. One-word terms: a noun in **Nom. Sg.** or **Pl.:** ***hepar*** **–** *liver;* ***ossa*** **–** *bones.*

2. Two-word terms.

a) a noun in **Nom. Sg.** or **Pl.** + an adjective in **Nom. Sg.** or **Pl.** (agreed attribute): ***vertebra thoracica*** **–** *thoracic vertebra;* ***vertebrae thoracicae*** **–** *thoracic vertebrae.*

b) a noun in **Nom. Sg.** or **Pl.** + a noun in **Gen Sg.** or **Pl.** (non-agreed attribute)**:** ***collum costae*** **–** *neck of rib;* ***colla costarum*** *– necks of ribs*

Multi-word terms present a combination of two or more **key patterns**:

a) a noun in **Nom. +** two or more adjectives in the **same** form: ***facies articularis superior*** **–** *superior articular facet;*

b) a noun in **Nom. +** two or more nouns in **Gen.:** ***pediculus arcus vertebrae*** **–** *pedicle of the arch of a vertebra*;

c1) a noun in **Nom. +** a noun in **Gen. +** an adjective in **Gen.** (attribute agreed with the second noun)**:** ***corpus vertebrae thoracicae*** **–** *body of thoracic vertebra*; **or**

c2) a noun in **Nom. +** an adjective (or two adjectives) **in Nom.** (attribute agreed with the first noun) **+** a noun in **Gen.:** ***fossa glenoidalis scapulae*** **–** *glenoid fossa of scapula.*

d) a noun in **Nom. +** an adjective in **Nom.** (attribute agreed with the first noun) **+** a noun in **Gen. +** an adjective in **Gen.** (attribute agreed with the second noun)**:** ***linea intermedia cristae iliacae*** **–** *intermediate line of iliac crest.*

Exercise 1. Decline the terms and translate them into English:

a lacrimal groove: sulcus, i m; *lacrimalis, e*

	Latin	English
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

a lesser tubercle
tuberculum, i n; *minor, us*

	Latin	English
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

a lingual tonsil
tonsillar, ae f; *lingualis, e*

	Latin	English
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

Exercise 2. Divide the following anatomical terms into groups according to the patterns and translate them into English (orally):

collum /vesicae felleae; anulus tympanicus; facies anterior/ partis petrosae; area cribrosa; arteria dorsalis /pedis; nervus cardiacus cervicalis superior; ossa / digitorum / pedis; cartilago /tubae auditivae; tuberositas /maxillae; caput / ossis / metacarpi; cervix / uteri; porus acusticus externus; canalis cervicalis /uteri; capsula fibrosa/ glandulae thyroideae

a noun in **Nom**. + an adjective in **Nom**.	1. _____ 2. _____
a noun in **Nom**. + a noun in **Gen.**	1. _____ 2. _____
a noun in **Nom**. + two or more adjectives in **Nom**.	1. _____ 2. _____
a noun in **Nom**. + two nouns in **Gen**.	1. _____ 2. _____
a noun in **Nom**. + a noun in **Gen**. + an adjective in **Gen**.	1. _____ 2. _____
a noun in **Nom**. + an adjective in **Nom**. + a noun in **Gen**.:	1. _____ 2. _____
a noun in **Nom**. + an adjective in **Nom**. + a noun in **Gen**. + an adjective in **Gen**.:	1. _____ 2. _____

Exercise 3. Complete the dictionary forms and translate into Latin:

1. anterior membranous ampulla – ampulla,… membranaceus, … anterior,…	9. external intercostal membrane – membrana,…. intercostalis,…. externus,…..
2. sacrospinous ligament – ligamentum,….. sacrospinalis,….	10. sphenoidal angle – angulus,… sphenoidalis,….
3. angular veins – vena,…… angularis,……	11. pharyngeal tubercle – tuberculum,…. pharyngeus,….
4. lateral osseous ampulla – ampulla,…. osseus,…. lateralis,….	12. anular ligament of the radius – ligamentum,…. anularis,… radius,…
5. posterior cruciate ligaments – ligamentum,… cruciatus,…. posterior,…	13. lateral plantar sulcus – sulcus,….. plantaris,….. lateralis,….
6. carotid grooves – sulcus,…. caroticus,…	14. sphenoidal fontanel – fonticulus,…. sphenoidalis,….
7. mental tubercles – tuberculum,…….. mentalis,……	15. digastric fossa – fossa,…. digastricus,….
8. long head – caput, … … longus, … …	16. cruciform eminence – eminentia, … … cruciformis, … …

Exercise 4. Underline the nouns with a straight line and the adjectives with a squiggly line, determine their number and case and translate them into English:

Nom.Sg. Gen.Sg. Gen.Sg. Gen.Sg. 1. sulcus / nervi petrosi minoris – *a groove for lesser petrosal nerve*	6. ala major/ ossis sphenoidalis –
2. ampulla membranacea posterior –	7. angulus medialis / oculi –
3. arcus dentalis maxillaris –	8. musculus gluteus medius –
4. arteria profunda /linguae –	9. sulcus / arteriae occipitalis –
5. ligamentum collaterale fibulare –	10. crista / tuberculi minoris –

Exercise 5. Determine the case and number of the terms from exercise 3 and provide their appropriate forms:

English	*Latin*
of a carotid groove **(Gen., Sg.)**	*sulc**i** caroti**ci***
an angular vein (_____, _____)	
of posterior cruciate ligaments (_____, _____)	
a sacrospinous ligament (_____, _____)	
of a digastric fossa (____, ____)	
of pharyngeal tubercles (_____, _____)	
long heads (____, ____)	
of sphenoidal fontanels (_____, _____)	

Self-Assessment

2nd Declension (Declinatio Secunda)

The **masculine** nouns of the **second** declension end in **-us** or **-er** and the **neuter** nouns end in **-um** or **-on** (Gr.) in **Nom. Sg.,** while for all of them the ending for **Gen. Sg**. is **-i**, e.g.: *musculus, i* **m** *(muscle); cancer, cri* **m** *(cancer); ligamentum, i* **n** *(ligament); ganglion, i* **n** *(ganglion).*

Memorize the **exceptions** to the **masculine** gender rule. These nouns have the endings characteristic of the **masculine** gender (**-us** or **-er)**, but belong to either **feminine** or **neuter** gender:

alvus, i **f** – *alvus, stomach, abdomen*	*methodus, i* **f** –*method*
crystallus, i **f** – *crystal*	*periodus, i* **f** – *period*
diameter, tri **f** – *diameter*	*virus, i* **n** – *virus.*

Exercise 6. Translate the following nouns of the 2nd declension into Latin (See Key Vocabulary and exceptions). Pay attention to their form!

English	*Latin*	*English*	*Latin*
of a *nerv**us***	*nerv**i***	*lip**s***	
*lobe**s***		***a*** *ligament*	
of *ganglion**s***		***of a*** *fenulum*	
*limb**s***		***of*** *cavit**ies***	
of a *nose*		***of*** *cancer*	
of a *period*		*diameter**s***	
*duodenum**s***		***of*** *skeleton**s***	
of *method**s***		***of a*** *virus*	

Exercise 7. Determine the gender of the 2nd declension nouns and choose the correct endings for the adjectives:

1. ligamentum (**n**) (transversus, a, (**um)**; triangularis, **(e)**; posterior, **(ius)**;
2. bronchus (___) (lobaris, e; dexter, tra, trum; principalis, e);
3. hamulus (___) (lacrimalis, e; pterygoideus, a, um);
4. septum (___) (fibrosus, a, um; interalveolaris, e; transversus, a, um);
5. nervus (___) (palatinus, a, um; tibialis, e; vestibularis, e);
6. tuberculum (___) (adductorius, a, um; major, jus; articularis, e);
7. musculus (___) (intercostalis, e; externus, a, um; circularis, e);
8. ganglion (___) (aorticorenalis, e; mesentericus, a, um; superior, ius);
9. angulus (___) (mastoideus, a, um; occipitalis, e; superior, ius).

Exercise 8. Translate the terms into Latin. Provide both Singular and Plural forms:

Nominative Singular	*Nominative Plural*
1. auricular muscle – musculus auricular….	auricular muscles – muscul…. auricular……
2. external intercostal muscle – musculus intercostal…… extern….	external intercostal muscles – muscul…… intercostal……extern….
3. palmar interosseous muscle – musculus interosse…. palmar….	palmar interosseous muscles – muscul…… interosse…. palmar….
4. oblique arytenoid muscle – musculus arytenoide…obliqu….	oblique arytenoid muscles – muscul…… arytenoide…… obliqu….
5. dorsal interosseous muscle – musculus interosse…… dorsal……	dorsal interosseous muscles – muscul…. interosse…… dorsal……
6. costotransverse ligament – ligamentum costotransversari….	costotransverse ligaments – ligament……costotrasversari….
7. yellow ligament – ligamentum flav….	yellow ligaments – ligament…. flav….
8. interspinal ligament – ligamentum interspinal….	interspinal ligaments – ligament…… interspinal….
9. palmar ligament – ligamentum palmar….	palmar ligaments – ligamen…… palmar….
10. posterior sacroiliac ligament – ligamentum sacroiliac. …. poster….	posterior sacroiliac ligaments – ligament…. sacroiliac…. posterior….

Exercise 9. Complete the dictionary forms, translate the terms:

1. mobile end – punctum, …. mobilis, …	8. circular layer – stratum, … circularis, …
2. bony palate – palatum, …. osseus, ….	9. submandibular trigone – trigonum, … submandibularis, ….
3. supraglenoid tubercle**s** – tuberculum, … supraglenoidalis, ….	10. lip**s** of the mouth – labium, … os, …
4. latissimus dorsi muscle – musculus, … latissimus, … dorsum, …	11. longus colli muscle – musculus, … longus, … collum, …
5. posterior nucleus – nucleus, … posterior, …	12. lower limb**s** – membrum, …. inferior, ….
6. greater and lesser palatine nerves – nervus, …. palatinus, … major, … minor, ….	13. submental lymph nodes – nodus, …. lymphaticus, …. submentalis, …
7. interspinales muscles of the neck – musculus, …. interspinalis, …. cervix, ….	14. longissimus capitis muscle musculus, …… longissimus, …… caput, ……

Exercise 10. Underline the nouns with a straight line and the adjectives with a squiggly line, determine their number and case and translate into English:

Nom.Sg. Gen.Sg. Gen.Sg. 1. crista tuberculi majoris – *a crest of greater tubercle*	12. dorsum linguae –
2. collum chirurgicum –	13. frenulum labii superioris –
3. facies articularis tuberculi costae –	14. plicae semilunares coli –
4. ganglia trunci sympathici –	15. septum intermusculare brachii mediale –
5. papilla duodeni major –	16. skeleton membri superioris –
6. fonticulus posterior (occipitalis) –	17. disci intervertebrales –
7. nodi lymphatici submandibulares –	18. musculi interossei plantares –
8. collum tali –	19. musculi scaleni –
9. musculus obturatorius internus –	20. musculus rectus capitis posterior major –
10. nucleus accessorius nervi oculomotorii –	21. angulus lateralis oculi –
11. digitus minimus pedis –	22. canaliculus lacrimalis –

Key Vocabulary

Provide the dictionary forms for the following words, translate them into English and memorize:

ampulla,	os, oris n
cavum,	osseus,
colon,	papilla,
costotransversarius,	peritoneum,
dorsum,	pes,
duodenum,	petrosus,
eminentia,	principalis,
flavus,	profundus,
fonticulus,	pylorus,
frenulum,	sacrococcygeus,
ganglion,	sacroiliacus,
labium,	semilunaris,
latissimus,	skeleton,
ligamentum,	sternum,
lobus,	sympathicus,
malleus,	talus,
membrum,	uterus,
nasus,	ventriculus,
nervus,	

Latin sayings and aphorisms

Lupus non mordet lupum. – A wolf does not bite another wolf.

Otium post negotium. – Rest comes after work.

Nihil est perfectum. – There is nothing perfect in the world.

Exceptio probat regulam. – The exception proves the rule.

Medicus curat, natura sanat – The physician treats, nature cures.

