

Basic medical terminology 6



IIIRD DECLENSION : CONSONANT STEMS

Specific features of the 3rd declension



- All 3 genders are included (cortex **m.**, radix **f.**, femur **n.**)
- Genitive ending: **-is**
- Nom. Sg. – various endings (**sanguis**, **excisio**, **abductor**,
rete, **latus**, **femur**, **abdomen**, **cavitas**)
 - !NOMINATIVE form is NOT interconnected with the GENDER!
Words must be carefully memorized!
- Two main groups:
 - nominative and genitive stem differs (genitive is longer than nominative) Consonant stems
 - nominative and genitive stem remains unchanged (genitive has same number of syllables as nominative)
I- stems + exceptions

Specific features of the 3rd declension

-Consonant stems

- Stem in gen. sg. and nom sg. usually differs
 - **pulm-o//pulmon-is**
 - **fem-ur//femor-is**
 - **rad-ix//radic-is**
- For the proper inflection the GENITIVE form is NECESSARY to know
 1. *pulm-o*
 2. **pulmon-is**
 4. **pulmon-em**
 6. **pulmon-e**

Declension paradigms



Consonant	I-stems	EXCEPTIONS
DOLOR	CORPUS	PELVIS
M. + F.	N.	M. + F. N. F.

DOLOR



	Sg.	Pl.
nom.	dolor	dolor-es
gen.	dolor-is	dolor-um
ak.	dolor-em	dolor-es
abl.	dolor-e	dolor-ibus

CORPUS



	Sg.	Pl.
nom.	corpus	corpor-a
gen.	corpor-is	corpor-um
ak.	corpus	corpor-a
abl.	corpor-e	corpor-ibus

Latin and Greek declensions



Declens.	I.			II.				III.					IV.		V.
Paradigm	vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies
Gender	f.	f.	m.	m.	n.	m.	n.	m. + f.	m. + f.	n.	m.	n.	m.	n.	f.
Singular	1.	-a	-e	-es	-us/-er	-um	-os	-on	○	○	-is/-es	-ar/-e/-al	-us	-u	-es
	2.	-ae	-es	-ae	-i	-i	-i	-i			-is	-is/-eos	-us	-us	-ei
	4.	-am	-en	-am	-um	1	-on	1	○	1	-em	-im/-in	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o			-e	-i	-u	-u	-e
Plural	1.	-ae	-ae	-ae	-i	-a	-i	-a	-	-	-es	-es	-us	-ua	-es
	2.	-arum	-arum	-arum	-orum	-orum	-orum	-orum			-ium	-ium	-uum	-uum	-erum
	4.	-as	-as	-as	-os	1	-os	1	-	1	-es	-es	-us	1	-es
	6.	-is	-is	-is	-is	-is	-is	-is			-ibus	-ibus	-ibus	-ibus	-ebus
		+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N				

EXCEPTIONS



1. **os, ossis** n. *bone* → gen. pl. *-ium*
2. **vas, vasis,** n. *vessel*
 1. In sg. follows paradigm **CORPUS** *vas-vasis-vas-vase*
 2. In pl. follows paradigm **CEREBRUM** *vasa-vasorum-*
vasa-vasis
3. **GREEK NOUNS** typical endings
 1. **-itis// -itidis** → *inflammation*
 2. **-(o)ma// -(o)matis** → *tumour diseases/swellings*

Connection with the adjective



F	M	N
SG.		
1. <i>cavitas magna</i>	<i>dolor magnus</i>	<i>foramen magnum</i>
2. <i>cavitatis magnae</i>	<i>doloris magni</i>	<i>foraminis magni</i>
4. (in) <i>cavitatem magnam</i>	<i>dolorem magnum</i>	<i>foramen magnum</i>
6. (in) <i>cavitate magna</i>	<i>dolore magno</i>	<i>foramine magno</i>
PL.		
1. <i>cavitates magnae</i>	<i>dolores magni</i>	<i>foramina magna</i>
2. <i>cavitatum magnarum</i> <i>magnorum</i>	<i>dolorum magnorum</i>	<i>foraminum</i>
4. (in) <i>cavitates magnas</i>	<i>dolores magnos</i>	<i>foramina magna</i>
6. (in) <i>cavitatibus magnis</i>	<i>doloribus magnis</i>	<i>foraminibus magnis</i>

Write down stems

Nom. Sg.

- Abdomen
- Dolor
- Latus
- Abductor
- Encephalitis
- Lien
- Amputatio
- Excisio
- Luxatio
- Apex
- Extensor
- Margo