UNIT V. TERMINOLOGIA ANATOMICA-4

In this unit

- General characteristic of the nouns of the 3rd declension
- Parisyllabic and imparisyllabic nouns
- Types of stems of the nouns of the 3rd declension and their peculiarities
- 3rd declension nouns in combination with agreed and non-agreed attributes

The majority of Latin nouns in general and medical terms in particular fall into the 3rd declension. It includes nouns of all three genders and is characterized by a wide range of endings in **Nom. Sg.** To make things worse, these endings are not specific for each gender. Thus, the only reliable sign of the nouns of this declension is the ending ***-is*** in **Gen. Sg.** And the only way to be certain of a gender of these nouns is to **memorize** it.

Parisyllabic and imparisyllabic nouns

The 3rd declension nouns may be parisyllabic (having the same number of syllables in all cases of the singular) and imparisyllabic (having inflected forms with different numbers of syllables in Nominative and other cases of the singular).

To distinguish between the two, look at what is written after the coma in the dictionary form: **-is** only means a noun is parisyllabic, e.g.: *basis,* ***is*** f*; canalis,* ***is*** m*; pubes,* ***is*** f; while more letters before **-is** are a sign of an imparisyllabic noun, e.g.: *apex,* ***icis*** m (the stem is **apic**-); *tempus,* ***oris*** n (the stem is **tempor**-); *cartilago,* ***inis*** f (the stem is **cartilagin**-). For one-syllable words dictionaries provide the full form of **Gen. Sg.:** *pes,* ***pedis*** m; *dens,* ***dentis*** m; *pars,* ***partis*** f.

Exercise 1. Mark the following nouns as parisyllabic (=) or imparisyllabic (≠) and determine their stems:

canalis, is m (=) – *canal* – the stem: canal-
foramen, inis n (__) – *foramen* – the stem:
margo, inis m (__) – *margin, border* – the stem:
os, ossis n (__) – *bone* – the stem:
pars, partis f (__) – *part* – the stem:
chiasma, atis n (__) – *chiasm* – the stem:
rete, is n (__) – *rete, net* – the stem:
lien, enis m (__) – spleen – the stem:
auris, is f (__) **–** *ear* – the stem:

Types of stems

Some endings of the 3rd declension nouns (namely, **Genitive Plural** for all genders and **Nominative Plural** for **neuter** gender) may have an extra **-i** (**-ium** instead of **-um** and **-ia** instead of **-a**). To choose the proper ending, you should distinguish between the three types of stems:

а) consonant (characteristic of most 3rd declension nouns)**;**

б) vowel (or **-i-stem**)**;**

в) mixed.

The consonant type. ***Imparisyllabic*** nouns of all **three genders** the stem of which ends in ***one*** **consonant** belong to this type, e.g.: *pulmo, pulmo**n**is* m (the stem **pulmon-**); *radix, radi**c**is* f (the stem **radic**-).

The vowel (-i-stem) type. Only **neuter** nouns ending in **-al, -ar, -e** belong to this type, e.g.: *ret**e**, is* n; *anim**al**, alis* n.

The mixed type includes the nouns:

1**)** ***imparisyllabic*** of all **three genders** the stem of which ends in ***two or three*** **consonants**, e.g.: *dens, de**nt**is* m; *pars, pa**rt**is* f; *os, o**ss**is* n

2) ***parisyllabic*** of **masculine** and **feminine genders** ending in **-is** or **-es**, e.g.: *canal**is**, canalis* m; *pub**es**, pubis* f

Compare how the 3rd declension nouns of all three types are declined:

	The Consonant Type	**The Vowel (i-stem) Type**	**The Mixed Type**
Entry	*os, oris* n	*rete, is* n	*os, ossis* n
Nom. Sg.	*os*	*ret**e***	*os*
Gen. Sg	*or**is***	*ret**is***	*oss**is***
The stem	*or-*	*ret-*	*oss-*
Nom. Pl.	*or**a***	*ret**ia***	*oss**a***
Gen. Pl.	*or**um***	*ret**ium***	*oss**ium***

Exercise 2. Find the stems of the following nouns and determine the type according to which they are declined:

caput, itis n –	os, ossis n –
atlas, antis m –	tuber, eris n –
basis, is f –	vomer, eris m –
trochanter, eris m –	canalis, is m –
animal, alis n –	gastritis, is f –
coma, atis n –	mare, is n –

Exercise 3. Complete the dictionary forms for the adjectives, agree the 3rd declension nouns with them, translate the terms and provide Gen. Sg.:

1. palatine aponeurosis – (aponeurosis, is f; palatinus, **a, um**) Nom. sing – **aponeurosis palatin<u>a</u>** Gen. sing. – **aponeurosis palatin<u>ae</u>**	5. infraorbital canal – (canalis, is m; infraorbitalis, …….) Nom. sing – **canalis infraorbital….** Gen. sing. –
2. compound joint – (articulatio, onis f; compositus, ……..) Nom. sing – **articulatio composit…** Gen. sing. –	6. oblique head – (caput, itis n; obliquus, ……..) Nom. sing – **caput obliqu….** Gen. sing. –
3. atlantoaxial joint – (articulatio, onis f; atlantoaxialis, ……) Nom. sing – **articulatio atlantoaxial …** Gen. sing. –	7. glenoid cavity – (cavitas, atis f; glenoidalis, ……) Nom. sing – **cavitas glenoidal….** Gen. sing. –
4. carotid canal – (canalis, is m; caroticus, ……..) Nom. sing – **canalis carotic….** Gen. sing. –	8. mastoid foramen – (foramen, inis n; mastoideus, ……..) Nom. sing – **foramen mastoide….** Gen. sing. –

Exercise 4. Choose (circle) corresponding endings of the following adjectives; memorize <u>the dictionary forms</u>; translate the terms (orally):

1. **aponeurosis, is f** – (palatinus, **(a)**, um; palmar**(is)**, e);
2. **articulatio, onis f** – (compositus, a, um; sternoclavicularis, e);
3. **caput, itis n** – (lateralis, e; profundus, a, um);
4. **cartilago, inis f** – (nasalis, e; accessorius, a, um;
5. **corpus, oris n** – (geniculatus, a, um; medialis, e)
6. **dens, dentis m** – (incisivus, a, um; molaris, e);
7. **extremitas, atis f** – (acromialis, e; anterior, ius);
8. **foramen, inis n** – (frontalis, e; incisivus, a, um);
9. **impressio, onis f** – (cardiacus, a, um; renalis, e);
10. **margo, inis m** – (interosseus, a, um; frontalis, e);
11. **os, ossis n** – (hyoideus, a, um; centralis, e);
12. **pars, partis f** – (cardiacus, a, um; clavicularis, e);
13. **radix, icis f** – (motorius, a, um; medialis, e);
14. **regio, onis f** – (epigastricus, a, um; sacralis, e)
15. **vas, vasis n** – (lymphaticus, a, um; collateralis, e).

Exercise 5. Complete the dictionary forms (see Exercise 4) and translate the terms into Latin:

1. plantar aponeurosis – aponeurosis, …. plantaris, ….	9. gastric impression – impressio, …. gastricus, ….
2. sacrococcygeal joint – articulatio, …. sacrococcygeus, ….	10. infraorbital margin – margo, … infraorbitalis, ….
3. medial head – caput, …. ; medialis, …	11. cuboid bone – os, … cuboideus, …
4. sesamoid cartilage- cartilago, …. sesamoideus, ….	12. costal part – pars, … costalis, …
5. corpus callosum – corpus, …. callosus, ….	13. sensory root – radix, …. sensorius, ….
6. canine tooth – dens, …. caninus, ….	14. vertebral region – regio, … vertebralis, …
7. sternal extremity – extremitas, …. sternalis, ….	15. capillary vessel – vas, … capillaris, ….
8. jugular foramen – foramen, … jugularis, ……	16. anastomotic vessel vas, …… anastomoticus, ……

Exercise 6. Provide the dictionary forms and translate the terms:

1. occipital border –	6. orbital part –
2. posterior margin –	7. lateral root –
3. sphenoid bone –	8. oculomotor root –
4. temporal bone –	9. deltoid region –
5. transverse part –	10. facial region –

Exercise 7. Translate into English:

1. regio inguinalis dextra –	7. pars abdominalis –
2. pars cruciformis vaginae fibrosae –	8. os zygomaticum –
3. os scaphoideum –	9. os cuneiforme mediale –
4. os cuneiforme intermedium –	10. margo anterior partis petrosae –
5. margo linguae dexter –	11. foramen ischiadicum majus –
6. regio lateralis sinistra –	12. systema nervosum autonomicum –

Self-Assessment

Exercise 8. Translate the following nouns of the 3rd declension into Latin. Pay attention to their form!

English	*Latin*	*English*	*Latin*
***of a** head*	*capit**is***	***of a** liver*	
*leg**s***		*margin**s***	
***of a** foramen*		***of** kidney**s***	
of** cartilage**s		***of a** spleen*	
*system**s***		***of** bas**es***	
*bone**s***		*mouth**s***	
of** net**s		*part**s***	

Exercise 9. Complete the dictionary forms, translate the terms into Latin:

1. <u>lymphatic system</u> – systema,….. lymphaticus,…..	6. <u>fascia of the leg</u> – fascia,… crus,….
2. <u>venous rete</u> – rete,….. venosus,…..	7. <u>fovea of the head of the femur</u> – fovea,….. caput,….. femur,……
3. <u>medial crus</u> – crus,…. medialis,….	8. <u>left crus</u> – crus,…… sinister,…..
4. <u>accessory spleen</u> – lien,,,,, accessorius,….	9 <u>infraorbital foramen</u> – foramen,…. infraorbitalis,….
5. <u>right kidney</u> – ren,…. dexter,….	10. <u>hilus of the spleen</u> – hilus,…. lien,…..

Exercise 10. Provide the dictionary forms and translate the terms:

1. right lung –	5. lunate bone –
2. lateral wall –	6. lacrimal bone –
3. lesser trochanter –	7. superior margin –
4. apex of the auricle –	8. frontal tuber –

Exercise 11. Translate into English:

1. lobus superior pulmonis sinistri –	8. cavitas oris propria –
2. os occipitale –	9. arteria radialis indicis –
3. alae vomeris –	10. fascia dorsalis pedis –
4. paries medialis –	11. systema nervosum peripheric um –
5.pes anserinus superficialis –	12. facies articularis capitis fibulae –
6. pia mater encephali –	13. septum intermusculare cruris anterius –
7. tuber calcanei –	14. rete venosum dorsale pedis –

Exercise 12. Complete the dictionary forms of the adjectives and choose the proper endings for the following nouns:

1.**articulatio (f)** atlantoaxial…. lateral (atlantoaxialis,…; lateralis, …)	10.**phalanx (f)** proximal… (proximalis, …)
2.**canalis (m)** nasolacrimal… (nasolacrimalis, …)	11.**radix (f)** clinic… (clinicus, … …)
3.**canalis (m)** nutrici… (nutricius, … …)	12.**vas (n)** spiral… (spiralis, …)
4.**extremitas (f)** uterin… (uterinus, … …)	13.**pars (f)** alar… (alaris, …)
5.**margo (m)** falciform… (falciformis, …)	14. **pars (f)** pyloric… (pyloricus, … …)
6.**regio (f)** lumbal……medial……. (lumbalis, …; medialis, …)	15. **phalanx (f)** distal… (distalis, …)
7.**cartilago (f)** alar…. min…. (costalis, …; minor, …)	16.**phalanx (f)** medi… (medius, … …)
8.**auris (f)** extern… (externus, … …)	17. **margo (m)** sagittal… (sagittalis, …)
9.**articulatio (f)** sacroiliac… (sacroiliacus, … …)	18.**margo (m)** lambdoide… (lambdoideus, … …)

Exercise 13. Agree the nouns and adjectives and decline the terms:

margo, inis m; lateralis, e

	Singularis	Pluralis
Nom.	**margo lateralis**	
Gen.		

regio, onis f; epigastricus, a, um

	Singularis	Pluralis
Nom.		
Gen.		

foramen, inis n; palatinus, a, um; minor, us

	Singularis	Pluralis
Nom.		
Gen.		

Exercise 14. Choose the correct endings and translate into English:

1. caput infraorbital….. (infraorbitalis,e)	6. foramen palatin…. ma…. (palatinus,a,um; major, jus)
2. caput zygomatic…… (zygomaticus,a,um)	7. crus lateral….. (lateralis,e)
3. corpus geniculat….. lateral….. (geniculatus,a,um; lateralis,e)	8. crus dextr…… (dexter, tra, trum)
4. diaphragma urogenital….. (urogenitalis,e)	9. rete arterios….. (arteriosus,a,um)
5. foramen supraorbital….. (supraorbitalis,e)	10. rete acromial…. (acromialis,e)

Exercise 15. Provide the dictionary forms and translate the terms into English:

1. urogenital system –	5. oral diaphragm –
2. nervous system –	6. pelvic diaphragm –
3. calceneal rete –	7. optic chiasm –
4. parietal foramen –	8. oval foramen –

9. body of the femur –	10. short head –

Key Vocabulary

Provide the dictionary forms for the following words, translate them into English and memorize:

abdomen,	infraorbitalis,
abdominalis,	intermedius,
accessorius,	lien,
appendix,	nervosus,
articulatio,	margo,
auricula,	obturatus,
autonomicus,	peripheric us,
brevis,	os,
canalis,	pars,
cartilago,	radiocarpeus,
cervicalis,	regio,
chiasma,	ren,
cruciformis,	scaphoideus,
crus,	rete,
cuneiformis,	sinister,
femur,	systema,
foramen,	vagina,
hepar,	venosus,

Latin sayings and aphorisms

Diagnosis bona – curatio bona. Good diagnosis – good cure.

Amor tussique non celantur – One cannot hide love and cough.

Vultus est index animi. – The face is the index of the soul.

Mens sana in corpore sano. – A healthy mind in a healthy body.

UNIT VI. TERMINOLOGIA ANATOMICA-5

In this unit

- Peculiarities of 3rd declension nouns of masculine, feminine and neuter genders
- Muscle names referring to their functions
- Exceptions to the gender rule of 3rd declension nouns for all three genders

 Though the 3rd declension nouns may have lots of different endings for each gender, there are certain patterns which are followed quite consistently. In this Unit we will consider the most characteristic endings for each gender, as well as the exceptions to the gender rules.

3rd Declension Nouns of Masculine Gender

 **Exercise 1. Study the endings for the Nominative and Genitive cases and add your own examples for each pattern.**

Nom.	Gen.	Examples:	
-o	**-onis** **-inis**	*pulm**o**, pulmonis* m – *lung* *hom**o**, hominis* m – *man*	
-or	**-oris**	*tum**or**, tumoris* m – *tumour*	
-os	**-oris**	*fl**os**, floris* m – *flower*	
-er	**-ěris** **-ris**	*vom**er**, voměris* m – *vomer* *vent**er**,ventris* m – *venter, belly*	
-es	**-edis** **-etis**	*p**es**, pedis* m – *foot* *pari**es**, parietis* m - *wall*	
-ex	**-icis**	*ap**ex**, apicis* m – *apex*	

What types of stems (consonant, vowel or mixed) do all the above-mentioned nouns have? Why?

 Memorize the exceptions to the masculine gender rule. These nouns have the endings characteristic of the masculine gender, but belong to either feminine or neuter gender. Determine types of stems (consonant, vowel or mixed) they have:

os, ossis **n** – *bone*: **mixed** type	*gaster, tris* **f** – *stomach*: _____ type
os, oris **n** – *mouth*: _____ type	*mater, tris* **f** – *mater*: _____ type
tuber, eris **n** – *tuber*: _____ type	*pia mater – pia mater*
cor, cordis **n** – *heart*: _____ type	*dura mater – dura mater*

Exercise 2. Translate the following nouns of the 3rd declension into Latin (see exercise 1 and exceptions for dictionary forms). Pay attention to their form!

English	*Latin*	*English*	*Latin*
***of a** man*	*homin**is***	***of an** apex*	
*lung**s***		*wall**s***	
of** tumour**s		*m**e**n*	
*f**ee**t*		***of a** mouth*	
of** bone**s		***of a** heart*	
***a** belly*		*stomach**s***	
*tuber**s***		***of** mater*	

Exercise 3. Complete the dictionary forms and translate into Latin:

1. <u>apex of the heart</u> – apex, … cor, ….	6. <u>body of the ischium</u> – corpus, …. os, …. ischium, ….
2. <u>notch of the apex of the heart</u> – injcisura, … apex, … cor, ….	8. <u>lateral cuneiform bone</u> – os, … cuneiformis, … lateralis, ….
3. <u>apex of the sacrum</u>- apex, … os, … sacrum, ….	7. <u>body of the ilium</u> – corpus, … os, … ilium, ….
4. <u>toes</u> – digitus, … pes, ….	9. <u>navicular bone</u> – os, …. navicularis, ….
5. <u>hilus of the lung</u> – hilus, … pulmo, ….	10. <u>parietal bone</u> – os, …. parietalis, ….

Muscle Names Referring to Their Functions

The suffix **-or** is frequently used to form nouns of masculine gender of the 3rd declension to name muscles based on the action they perform.

These names of muscles consist of two nouns in **Nominative** case: the first noun is "*musculus*", usually abbreviated as "***m.***", and the second one is a 3rd declension noun of masculine gender with the suffix **-or** (sometimes **-er** in the words of Greek origin). The number and case of these two nouns always coincide, e.g.:

Nom. Sg. *musculus constrictor;* **Gen. Sg.** *musculi constrictoris*

The names of muscles according to their function are translated into English with the word order opposite to that in Latin, e.g. *m. abductor – abductor muscle.* Except for the **Nominative Case** for the nouns denoting muscle function, multi-word terms for muscles follow the same rules as other terms, e.g.:

*musculus (**Nom.**) levator (**Nom.**) scapulae **(Gen.)***

Exercise 4. Study the examples and make the rule for translation of muscle names from Latin into English:

Latin	English
musculus *erector spinae*	*erector spinae* ***muscle***
musculus *extrensor hallucis longus*	*extrensor hallucis longus* ***muscle***
musculus *adductor magnus*	*adductor magnus* ***muscle***
musculi *levatores costarum*	*levatores costarum* ***muscles***

To translate the Latin term for the muscle into English, you should _____

_____

_____

_____.

Exercise 5. Study the table, provide explanation of the terms in English (use a dictionary if necessary) and memorize them:

m. abductor	*abductor muscle*	that which **abducts**, i.e. moves (a limb or part) away from the midline of the body or from another part
m. adductor	*adductor muscle*	
m. buccinator	*buccinator muscle*	

m. constrictor	*constrictor muscle*	
m. corrugator	*corrugator muscle*	
m. depressor	*depressor muscle*	
m. dilatator	*dilator muscle*	
m. flexor	*flexor muscle*	
m. erector	*erector muscle*	
m. extensor	*extensor muscle*	
m. levator	*levator muscle*	
m. masseter	*masseter muscle*	
m. pronator	*pronator muscle*	
m. supinator	*supinator muscle*	
m. tensor	*tensor muscle*	

Exercise 6. Provide the dictionary forms, translate the terms into Latin and explain their function in English:

1. levator costae muscle – musculus, …… levator, … … costa, … … **L:** musculus levator costae **E:** a muscle lifting a rib	5. levator scapulae muscle – musculus, …… levator, …… scapula, …… **L:** **E:**
2. depressor septi nasi muscle – musculus, … … depressor, … … septum, … … nasus, … … **L:** **E:**	6. abductor digiti minimi muscle – musculus, …… abductor, …… digitus, …… minimus, …… **L:** **E:**
3. flexor carpi radialis muscle - musculus,… flexor,…. carpus,….. radialis,…. **L:** **E:**	7. tensor fasciae latae muscle – musculus,…. tensor,… fascia,…. latus,….. **L:** **E:**
4. corrugator supercilii muscle – musculus, …. corrugator,…. supercilium,…. **L:** **E:**	8. depressor anguli oris muscle – musculus,…. depressor,…. angulus,…. os,……. **L:**

Exercise 7. Decline the muscle names:

	Latin	***English***
Nom. Sg.	*musculus masseter*	*musculus tensor*
Gen. Sg		
Nom. Pl.		
Gen. Pl.		

Self-Assessment

3rd Declension Nouns of Feminine Gender

Exercise 8. Study the endings for the Nominative and Genitive cases and add your own examples for each pattern.

Nom.	Gen.	Examples:	
-io	**-onis**	*reg**io**, reg**ionis*** f – *region*	
-go	**-inis**	*cartila**go**, cartilag**inis*** f	
-do	**-inis**	*longitu**do**, longitud**inis*** f – *length*	
-as	**-atis**	*tuberosit**as**, tuberosit**atis*** f	
-is **-es**	**-is** (pari-syllabic)	*aur**is**, aur**is*** f – *ear* *pub**es**, pub**is*** f - *pubes*	
-us	**-udis**	*inc**us**, incudes* f – *incus, anvil*	
-cons. +s	**-tis**	*par**s**, par**tis*** f – *part*	
-x **(-ex)**	**-gis** **-cis**	*menin**x**, meninges* f – *meninx* *vo**x**, vo**cis*** f – *voice*	

Determine types of stems for the above-mentioned nouns.

Memorize the exceptions to the feminine gender rule. These nouns have the endings characteristic of the feminine gender, but belong to either masculine or neuter gender. Determine types of stems (consonant, vowel or mixed) they have:

atlas, antis **m** – *atlas, the 1st cervical vertebra:* **mixed** type *axis, is* **m** – *axis; the 2nd cervical vertebra*: _____ type *calix, icis* **m** – *calix, a cuplike organ or cavity:* _____ type *canalis, is* **m** – *canal:* _____ type *dens, dentis* **m** – *tooth:* _____ type *fornix, icis* **m** - *vault, fornix:* _____ type *hallux, ucis* **m** – *hallux, the great toe:* _____ type *larynx, ngis* **m** *(Gr.) – larynx:* _____ type	*margo, inis* **m** – *margin:* _____ type *sanguis, inis* **m** – *blood:* _____ type *tendo, inis* **m** – *tendon:* _____ type *thorax, acis* **m** *(Gr.) – thorax, chest:* _____ type *unguis, is* **m** – *nail:* _____ type *vermis, is* **m** – *vermis, a wormlike structure:* _____ type *pharynx, ngis* **m** *(Gr.) – pharynx:* _____ type *coccyx, ygis* **m** *(Gr.) – coccyx:* _____ type
pancreas, atis **n** *(Gr.) – pancreas:* _____ type	*vas, vasis* **n** – *vessel:* _____ type

Exercise 9. Translate the following nouns of the 3rd declension into Latin (see exercise 8 and exceptions for dictionary forms).

English	*Latin*	*English*	*Latin*
***of a** region*	*region**is***	***of an** atlas*	
*t**ee**th*		*tendon**s***	
***of a** pancreas*		*part**s***	
of** margin**s		***of a** meninx*	
blood		*ear**s***	
*nail**s***		***of** anvil**s***	
***of a** hallux*		***of a** coccyx*	

Exercise 10. Complete the dictionary forms and translate into Latin:

1. sternocostal **joints** – articulatio,… sternocostalis,…. Nom.pl:	6. **cartilages** of the larynx - cartilago,… larynx,… Nom.pl:
2. intercarpal **articulations** – articulatio,…. intercarpeus,….. Nom.pl:	7. incisive **teeth** – dens,… incisivus,… Nom.pl:
3. lateral **canals** – canalis,… lateralis,… Nom.pl:	8. premolar (**teeth**)– dens,… premolaris,… Nom.pl:
4. lesser palatine **canals** – canalis,… palatinus,… minor,…. Nom.pl:	9. lateral abdominal **regions** – regio,… abdominalis,… lateralis,…. Nom.pl:
5. lesser alar **cartilages** – cartilago,… alaris,…… minor,… Nom.pl:	10. **regions** of the neck – regio,… collum,… Nom.pl:

Exercise 11. Underline the nouns, determine their declension, number and case and translate the terms into English:

3rd, Nom. Sg. 1. articulatio radioulnaris distalis – *distal radioulnar articulation (joint)*	6. cartilagines nasales accessoriae –
2. axis bulbi externus –	7. cavitas glenoidalis scapulae –
3. canalis nervi facialis –	8. ligamentum transversum atlantis –
4. facies buccalis dentis –	9. margo posterior patris petrosae –
5. ligamentum apicis dentis –	10. ostium appendicis vermiformis –

3rd Declension Nouns of Neuter Gender

Exercise 12. Study the endings for the Nominative and Genitive cases and add your own examples for each pattern.

Nom.	**Gen.**	**Examples:**	
-en	**-inis**	*faram**en,** foram**inis* **n**	
-us	**-oris** **-uris** **-eris**	*corp**us**, corpor**is* **n** – *body* *cr**us**, cr**uris* **n** – *leg, crus* *vuln**us,** vuln**eris* **n** – *wound*	
-ur	**-oris**	*fem**ur**, fem**oris* **n**	
-e	**-is**	*ret**e**, ret**is* **n** – *rete, net*	
-al	**-alis**	*anim**al**, anim**alis* **n**	
-ar	**-atis**	*hep**ar**, hep**atis* **n –** *liver*	
-ma (Gr.)	**-atis**	*syste**ma,** system**atis* **n**	
-c	**-tis**	*la**c**, lac**tis* **n –** *milk*	
-l	**-is**	*fe**l**, fel**lis* **n –** *bile*	
-ut	**-itis**	*cap**ut**, cap**itis* **n** – *head*	

Determine types of stems for the above-mentioned nouns. All three are possible!

Memorize the exceptions to the neuter gender rule:

ren, renis **m** – *kidney:* _____ type	*lien, lienis* **m** – *spleen:* _____ type

There is one more 3rd declension word which should be memorized because of peculiarities of its endings for Plural:

	Singularis	**Pluralis**
Nom.	vas *(vessel)*	vas-**a** *(vessels)*
Gen.	vas-**is** *(of the vessel)*	vas-**orum** *(of the vessels)*

Endings of which declension do the plural forms have?

Exercise 13. Translate the terms into Latin and decline them:

ciliary body:

corpus, oris n; *ciliaris, e*

Nom. Sg.	*corpus ciliare*
Nom. Pl.	
Gen. Sg.	
Gen. Pl.	

autonomic nervous system:

systema, atis n; *nevrosus, a, um*; *autonomicus, a, um*

Nom. Sg.	
Nom. Pl.	
Gen. Sg.	
Gen. Pl.	

lesser palatine foramen:

foramen, inis n; *palatinus, a, um*; *minor, us*

Nom. Sg.	
Nom. Pl.	
Gen. Sg.	
Gen. Pl.	

Exercise 14. Agree the nouns with the adjectives, circle correct endings, translate the terms (orally):

foramen (ethmoidalis, e; anterior, ius; frontalis, e; magnus, a, um);

corpus (adiposus, a, um; ciliaris, e);

crus (lateralis, e; anterior, ius);

rete (acromialis, e; arteriosus, a, um; medialis, e);

caput (brevis, e; longus, a, um; obliquus, a, um; lateralis, e; profundus, a, um);

systema (urogenitalis, e; lymphaticus, a, um; centralis, e; respiratorius, a, um).

Exercise 15. Provide the dictionary forms and translate the terms into Latin:

1. accessory interrenal **bodies** – corpus, oris n interrenalis, e accessorius, a, um ***corpora** interrenalia accessoria*	9. right and left **crura** –
2. paraaortic **bodies** –	10. membranous **crura** –
3. nutricient **vessels** –	11. intervertebral **foramina** –
4. right and left **kidneys** –	12. pelvic sacral **foramina** –
5. lymphatic system –	13. fascia of the leg –
6. venous rete –	14. fovea of the head of the femur –
7. accessory spleen –	15. infraorbital foramen –
8. frontal tuber –	16. hilus of the spleen –

Exercise 16. Underline the nouns, determine their declension, number and case and translate the terms into English:

1. appendix fibrosa hepatis-	6. foramen ischiadicum majus –
2 systema nervosum autonomicum-	7. chiasma tendinum –
3. systema nervosum periphericum-	8. septum intermusculare cruris anterius –
4. facies articularis capitis fibulae –	9. fascia lata femoris –
5. cavitas abdominis-	10. rete venosum dorsale pedis –

Key Vocabulary

Provide the dictionary forms for the following words, translate them into English and memorize:

articulatio,	impressio,
carpus,	pelvis,
cavitas,	pulmo,
chiasma,	pupilla,
cor,	radix,
crus,	rete
digitus,	systema,
femur,	tympanum,
hepar,	ulna,
hilus,	vas,

Latin sayings and aphorisms

***O tempora! O mores!* –** O, the times! O, the morals!

***Non scholae sed vitae discimus.* –** We do not learn for school, but for life.

UNIT VII. TERMINOLOGIA ANATOMICA-6

In this unit

- 1st, 2nd and 3rd declension nouns in combination with II class adjectives
- Present Participle and its declension
- Anatomical terms consisting of nouns and participles

 Revise everything you know about the adjectives in Latin, use the Table (if necessary) and answer the following questions:

1. How many endings may the adjectives have? From _____ to ____.

2. Which group of the adjectives has the most miscellaneous endings? The _____ class.

3. Which gender is always the first to be presented in an adjective entry? _____. The last? _____.

4. Study the following entries. One is for a noun, and another is for an adjective. How can you distinguish between the two? _____.

*descende**ns**, **entis***; *de**ns**, d**entis*** **m**.

Which group does this adjective belong to? The _____ class.

For the purpose of convenience, we refer to such words as *descende**ns**, **entis*** as to adjectives, though in fact they are participles.

Present Participle (Partitipium praesentis activi)

A participle is formed from a verb but looks and functions like an adjective. This means that it agrees with the noun it modifies in **number, case** and **gender**. We form **Partitipia praesentis activi** by adding the ending **-ns** to the stems of the first and second conjugation verbs (**Gen. -ntis**), and the ending **-ens** to the stems of the third and fourth conjugation verbs (**Gen. -entis**):

sano, sanavi, sanatum, ***sana-re*** *I – to treat*	***sana-ns*** *– treating*
misceo, miscui, mixtum, ***misce-re*** *II – to mix*	***misce-ns*** *– mixing*
solvo, solvi, solutum, ***solv-ere*** *III – to dissolve*	***solv-ens*** *– dissolving*
audio, audivi, auditum, ***audi-re*** *IV – to hear*	***audi-ens*** *– hearing*

The dictionary form of the **Present Participle** resembles the entry for the adjectives of II class with one ending, e.g.: *simplex, icis*. To differentiate between the **participles** and the **3rd declension nouns** mind that **gender** reference in the dictionary is for **nouns** only: *sanans, ntis; miscens, ntis; solvens, ntis; audiens, ntis.*

Exercise 1. Determine the stem of the present participles and decline them. Mind Nominative Plural for the neuter gender!

ascendens, ntis (ascending)

	m	**f**	**n**
Nom. Sg.			
Gen. Sg.			
Nom. Pl.			
Gen. Pl.			

fluctuans, ntis (floating)

	m	**f**	**n**
Nom. Sg.			
Gen. Sg.			
Nom. Pl.			
Gen. Pl.			

Exercise 2. Determine the class of the adjectives and participles and complete the dictionary forms:

thoracicus, ….	major, ….	intermedius, ….
pyramidalis, ….	permanens, ….	opponens, ….
gastricus, ….	efferens, ….	peripheric**u**s, ……
recurrens, …	lumbalis, ….	posterior, ….
inferior, ….	peripheric**u**s, ….	accelerans, ……

Exercise 3. Translate the terms into English. Mind the Number!

1. arteria cervicalis ascendens –	5. costae fluctuantes –
2. rami perforantes –	6. vas afferens –
3. ramus descendens arteriae occipitalis –	7. musculus opponens digiti minimi –
4. venae lumbales ascendentes –	8. nervi laryngei recurrentes –

Exercise 4. Complete the dictionary forms and translate the terms into Latin (provide both Sg. and Pl. Nom. forms):

1. anterior ascending branch**es** – ramus, … … anterior, … … ascendens, … … **Nom. Sg.:** **Nom. Pl.:**	7. radial recurrent arteri**es** – arteria, … … recurrens, … … radialis, … … **Nom. Sg.:** **Nom. Pl.:**
2. posterior tibial recurrent arteri**es** – arteria, … … recurrens, … … tibialis, … … posterior, … …. **Nom. Sg.:** **Nom. Pl.:**	8. 7th prominent vertebr**a** – vertebra, … … prominens, … … septimus, … … **Nom. Sg.:** Why **no** Plural?
3. descending colon – colon, … …. descendens, … … **Nom. Sg.:** Why **no** Plural?	9. ascending aorta – aorta, … … ascendens, … … **Nom. Sg.:** Why **no** Plural?
4. perforating branch**es** – ramus, … … perforans, … … **Nom. Sg.:** **Nom. Pl.:**	10. permanent t**ee**th – dens, … … permanens, … … **Nom. Sg.:** **Nom. Pl.:**
5. comitant arteri**es –** arteria, … … comitans, …… **Nom. Sg.:** **Nom. Pl.:**	11. opponens muscle**s** – musculus, …… opponens, … … **Nom. Sg.:** **Nom. Pl.:**
6. deferent duct**s** – ductus, …… deferens, …… **Nom. Sg.:** **Nom. Pl.:**	12. ascending palatine arteri**es** – arteria, … … palatinus, …… ascendens, …… **Nom. Pl.:**

Self-Assessment

Exercise 5. Determine the declension of the nouns and the class of the adjectives or participles, decline the terms and translate each form into English:

nervus (___ declension) abducens (_____)

	Latin	*English*
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

vas (!) (___ declension) prominens (_____)

	Latin	*English*
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

camera (___ declension) anterior (_____)

	Latin	*English*
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

foramen (___ declension) vertebralis (_____)

	Latin	*English*
Nom. Sg.		
Gen. Sg.		
Nom. Pl.		
Gen. Pl.		

Exercise 6. Determine the declension of the nouns and the group (class) of the adjectives and put the terms into Genitive Singular:

Nom. Sg.	*Gen. Sg.*
nervus (**2nd**) tibialis (**II class**)	*nerv**i** tibial**is***
ventor (___) inferior (_____)	_____
cartilago (___) minor (_____)	_____
aorta (___) ascendens (_____)	_____
ligamentum (___) posterius (_____)	_____
costa (___) fluctuans (_____)	_____

Exercise 7. Complete the dictionary forms. Agree the nouns and adjectives and translate the terms into Latin:

1. occipital belly – venter, … … occipitalis, …….	6. occipital region – regio, ……. occipitalis, …….
2. muscular coat of the pharynx – tunica, ……. muscularis, ……. pharynx, …….	7. lateral malleolar network – rete, …… malleolaris, …… lateralis, ……
3. tuberosity of the distal phalanx – tuberositas, ……. phalanx, ……. distalis, …….	8. tibialis posterior muscle – musculus, ……. tibialis, ……. posterior, …….
4. infraglenoid tubercle – tuberculum, ……. infraglenoidalis, …….	9. anterior wall – paries, ……. anterior, …….
5. groove for the ulnar nerve – sulcus, ……. nervus, ……. ulnaris, …….	10. geniculum of the facial canal – geniculum, ……. canalis, ……. facialis, …….

Exercise 8. Provide the dictionary forms and translate the terms in Pl.:

1. tracheal **cartilages** – cartilago, … trachealis, …	3. orbiculares **muscles** – musculus, … orbicularis, …
2. lesser **wings** – ala, …. major, …	4. collateral **ligaments** – ligamentum, … collateralis, …

5. superior and inferior labial **arteries** – arteria, … labialis, … superior, …. inferior, ….	7. superior and inferior costal **foveae** – fovea, … costalis, … superior, … inferior, ….
6. dorsal sacral **foramina** – foramen, … sacralis, … dorsalis, ….	8. lateral **parts** of the occipital bone – pars, … lateralis, … os, …. occipitalis, ….

Exercise 9. Match the corresponding adjectives (given in the table) and the following nouns and translate the terms into English:

~~thoracica descendens,~~ cava ascendens, fluctuans, communicantes, communicans posterior, ascendens, efferens, opponens pollicis, abducens

Latin term	***Translation into English***
1. aorta *thoracica descendens*	*descending thoracic aorta*
2. colon _____	
3. nervus_____	
4. vas_____	
5. vena_____	
6. arteria_____	
7. arteriae_____	
8. musculus_____	
9. costa_____	

Exercise 10. Determine the case, number and gender of the terms from exercises 8 and 9 and provide their appropriate forms:

Latin	*English*
1. ligament**orum** collateral**ium** **(Gen., Pl., n)**	***of** collateral ligament**s***
2. cartilaginis trochlearis (_____, _____, _____)	
3. venae cavae ascendentis (_____, _____, _____)	
4. vasa efferentia (_____, _____, _____)	
5. foraminis sacralis dorsalis (_____, _____, _____)	
6. musculorum orbicularium (_____, _____, _____)	
7. arteria communicans (_____, _____, _____)	
8. coli ascendentis (_____, _____, _____)	
9. nervi abducentes (_____, _____, _____)	
10. costarum fluctuantium (_____, _____, _____)	
11. foveae costalis (_____, _____, _____)	

Exercise 11. Provide the dictionary forms and translate into Latin:

1. pyramidalis muscle –	3. inferior nucleus –
2. medial meniscus –	4. scapular line –

5. lateral ligament –	9. supraorbital notch –
6. vertebral foramen –	10. ciliary body –
7. fossa of the lacrimal gland –	11. posterior auricular muscle –
8. joints of thorax –	12. interosseous membrane of forearm –

Exercise 12. Translate the terms into English:

1. ligamentum atlantooccipitale anterius –	6. vena scapularis dorsalis –
2. sulcus ulnaris antebrachii –	7. regio lumbalis lateralis –
3. septum intermusculare cruris posterius –	8. musculus spinalis thoracis, cervicis et capitis –
4. regio umbilicalis –	9. partes laterales ossis sacri –
5. plica longitudinalis duodeni –	10. membrana atlantooccipitalis anterior –

Key Vocabulary

Provide the dictionary forms for the following words, translate them into English and memorize:

abducens,	meniscus,
antebrachium,	opponens,
aorta,	plica,
ascendens,	pollex,
atlantooccipitalis,	pyramidalis,
auricularis,	recurrens,
communicans,	scapularis,
descendens,	thoracicus,
efferens,	thorax,
glandula,	ulnaris,
interosseous,	umbilicalis,
longitudinalis,	vas,
lumbalis,	vertebralis,
membrana,	

Latin sayings and aphorisms

Exercise 13. Analyze grammatical categories of the words in the proverbs and translate them into English. Dictionary forms are provided:

Omnium artium medicina nobilissima est.

omnia, omnium **n pl.** – *all*

ars, artis **f** – *art, craft*

medicina, ae **f** – *medicine*

nobilissimus, a, um – the noblest

est = ***is***

_____

Repetitio est mater studiorum.

repetitio, onis **f –** *repetition*

mater, tris **f** – *mother*

studium, i **n** – *study, devotion*

_____

UNIT VIII. TERMINOLOGIA ANATOMICA-7

In this unit

- Nouns of the 4th and 5th declensions
- Revision of all topics on anatomical terminology

4th Declension (Declinatio Quarta)

The nouns of **masculine** gender ending in **-us** and nouns of **neuter** gender ending in **-u** in **Nominative singular** belong to the **fourth declension**. The ending in **Genitive singular** is **-us** for both genders, e.g.:

processus, us **m** – *process; cornu, us* **n** – *horn, cornu.*

Memorize the **exceptions** to the **masculine** gender rule. These nouns have the ending **-us**, but belong to **feminine** gender:

manus, us **f** – *hand*	*Quercus, us* **f** – *oak*

Exercise 1. Determine the stem of the nouns, decline them and translate into English:

	Latin	***English***	***Latin***	***English***
Entry	*arcus, us* m		*genu, us* n	
Nom. Sg.				
Gen. Sg				
The stem				
Nom. Pl.				
Gen. Pl.				

Exercise 2. Study Table 1 and examples in Exercise 1 and answer the following questions:

1. Which forms of the 4th declension nouns of **masculine** gender have the same endings? _____, _____ and _____.

2. Which forms of the 4th declension nouns of **neuter** gender have the same endings? _____ and _____.

3. The nouns of which other declensions may have the ending **-us** in Nominative Singular? _____ and _____. How can you distinguish between them? _____.

4. Can we determine the form of the 4th declension noun used separately (e.g., *ductus*)? Why is it impossible? Because the ending **-us** is characteristic for three forms: _____,_____ and _____.

Exercise 3. Provide the dictionary forms and translate into Latin:

1. anterior arch of the atlas – arcus, …… anterior, …… atlas, ……	7. opening of nasolacrimal duct apertura, …… ductus, …… nasolacrimalis, ……
2. parotid duct – ductus, …… parotideus, ……	8. maxillary sinus**es** – sinus, …… maxillaris, ……
3. aortic opening (hiatus)– hiatus, …… aorticus, ……	9. nasolacrimal duct**s** – ductus, …… nasolacrimalis, ……
4. external acoustic meatus – meatus, …… acusticus, …… externus, ……	10. anterior clinoid process – processus, …… clinoideus, …… anterior, ……
5. pterygoid plexus – plexus, …… pterygoideus, ……	11. aditus of the larynx – aditus, …… larynx, ……
6. pyramidal process**es** – processus, …… pyramidalis, ……	12. costal pit of transverse process fovea, …… costalis, …… processus, …… transversus, ……

5th Declension (Declinatio Quinta)

The nouns of **feminine** gender ending in **-es** in **Nominative singular** belong to the **fifth declension**. The ending in **Genitive singular** is **-ei**, e.g.:

facies, ei **f** – *face, surface; species, ei* **f** – *species, tea (a dosage form).*

As usual, the ending of **Gen. Sg. (-ei)** helps to distinguish between these nouns and the **3rd declension** nouns of **masculine** and **feminine** genders, e.g.: *pari**es***, *et**is*** **m**; *tab**es***, ***is*** **f.**

Exercise 4. Agree the nouns with the adjectives, circle the correct ending:

processus (costotransversarius, a, um; coronoideus, a, um; pterygoideus, a, um; zygomaticus, a, um; sphenoidalis, e; lacrimalis, e; jugularis, e);

facies (posterior, ius; medialis, e; infraorbitalis, e; temporalis, e; articularis, e);

arcus (palmaris, e; profundus, a, um; superficialis, e);

sinus (caroticus, a, um; cavernosus, a, um; frontalis, e);

cornu (coccygeus, a, um; inferior, ius; lateralis, e; sacralis, e; major, jus; temporalis, e).

Exercise 5. Decline the following terms and translate them into English (orally):

sinus, us m; *transversus, a, um*

	Singularis	**Pluralis**
Nom.		
Gen.		

cornu, us n; *inferior, ius*

	Singularis	**Pluralis**
Nom.		
Gen.		

cornu, us n; *sacralis, e*

	Singularis	**Pluralis**
Nom.		
Gen.		

facies, ei f; *articularis, e; cuboideus, a, um*

	Singularis	**Pluralis**
Nom.		
Gen.		

Exercise 6. Complete the dictionary forms and translate the terms:

	Singularis	**Pluralis**
arcus, us m	inferior dental arch – arcus, …. dentalis, …. inferior, ……	superior et inferior arches –
plexus, us m	inferior rectal plexus- plexus, …. rectalis, …. inferior, ….	inferior rectal plexuses –
	cardiac plexus – plexus, …. cardiacus, ….	cardiac plexuses –
cornu, us n	greater horn – cornu, …. major, ….	greater horns –
	coccygeal horn – cornu, …. coccygeus, ….	coccygeal horns –
processus, us m	ciliary process- processus, …. ciliaris, …	ciliary processes –
	anterior clinoid process – processus, …. clinoideus, …. anterior, ….	anterior clinoid processes –
tractus, us m	pyramidal tract – tractus, …. pyramidalis, ….	pyramidal tracts –

Exercise 7. Provide the dictionary forms and translate into Latin:

1. spinous process –	2. lesser sublingual duct**s** –

3. posterior process of the talus –	9. inferior sagittal sinus –
4. jugular process**es** –	10. inferior nasal meatus –
5. piriform recess**es** –	11. pharyngeal plexus –
6. frontal sinus**es** –	12. accessory process**es** –
7. cochlear duct**s** –	13. pterygoid process –
8. inferior surface of the tongue –	14. articular facet of tubercle of rib

Exercise 8. Translate the terms into English:

1. ductus sublinguales majores –	5. processus mastoidei –
2. facies lingualis dentis –	6. ductus lymphaticus dexter –
3. hiatus canalis nervi petrosi majoris –	7. genu capsulae internae –
4. meatus nasi medius –	8. arcus lumbocostales laterales –

9. processus lateralis tuberis calcanei –	12. arcus tendineus fasciae pelvis –
10. apertura sinus frontalis –	13. articulatio genus –
11. cartilago meatus acustici –	14. facies articularis capitis costae –

Key Vocabulary

Provide the dictionary forms for the following words, translate them into English and memorize:

aditus,	plexus,
apertura,	recessus,
ductus,	sinus,
genu,	olfactorius,
hiatus,	submucosus,
meatus,	tendineus,
piriformis,	tractus,

Latin sayings and aphorisms

Exercise 9. Analyze grammatical categories of the words in the proverbs and translate them into English. Dictionary forms are provided:

Optimum medicamentum quies est.

optimus, a, um – the best, excellent

medicamentum, i n – *remedy, medicine*

quies, etis f – *rest, quiet*

est = is

_____

Salus aegroti suprema lex (est).

salus, utis f – *well-being, health*

aegrotus, i m – *a patient, a sick person*

supremus, a, um – the greatest, supreme

lex, legis f – *law*

_____

Self-Assessment

Exercise The Last! Revise all the material and check your knowledge:

Part 1
I. Define the pronunciation of Latin letter-combination:
a-**qu**-a: a) kv; b) ku
II. Determine the declension of the noun:
digitus, i m: a) 1; b) 2; c) 3; d) 4; e) 5
III. Determine the case of the 3-rd declension noun:
apic**es:** a) Nom. sing. b) Gen. sing. c) Nom. pl. d) Gen. pl.
IV. Determine the class of the adjective:
fibrosus, a, um: a) I; b) II; c) the Comparative degree
Part 2
V. Make agreement between the noun and the adjectives, choose and circle correct generic endings:
1. angulus 1) mastoideus, a, um 2) medialis, e 3) superior, ius
VI. Choose the correct answer:
petrosal vein a) vena petrosus b) vena petrosa c) vena petrosum
VII. Determine the gender of the 3-rd declension noun:
apex, icis a) m; b) f; c) n
VIII. Circle corresponding generic ending:
aponeurosis (palmar**is**, palmar**e**)
IX. Determine the case:
pulmonis sinistri a) Nom. Sg. c) Nom. Pl.; b) Gen. Sg. d) Gen. Pl.
X. Make agreement, circle corresponding ending (the term is in Nom. pl.):
ligamenta – a) cruciat**a** b) cruciat**es** c) cruciat**um**

Part 3	
I. Complete the dictionary forms, translate the terms into Latin:	**II. Translate into English:**
1. lesser wings – ala, …. minor, ….	1. os cuneiforme mediale – –
2. apex of the patella – apex, …. patella, ……	2. musculus flexor digitorum brevis –
3. alveolar arch – arcus, …. alveolaris, …	3. musculus adductor longus –
4. left coronary artery – arteria, …. coronaries, … sinister, ….	4. margo superior partis petrosae –
5. atlantoaxial joint – articulatio, …. atlantoaxialis, ….	5. ligamentum transversum acetabuli –
6. external cranial base – basis, …… cranium, , , , , externus, ….	6. lamina horizontalis ossis palatini –
7. lacrimal canaliculus – canaliculus, … lacrimalis, ….	7. corpus coccygeum –
8. infraorbital head – caput, …… infraorbitalis, ….	8. foramen ischiadicum majus-
9. cricoid cartilage – cartilago, …. cricoideus, ….	9. concha nasalis superior –
10. abdominal cavity – cavitas, … abdomen, ….	10. chiasma tendinum –

APPENDICES

Table A.1

Numerals

Arabic numbers	Cardinal numbers	Ordinal numbers (declined as II class adj.)	Roman numbers
1	unus, a, um	primus, a, um	I
2	duo, duae, duo	secundus, a, um	II
3	tres, tria	tertius,a,um	III
4	quattuor	quartus,a,um	IV
5	quinque	quintus,a,um	V
6	sex	sextus,a,um	VI
7	septum	septimus,a,um	VII
8	octo	octavus,a,um	VIII
9	novem	nonus,a,um	IX
10	decem	decimus,a,um	X
11	undecim	undecimus,a,um	XI
12	duodecim	duodecimus,a,um	XII
13	tredecim	tertius (a,um) desimus,a,um	XIII
14	quattuordecim	quartus (a,um)decimus,a,um	XIV
15	quindecim	quintus (a,um)decimus,a,um	XV
16	sedecim	sextus (a,um)decimus,a,um	XVI
17	septendecim	septimus (a,um)decimus,a,um	XVII
18	duodeviginti	duodevicesimus,a,um	XVIII
19	undeviginti	undevicesimus,a,um	XIX
20	viginti	vicesimus,a,um	XX
21	viginti unus *or* unus et viginti	unus et vicesimus,a,um *or* vicesimus primus	XXI
30	triginta	tricesimus,a,um	XXX
40	quadraginta	quadragesimus,a,um	XL
50	quinquaginta	quinquagesimus,a,um	L
60	sexaginta	sexagesimus,a,um	LX
70	septuaginta	septuagesimus,a,um	LXX
80	octoginta	octogesimus,a,um	LXXX
90	nonaginta	nonagesimus,a,um	XC
100	centum	centesimus,a,um	C
200	ducenti,ae,a	ducentesimus,a,um	CE
1000	mille	millesimus,a,um	M
2000	duo milia	bis millesimus,a,um	MM

Table A.2

Correspondence between Cases in Latin and their Equivalents in English

Latin	English
Nominativus (Nom.)	**Nominative** is used when a noun is the subject of the sentence.
Genetivus (Gen.)	**Genitive** denotes possession. It is usually translated by "of" and a noun.
Dativus (Dat.)	**Dative** is usually translated by "to" or "for" and a noun.
Accusativus (Acc.)	**Accusative** is usually dependent on a verb. It is used to express a direct object.
Ablativus (Abl.)	**Ablative** is usually translated by "by", "with", "from", "on" or "in" and a noun.
Vocativus (Voc.)	**Vocative** is used to address a person

Table A.3

The Most Characteristic Endings of Nouns according to their Gender

Endings in Nominative Singular		
Feminine gender (f)	**Masculine gender (m)**	**Neuter gender (n)**
-a (I decl.): cost**a, ae f** I – rib pulp**a, ae f** I – pulp vertebr**a, ae f** I – vertebra lamin**a, ae f** I – plate	**-us** (**II, IV decl.)**. Dictionary forms are different depending on the declension: angul**us**, i, **m** II – angle sulc**us**, i **m** II – sulcus, groove arc**us**, us **m** IV – arch process**us**, us **m** IV – process **NB:** Ending **-us** belongs to some nouns of III declension. Memorise the most common ones: **corpus, oris n** and **crus, cruris n**.	**-um, -on (Gr.)(II decl.)** tubercul**um, i n** II **–** tubercle acromi**on, i n** II **–** acromion stern**um, i n** II **–** sternum skelet**on, i n** II **-** skeleton

LATIN-ENGLISH VOCABULARY

A

abdomen, inis n	abdomen
abdominalis,e	abdominal
abducens,entis	abducens
abductor, oris m	abductor (muscle)
accessorius,a,um	accessory
acetabulum, i n	acetabulum
acromialis,e	acromial
acromion, i n	acromion
acusticus,a,um	acoustic, auditory
acutus,a,um	acute
adductor,oris m	adductor (muscle)
adductorius,a,um	adductor
adiposus,a,um	fatty
aditus, us m	aditus
ala, ae f	ala,wing
alae,arum pl/f	alae,wings
alaris,e	alar
albus,a,um	white
alveolaris,e	alveolar
alveoli,orum pl/m	alveoli, sockets
alveolus, i m	alveolus, socket
ampulla, ae f	ampulla
ampullae,arum pl/f	ampullae
ampullaris,e	ampullar
analis,e	anal
anastomoticus,a,um (Gr.)	anastomotic
anatomicus,a,um (Gr.)	anatomical
angularis,e	angular
angulus, i m	angle
ansa,ae f	loop
ansae,arum pl/f	loops
anserinus,a,um	anserine
antebrachium, i n	antebrachium
anterior, ius	anterior
anterobasalis,e	anterobasal
antrum, i n	antrum
anularis,e	anular
anuli, orum pl/m	rings
anulus, i m	ring
aorta,ae f (Gr.)	aorta
aorticus,a,um	aortic
apertura, ae f	aperture, opening
aperturae, arum pl/f	apertures, openings
apex, icis m	apex,head
aponeurosis, is f (Gr.)	aponeurosis
appendix, icis f	appendix
aqueductus, us m	aqueduct
arachnoidalis,e	arachnoidal
arcus, us m	arch
area, ae f	area
areae, arum pl/f	areas
arteria, ae f (Gr.)	artery
arteriae, arum pl/f	arteries
arteriola,ae f (Gr.)	arteriole
arteriolae, arum pl/f	arterioles
articularis,e	articular
articulatio, onis f	articulation, joint
articulationes/um pl/f	articulations, joints
arytenoideus,a,um (Gr.)	arytenoid
ascendens, entis	ascending
asper, era, erum	asper
atlas, antis m (Gr.)	atlas
atrioventricularis,e	atrioventricular
atrium, i n	atrium
auditivus,a,um	auditory
auricula, ae f	auricle
auricularis,e	auricular
auris, is f	ear
axilla, ae f	axilla
axillaris,e	axillary
axis, is m	axis
azygos (Gr.)	azygos

B

barba, ae f	beard
basalis,e (Gr.)	basal
basilaris,e (Gr.)	basilar
basis, is f (Gr.)	base
biceps, ipitis	biceps
bicipitalis,e	bicipital
bicuspidalis,e	bicuspidal
bilateralis,e	bilateral
brachialis,e	brachial
brachium, i n (Gr.)	brachium
brevis,e	short
bronchi, orum pl/m (Gr.)	bronchi
bronchialis,e	bronchial

bronchus, i m (Gr.)	bronchus
bucca, ae f	bucca, cheek
buccae, arum pl/f	buccae,cheeks
buccalis,e	buccal
buccinator, oris (musculus) m	buccinator
buccinatorius,a,um	buccinator
bulbiformis,e	bulbiform
bulbus, i m (Gr.)	bulb
bursa, ae f (Gr.)	bursa
bursae, arum pl/f	bursae

C

calcaneocuboideus,a,um	calcaneocuboid
calcaneonavicularis,e	calcaneonavicular
calcaneus, i m (os salcis)	calcaneus
calcar, is n	calcar
calix,icis m	calix
callosus,a,um	callose
calvaria, ae f	calvaria
camera, ae f (Gr.)	camera
canales,um pl/m	canals
canaliculi, orum pl/m	canaliculi,small canals
canaliculus, i m	canaliculus, small canal
canalis, is m	canal
caninus,a,um	canine
capillaris,e	capillary
capitatus,a,um	capitate
capitulum, i n	capitulum,small head
capsula, ae f	capsule
capsulae, arum pl/f	capsules
caput, itis n	head
cardiacus,a,um	cardiac
cardiovascularis,e	cardiovascular
caroticotympanicus,a,um	caroticotympanic
caroticus,a,um	carotid
carotis, idis f (Gr.)	carotis
carpalis,e (Gr.)	carpal
carpeus,a,um (Gr.)	carpal
carpometacarpeus,a,um	carpometacarpal
carpus, i m (Gr.)	carpus,wrist
cartilagines, um pl/f	cartilages
cartilagineus,a,um	cartilaginous
cartilago, inis f	cartilage
cauda, ae f	cauda
caudalis,e	caudal
caudatus,a,um	caudate
cavernosus,a,um	cavernous
cavitas, atis f	cavity
cavum, i n	cavum
cavus,a,um	caval
cecalis,e	cecal
cecum, i n	cecum
cecus,a,um	cecal
celia, ae f	celia
celiacus,a,um	celiac
cellula, ae f	cellule
cellulae, arum pl/f	cellules
centralis,e (Gr.)	central
centrum, i n (Gr.)	centre
cephalicus,a,um (Gr.)	cephalic
cerebellaris,e	cerebellar
cerebellum, i n	cerebellum
cerebralis,e	cerebral
cerebrum, i n	cerebrum
cervicalis,e	cervical
cervicothoracicus,a,um	cervicothoracic
cervix, icis f	cervix
chiasma, atis n (Gr.)	chiasm
chirurgicus,a,um (Gr.)	surgical
choledochus,a,um (Gr.)	choledochal
chorda, ae f (Gr.)	cord
ciliaris,e	ciliary
cilium, i n	cilium
cinereus,a,um	cinereal
cingulum, i n	cingulum, girdle
circularis,e	circular
circumferentia, ae f	circumference
circumflexus,a,um	circumflex
cisterna, ae f	cistern
claustrum, i n	claustrum
clavicula, ae f	clavicle
clavicularis,e	clavicular
clinoideus,a,um (Gr.)	clinoid
clitoris, oridis f (Gr.)	clitoris
clivus, i m	clivus
coccygeus,a,um (Gr.)	coccygeal

coccyx, ygis m (Gr.)	coccyx
cochlea,ae f (Gr.)	cochlea
cochlearis,e	cochlear
colicus,a,um	colic
collateralis,e	collateral
collum, i n	neck
colon, i n (Gr.)	colon
columna, ae f	column
columnae, arum pl/f	columns
commissura, ae f	commissure
commissurae, arum pl/f	commissures
communicans, antis	communicating
communis,e	common
concha, ae f (Gr.)	concha
condylaris,e (Gr.)	condylar
condylus, i m (Gr.)	condylus
conoideus,a,um	conoid
constrictor, oris (musculus) m	constrictor
cor, cordis n	heart
coracoacromialis,e	coracoacromial
coracobrachialis,e	coracobrachial
coracoclavicularis,e	coracoclavicular
cornea, ae f	cornea
cornealis,e	corneal
cornu, us n	cornu (horn)
cornua, cornuum pl/n	cornua (horns)
corona, ae f (Gr.)	corona
coronalis,e (Gr.)	coronal
coronarius,a,um (Gr.)	coronary
coronoideus, a,um (Gr.)	coronoid
corpora, um pl/n	corpora, bodies
corpus, oris n	corpus, body
corpuscula, orum pl/n	corpuscles
corpusculum, i n	corpuscle
corrugator, oris (musculus) m	corrugator
cortex, icis m	cortex
corticalis,e	cortical
corticospinalis,e	corticospinal
costa, ae f	rib
costae, arum pl/f	ribs
costalis,e; costarius,a,um	costal
costotransversarius,a,um	costotransverse
costovertebralis,e	costovertebral
costoxiphoideus,a,um	costoxiphoid
coxa, ae f	coxa
cranialis,e (Gr.)	cranial
cranium, i n (Gr.)	cranium, skull
cremaster, is (musculus) m	cremaster
cremastericus,a,um	cremasteric
cribriformis,e	cribriform
cribrosus,a,um	cribrose
cricoideus,a,um (Gr.)	cricoid
crista, ae f	crest
cristae, arum pl/f	crests
cruciatus,a,um	cruciate
cruciformis,e	cruciform
crura, um pl/n	crura
crus, cruris n	crus, limb
cubitus, i m	cubitus, elbow
cuboideus,a,um (Gr.)	cuboid
cuneatus,a,um; cuneiformis,e	cuneiform
curvatura, ae f	curvature
cutaneus,a,um	cutaneous
cutis, is f	skin

D

dactylus, i m (Gr.)	finger
deltoideus,a,um	deltoid
dens, dentis m	odontoid process
dentalis,e	dental
dentes,ium pl/m	odontoid processes
depressor, oris (musculus) m	depressor
descendens, entis	descending
dexter, tra, trum	right
diameter, tri f (Gr.)	diameter
diaphragma, atis n (Gr.)	diaphragma
diaphragmaticus,a,um (Gr.)	diaphragmatic
digastricus,a,um	digastric
digestorius,a,um	digestive
digitalis,e	digital
digiti, orum pl/m	fingers
digitus, i m	finger
dilatator,oris (musculus) m	dilatator
diploë,es f (Gr.)	diploë

diploicus,a,um	diploic
disci, orum pl/m	discs
discus, i m	disc
distalis,e	distal
dorsalis,e	dorsal
dorsum, i n	dorsum
ductuli, orum pl/m	ductules
ductulus, i m	ductule
ductus, us m	duct
duodenalis,e	duodenal
duodenum, i n	duodenum
durus,a,um	dural

E

efferens, entis	efferent
elevator, oris m	elevator
eminentia, ae f	eminence
encephalon, i n (Gr.)	encephalon
epicondylus, i m (Gr.)	epicondyle
epigastricus,a,um	epigastric
episternalis,e	episternal
erector, oris m	erector
esophageus,a,um (Gr.)	esophageal
esophagus, i m (Gr.)	esophagus
ethmoidalis,e (Gr.)	ethmoid(al)
excretorius,a,um	excretory
extensor, oris m	extensor
extensorius,a,um	extensory
externus,a,um	external
extremitas, atis f	extremity

F

facialis,e	facial
facies, ei f	surface
falciformis,e	falciform
falx, falcis f	falx
fascia, ae f	fascia
fasciae, arum pl/f	fasciae
fasciculi, orum pl/m	fasciculi, bands
fasciculus, i m	fasciculus, band
femoralis,e	femoral
femur, oris n	femur
fenestra, ae f	window
fibra, ae f	fiber
fibrae, arum pl/f	fibers
fibrosus,a,um	fibrous
fibula, ae f	fibula
fibularis,e	fibular
fissura, ae f	fissure
fissurae,arum pl/f	fissures
flavus,a,um	yellow
flexor, oris m	flexor
flexura, ae f	flexure
folliculi, orum pl/m	follicles
fulliculus, i m	follicle
fonticuli, orum pl/m	fontanelles
fonticulus, i m	fontanelle
foramen, inis n	foramen
foramina, um pl/n	foramina
fornix, icis f	fornix
fossa, ae f	fossa
fossae, arum pl/f	fossae
fossula, ae f	fossette
fovea, ae f	facet, fovea
foveae,arum pl/f	facets, foveae
foveola, ae f	foveola
foveolae, arum pl/f	foveolae
frenulum, i n	frenulum
frontalis,e	frontal
frontoparietalis,e	frontoparietal
fundus, i m	fundus
fungiformis,e	fungiform
funiculus, i m	funicle

G

gallus, i m	gallus
ganglia,orum pl/n (Gr.)	ganglia
ganglion, i n (Gr.)	ganglion
gastricus,a,um	gastric
geniculum, i n	geniculum
genu, us n	genu,knee
gingiva,ae f	gingiva
gingivae,arum pl/f	gingivae
glandula,ae f	gland
glandulae, arum pl/f	glands
glenoidalis,e (Gr.)	glenoid
glomeruli, orum pl/m	glomeruli
glomerulus, i m	glomerulus
glossopharyngeus,a,um	glossopharyngeus, glossopharyngeal
gluteus,a,um (Gr.)	gluteal
gyri, orum pl/m	gyri
gyrus, i m (Gr.)	gyrus

H

hallux,icis m	hallux
hamatus,a,um	hamate
hamulus, i m	hamulus
hepar, atis n (Gr.)	liver
hepaticus,a,um	hepatic
hiatus,us m	hiatus
hilus, i m	hilus
horizontalis,e	horizontal
humerus, i m	humerus
hyoideus,a,um (Gr.)	hyoid

I

iliacus,a,um	iliac
impressio, onis f	impression
impressiones, um pl/f	impressions
incisivus,a,um	incisive
incisivus, i m (dens)	incisor (tooth)
incisura, ae f	incisure, notch
incisurae, arum pl/f	incisures, notches
index, icis m (digitus II)	index (second finger)
inferior, ius	inferior
inferolateralis,e	inferolateral
infraclavicularis,e	infraclavicular
infracorticalis,e	infracortical
infradiaphragmaticus, a,um	infradiaphragmatic
infraglenoidalis,e	infraglenoid
infraorbitalis,e	infraorbital
infraspinalis,e	infraspinal
infraspinatus,a,um	infraspinatus,infraspinous
infrasternalis,e	infrasternal
infratemporalis,e	infratemporal
inguinalis,e	inguinal
insula, ae f	island
intercostalis,e	intercostal
intermuscularis,e	intermuscular
internasalis,e	internasal
internus,a,um	internal
interosseus,a,um	interosseous
interuretericus,a,um	interureteric
intestinalis,e	intestinal
intestinum, i n	intestine
ischiadicus,a,um	ischial
ischium, i n (Gr.)	ischium
isthmus, i m (Gr.)	isthmus

J

jejunum, i n	jejunum
juga, orum pl/n	juga
jugularis,e	jugular
jugum, i n	jugum
junctura, ae f	junction
juncturae, arum pl/f	junctions

K

kephalicus,a,um (cephalicus)	cephalic

L

labia, orum pl/n	labia
labialis,e	labial
labium, i n	labium
labrum, i n	labrum
labyrinthi, orum pl/m (Gr.)	labyrinthi
labyrinthus, i m (Gr.)	labyrinthus
lacrimalis,e	lacrimal
lamina, ae f	lamina
laminae, arum pl/f	laminae
laryngeus,a,um	laryngeal
larynx,yngis m (Gr.)	larynx
lateralis,e	lateral
latissimus,a,um	latissimus
levator, oris m (musculus)	levator
lien, enis m	spleen
lienalis,e	lienal
ligamenta, orum pl/n	ligaments
ligamentum, i n	ligament
linea, ae f	linea
lineae, arum pl/f	lineae
lingua, ae f	tongue
lingualis,e	lingual
lingula, ae f	lingula
lingularis,e	lingular
lobaris,e	lobar
lobi, orum pl/m	lobes
lobularis,e	lobular
lobuli, orum pl/m	lobules
lobulus, i m	lobule
lobus, i m	lobe
longissimus,a,um	longissimus
longitudinalis,e	longitudinal
longus,a,um	longus

lumbalis,e	lumbar
lumbocostalis,e	lumbocostal
lumbosacralis,e	lumbosacral
lymphaticus,a,um (Gr.)	lymphatic
lymphonodi, orum pl/m	lymph nodes
lymphonodus,i m	lymph node

M

magnus,a,um	large
major, majus	greater
malleolaris,e	malleolar
malleolus, i m	malleolus
mammillaris,e	mammillary
mandibula, ae f	mandible
mandibularis,e	mandibular
manubrium, i n	manubrium
manus, us f	hand
margo, inis m	margin, border, edge
massa, ae f	mass
massae, arum pl/f	masses
massetericus,a,um	masseteric
mastoideus,a,um	mastoid
mater, tris f	mater
maxilla, ae f	maxilla, upper jaw bone
maxillaries,e	maxillary
maximus,a,um	greatest
meatus, us m	meatus, passage
medialis,e	medial
medianus,a,um	median
mediastinalis,e	mediastinal
mediastinum, i n	mediastinum, middle septum
medius,a,um	middle
medulla, a e f	marrow
medullaris,e	medullary
membrana, ae f	membrane
membranaceus,a,um	membranous
membranae, arum pl/f	membranes
membranosus,a,um	membranous
membrum, i n	limb, member
meninx, ngis f (Gr.)	meninx
menisci, orum pl/m (Gr.)	menisci
meniscus, i m (Gr.)	meniscus
mentalis,e	mental
mentum, i n	mentum ,chin
mesentericus,a,um	mesenteric
mesenterium, i n	mesentery
metacarpalis,e	metacarpal
metacarpeus,a,um	metacarpeus
metacarpus, i m	metacarpus
metaphysis, is f (Gr.)	metaphysis
metatarsalis,e	metatarsal
metatarseus,a,um	metatarsus
metatarsus, i m	metatarsus
minor, minus	lesser
molaris,e (dens)	molar
mollis,e	soft
mucosus,a,um	mucous
muscularis,e	muscular
musculi, orum pl/m	muscles
musculocutaneus,a,um	musculocutaneous
musculus, i m	muscle
mylohyoideus,a,um	mylohyoid

N

naris, is f	nostril
nasalis,e	nasal
nasopharyngeus,a,um	nasopharyngeal
nasofrontalis,e	nasofrontal
nasolabialis,e	nasolabial
nasolacrimalis,e	nasolacrimal
nasopalatinus,a,um	nasopalatine
nasus, i m	nose
navicularis,e	navicular
nephron, i n (Gr.)	nephron
nephros, i m (Gr.)	kidney
nervi, orum pl/m	nerves
nervosus,a,um	nervous
nervus, i m	nerve
nodi, orum pl/m	nodes
noduli, orum pl/m	nodules
nodulus, i m	nodule
nodus, i m	node
nucha, ae f	nucha
nucleus, i m	nucleus
nutricius,a,um	nutricial

O

obliquus,a,um	oblique
oblongatus,a,um	oblongate
obturator,oris m	obturator (muscle)

obturatorius,a,um	obturator
occipitalis,e	occipital
occipitofrontalis,e	occipitofrontal
occipitotemporalis,e	occipitotemporal
occiput,itis n	back of the head
oculomotorius,a,um	oculomotor
oculus,i m	eye
oesophagus,i m	oesophagus
olecranon, i n (Gr.)	olecranon
olfactorius,a,um	olfactory
ophthalmicus,a,um (Gr.)	ophthalmic
opticus,a,um (Gr.)	optic
oralis,e	oral
orbicularis,e	orbicular
orbita,ae f	orbit
orbitae, arum pl/f	orbits
orbitalis,e	orbital
organon,i n	organ
os,oris n	mouth
os,ossis n	bone
ossa, orum pl/n	bones
osseus,a,um	osseous, bony
osteon, i n (Gr.)	bone
ostium,i n	ostium
ovalis,e	oval

P

palatinus,a,um	palatine
palatum,i n	palate
palma, ae f	palm
palmaris,e	palmar
palpebra,ae f	eyelid
pancreas,atis n (Gr.)	pancreas
pancreaticus,a,um	pancreatic
papilla,ae f	papilla
papillae, arum pl/f	papillae
papillaris,e	papillary
paries,etis m	wall
parietalis,e	parietal
parotideus,a,um	parotid
parotis, otidis f (Gr.)	parotis
pars,partis f	part
partes, ium pl/f	parts
parvus,a,um	small
patella,ae f	patella
patellaris,e	patellar
pecten,inis n	pecten
pectinatus,a,um; pectinealis,e;	pectinate; pectineal
pectineus,a,um	pectinate
pectoralis,e	pectoralis
pectus, oris n	chest
pediculus, i m	pedicle
pedunculi, orum pl/m	peduncles
pedunculus,i m	peduncle
pelvinus,a,um	pelvic
pelvis,is f	pelvis
penis, is m	penis
perforans, antis	perforating
periosteum,i n	periosteum
periphericus,a,um	peripheral
peritendineum, i n	peritendineum
peritoneooperinealis,e	peritoneooperineal
perpendicularis,e	perpendicular
pes,pedis m	foot
petrosquamosus,a,um	petrosquamous
petrosus,a,um	petrous
phalanges,ium pl/f (Gr.)	phalanges
phalanx, ngis f	phalanx
phallus, i m (Gr.)	penis
pharyngeus,a,um	pharyngeal
pharynx,ngis m	pharynx
pia mater	pia mater
pigmentum, i n	pigment
piriformis,e	piriform
pisiformis,e	pisiform
pius,a,um	soft
planta, ae f	planta
plantaris,e	plantar
planus,a,um	plane, flat
platysma, atis n (Gr.)	platysma
pleura, ae f (Gr.)	pleura
plexus,us m	plexus
plica,ae f	fold
plicae, arum pl/f	folds
pollex, icis m (digitus I)	thumb (1st finger)
polus, i m	pole
popliteus,a,um	popliteal
porta, ae f	hilum
porus,i m (Gr.)	pore
posterior, ius	posterior
prevertebralis,e	prevertebral
primus,a,um	1st
princeps, ipis	main

principalis,e	principal
processus,us m	process
profundus,a,um	deep
prominentia,ae f	prominence
promontorium,i n	promontory
pronator,oris m	pronator
proprius,a,um	proper
protuberantia,ae f	protuberance
proximalis,e	proximal
psoa, as f (Gr.)	psoa
psoas (musculus)	psoas muscle
pterygoideus,a,um (Gr.)	pterygoid
pterygomandibularis, e	pterygomandibular
pterygomaxillaris,e	pterygomaxillary
pterygopalatinus,a, um	pterygopalatine
pterygopharyngeus,a, um	pterygopharyngeal
pterygospinalis,e	pterygospinal
pterygospinosus,a,um	pterygospinous
pubicus,a,um	pubic
pulmo, onis m	lung
pulmonalis,e	pulmonary
pulpa, ae f	pulp
pupilla, ae f	pupil
pyloricus,a,um	pyloric
pylorus, i m (Gr.)	pylorus
pyramidalis,e	pyramidal
pyramis, idis f	pyramid

Q

quadrangularis,e	quadrangular
quadratus,a,um	quadrate
quadriceps,cipitis	quadriceps

R

radialis,e	radialis
radiatus,a,um	radiate
radices, um pl/f	roots
radicularis,e	radicular
radiocarpeus,a,um	radiocarpal
radioulnaris,e	radioulnar
radius, i m	radius
radix, icis f	root
rami, orum pl/m	branches
ramus, i m	branch
raphe,es f (Gr.)	raphe
recessus,us m	recess
rectalis,e	rectal
rectum,i n	rectum
rectus,a,um	rectus
regio,onis f	region
regiones,um pl/f	regions
ren, renis m	kidney
renalis,e	renal
respiratorius,a,um	respiratory
rete,is n	network
retina,ae f	retina
rhinalis,e	rhinalis
rhomboideus,a,um	rhomboid
rima, ae f	rima
risorius (musculus)	risorius (muscle)
rostrum, i n	rostrum
rotator (musculus)	rotator (muscle)
rotundus,a,um	round

S

sacculus, i m	saccule
saccus, i m	sac
sacer, cra, crum	sacral
sacralis,e	sacral
sacrococcygeus,a,um	sacrococcygeal
sacroiliacus,a,um	sacroiliac
sacropelvinus,a,um	sacropelvic
sacrospinalis,e	sacrospinal
sacrotuberalis,e	sacrotuberal
sacrum,i n	sacrum
sagittalis,e	sagittal
saliva, ae f	saliva
sanguis,inis m	blood
scalenus,a,um	scalene
scaphoideus,a,um	scaphoid
scapula, ae f	scapula
scapularis,e	scapular
sceleton (um), i n (Gr.)	skeleton
schiasma, atis n (Gr.)	schiasm
sclera, ae f (Gr.)	sclera
scrotum, i n	scrotum
secretorius,a,um	secretory
secretum, i n	secrete
segmentalis,e	segmental
segmentum,i n	segment
sella, ae f	sella,saddle
sellaris,e	sellary

semicanalis, is m	semicanal
semicircularis,e	semicircular
semilunaris,e	semilunar
semimembranosus,a,um	semimembranous
seminalis,e	seminal
semispinalis,e	semispinal
septum,i n	septum
serosus,a,um	seroserous
serotinus,a,um	late
serratus,a,um	serrate
sesamoides, is; sesamoideus,a,um (Gr.)	sesamoid
seu (abbr. s.)	or
sigmoideus,a,um	sigmoid
simplex,icis	simple
sinister,tra,trum	left
sinus,us m	sinus
sinus,uum pl/m	sinuses
spatia, orum pl/n	spaces
spatium,i n	space
sphenoethmoidalis,e (Gr.)	sphenoethmoidal
sphenoidalis,e	sphenoid(al)
sphenomandibularis,e	sphenomandibular
sphenomaxillaris,e	sphenomaxillary
sphenooccipitalis,e	sphenooccipital
sphenopalatinus,a,um	sphenopalatine
sphincter,eris m (Gr.)	sphincter
spina, ae f	spine
spinae, arum pl/f	spines
spinalis,e	spinal
spinosus,a,um	spinous
spiralis,e (Gr.)	spiral
spongiosus,a,um (Gr.)	spongy
spurius,a,um	false
squama,ae f	squama
squamosus,a,um	squamous
sternalis,e	sternal
sternoclavicularis,e	sternoclavicular
sternum,i n (Gr.)	sternum
stomachus,i m (Gr.)	stomach
stratum,i n	layer
subclavius,a,um	subclavian
subcostalis,e	subcostal
subcutaneus,a,um	subcutaneous
subdeltoideus,a,um	subdeltoid
sublingualis,e	sublingual
submandibularis,e	submandibular
submaxillaris,e	submaxillary
submentalis,e	submental
submuscularis,e	submuscular
subscapularis,e	subscapular
substantia,ae f	substance
sulci, orum pl/m	sulci, grooves
sulcus, i m	sulcus, groove
supercilia, orum pl/n	supercilia, eyebrows
supercilium, i n	eyebrow
superciliaris,e	superciliary
superficialis,e	superficial
superior,ius	superior
superus,a,um	superus
supinator,oris m (musculus)	supinator
supremus,a,um	supreme
sura, ae f	sura,calf
suralis,e	sural
sutura,ae f	suture
suturae, arum pl/f	sutures
sympathicus,a,um (Gr.)	sympathetic
symphysialis,e	symphysial
symphysis,is f(Gr.)	symphysis
synovialis,e	synovial
systema,atis n (Gr.)	system

T

talocalcaneus,a,um	talocalcaneal, talocalcanean
talocruralis,e	talocrural
talofibularis,e	talofibular
talonavicularis,e	talonavicular
talus, i m	talus
tarsometatarseus,a,um	tarsometatarsal
tarsus,i m (Gr.)	tarsus, sole of the foot
tegmen, inis n	tegmen ,roof
temporalis,e	temporalis
temporomandibularis,e	temporomandibular
temporoparietalis,e	temporoparietal
temporozygomaticus,a,um	temporozygomatic

tempus, oris n	temple
tendineus,a,um	tendinous
tendinosus,a, um	tendinosus
tendo,inis m	tendon
tensor, oris m	tensor
teres,etis	round
terminalis,e	terminal
testis, is m	testis
thalamus, i m (Gr.)	thalamus
thoracicoacromialis,e	thoracicoacromial
thoracicus,a,um	thoracic
thoracodorsalis,e	thoracodorsal
thorax,acis m (Gr.)	thorax,chest
thymus, i m (Gr.)	thymus
thyroideus,a,um	thyroid
tibia,ae f	tibia
tibialis,e	tibial
tonsilla,ae f	tonsil
tonsillaris,e	tonsillar
trachea,ae f (Gr.)	trachea
trachealis,e	tracheal
tractus,us m	tract, tractus
tractus, uum pl/m	tracts, tractus
transversalis,e	transversal
transversarius,a,um	transverse
transversus,a,um	transverse
trapezium,i n	trapezium
trapezius,a,um; trapezoideus,a,um	trapezoid
triangularis,e	triangular
triceps, cipitis	triceps
tricuspidalis,e	tricuspid
trigeminus,a,um	trigeminal
trigonum, i n	trigone
trochanter,eris m (Gr.)	trochanter
trochantericus,a,um	trochanteric
trochlea,ae f (Gr.)	trochlea
trochlearis,e	trochlear
trunci, orum pl/m	trunks
truncus, i m	trunk
tuba, ae f	tube
tubarius,a,um	tubal
tuber, eris n	tuber
tubera, um pl/n	tubers
tuberalis,e	tuberal
tubercula, orum pl/n	tubercles
tubercularis,e	tubercular
tuberculum, i n	tubercle
tuberositas,atis f	tuberosity
tunica,ae f	tunic
tunicae, arum pl/f	tunics
turcicus,a,um	Turkish
tympanicus,a,um	tympanic
tympanum,i n	tympanum

U

ulna, ae f	ulna
ulnaris,e	ulnar
umbilicalis,e	umbilical
umbilicus, i m	umbilicus, naval
unguis, is m	nail
urogenitalis,e	urogenital
uterinus,a,um	uterine
uterus, i m (metra)	uterus
uvula, ae f	uvula

V

vagalis,e	vagal
vagina, ae f	Vagina,sheath
vaginae, arum pl/f	vaginae
vaginalis,e	vaginal
vagus,a,um	vagus
valva, ae f	valve
valvula, ae f	valvule
vas, vasis n	vessel
vascularis,e	vascular
velum, i n	velum
vena, ae f	vein
venae, arum pl/f	veins
venosus,a,um	venous
venter, tris m	belly
ventralis,e	ventral
ventricularis,e	ventricular
ventriculi, orum pl/m	ventricles
ventriculus, i m (gaster)	ventricle
vermiformis,e	vermiform
vertebra, ae f	vertebra
vertebrae, arum pl/f	vertebrae
vertebralis,e	vertebral
verus,a,um	true
vesica, ae f	bladder
vesicalis,e	vesical
vesicorectalis,e	vesicorectal
vesicularis,e	vesicular

vestibularis,e	vestibular
vestibulum, i n	vestibule
viscera, um pl/n	viscera
visceralis,e	visceral
viscus, eris n	viscus
vita, ae f	life
vitreus,a,um	vitreitis
vocalis,e	vocal
vomer, eris m	vomer

X

xiphoideus,a,um (Gr.)	xiphoid

Z

zona,ae f (Gr.)	zone
zonula, ae f	zonule
zonularis,e	zonular
zygoma, atis n (Gr.)	zygoma
zygomaticofacialis,e	zygomaticofacial
zygomaticofrontalis,e	zygomaticofrontal
zygomaticoorbitalis,e	zygomaticoorbital
zygomaticotemporalis,e	zygomaticotemporal
zygomaticus,a,um	zygomatic

Endings of Nouns of Five Declensions in Nominative and Genitive Cases

Decl.	**I**	**II**		**III**			**IV**		**V**
Genders	**f**	**m**	**n**	**m**	**f**	**n**	**m**	**n**	**f**
e.g.	*ala,* ***ae f***	*lobus,* ***i m***	*cavum,* ***i n***	*pulmo,* *on***is m**	*radix,* *ic***is f**	*caput,* *it***is n**	*arcus,* ***us m***	*genu,* ***us n***	*facies,* ***ei f***
Nom. Sg.	**a**	**us, er**	**um, on**	**or, os, o** (~~io,~~ ~~go,~~ ~~do~~), **er, es, ex**	**io, go, do, x** (~~ex~~), **as, us, <u>es, is*</u>**	**en, us, ur, ut, c, l, <u>al, ar, e*</u>**	**us**	**u**	**es**
Gen. Sg.	***<u>ae</u>***	***<u>i</u>***		***<u>is</u>***			***<u>us</u>***		***<u>ei</u>***
Nom. Pl.	**ae**	**i**	**a**	**es**		**a (ia*)**	**us**	**ua**	**es**
Gen. Pl.	**arum**	**orum**		**um (<u>ium*</u>)**			**uum**		**erum**

* The underlined endings belong to the nouns of the III declension of the mixed or vowel type.

Endings of Adjectives in Nominative and Genitive Cases

Group	**I**			**II**		**Comparative Degree**	
Gender	**m**	**f**	**n**	**m f**	**n**	**m f**	**n**
e.g.	*thoracic***us, a, um**			*spinal***is, e**		*super***ior, ius**	
Nom. Sg.	**us, er**	**a**	**um**	**is**	**e**	**ior**	**ius**
Gen. Sg.	**i**	**ae**	**i**	**is**		(ior)**is**	
Nom. Pl.	**i**	**ae**	**a**	**es**	**ia**	(ior)**es**	(ior)**a**
Gen. Pl.	**orum**	**arum**	**orum**	**ium**		(ior)**um**	