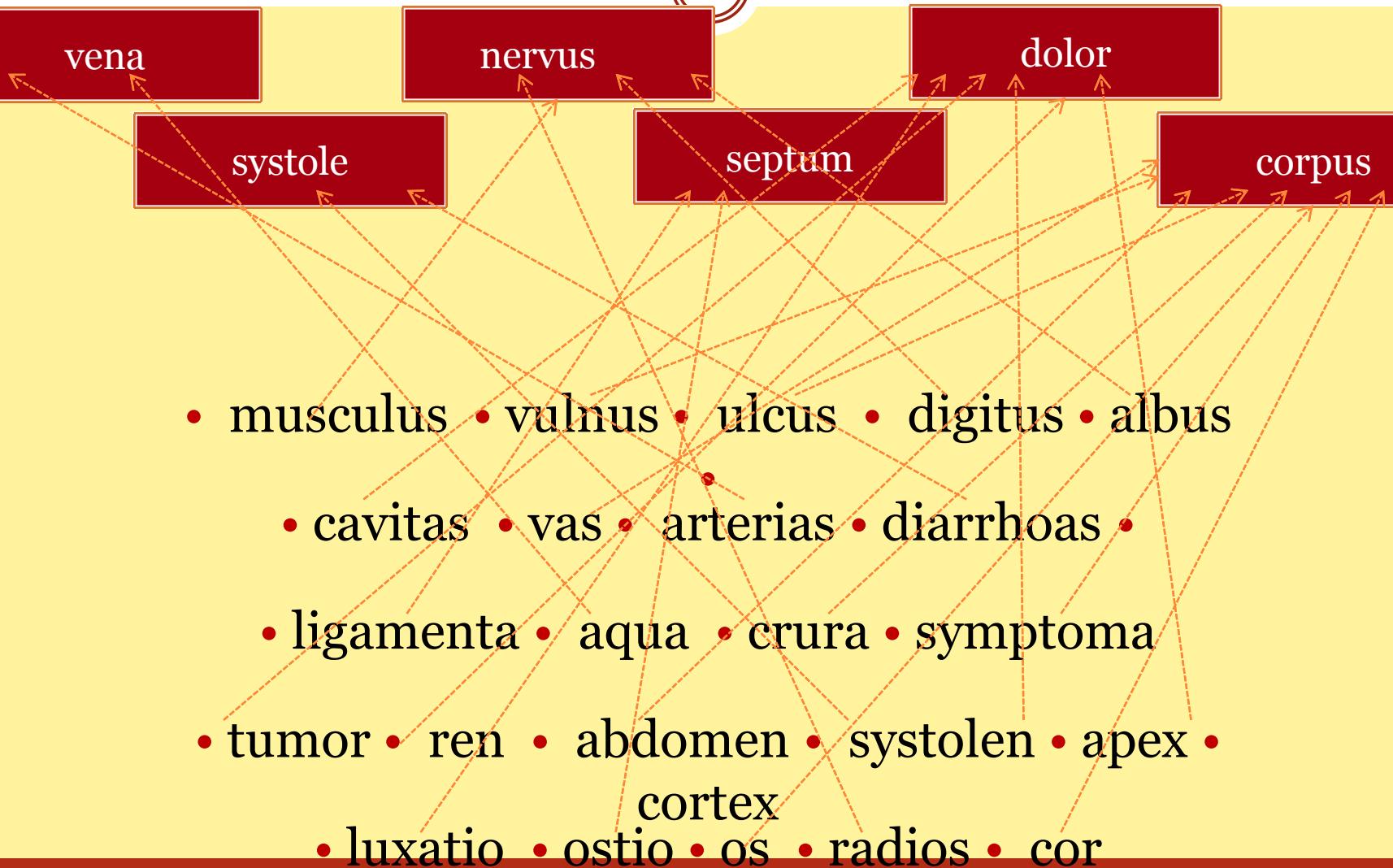
Gen. sg.

- **Abdominis**
- **Doloris**
- **Lateris**
- **Abductoris**
- **Encephalitidis**
- **Lienis**
- **Amputationis**
- **Excisionis**
- **Luxationis**
- **Apicis**
- **Extensoris**
- **Marginis**

Stem

- Abdomin-
- Dolor-
- Later-
- Abductor-
- Encephalitid-
- Lien-
- Amputation-
- Excision-
- Luxation-
- Apic-
- Extensor-
- Margin-

Assign nouns to paradigms



What is a nominative form of these nouns?



Ex.: *Injectionis* > *Injectio, feminine, DOLOR*

- | | | | |
|--------------|--------------------|----------------|---------------------|
| • Cervicis | • Cervix | • Phalangis | • Phalangx |
| • Solutionis | • Solutio | • Ossis | • Os |
| • Tumoris | • Tumor | • Oris | • Os |
| • Femoris | • Femur | • Coli | • Colon |
| • Vertebrae | • Vertebra | • Colli | • Collum |
| • Sacchari | • Saccharum | • Extremitatis | • Extremitas |
| • Systoles | • Systole | • Capitis | • Caput |
| • Oculi | • Oculus | • Ganglii | • Ganglion |
| • Cancri | • Cancer | | |

Change into nominative plural:



- Femur
 - Mater
 - Flos
 - Foramen
 - Oedema
 - Apex
 - Caput
 - Melanoma
 - Cartilago
 - Injectio
-
- **Femora**
 - **Matres**
 - **Flores**
 - **Foramina**
 - **Oedemata**
 - **Apices**
 - **Capita**
 - **Melanomata**
 - **Cartilagines**
 - **Injectiones**

Connect nouns to name structures:

- Cavitas
- 1. Cranii
 - 2. Thoracis
 - 3. Abdominis
 - 4. Laryngis
 - 5. Nasi
 - 6. Oris
 - 7. Pharyngis
 - 8. Uteri

- Regio
- 1. Brachii
 - 2. Capitis
 - 3. Carpi
 - 4. Cervicis
 - 5. Coxae
 - 6. Cruris
 - 7. Dorsi
 - 8. Femoris
 - 9. Pedis

Corpus

- 1. Linguae
- 2. Phalangis
- 3. Sterni
- 4. Tali
- 5. Tibiae
- 6. Uteri
- 7. Ossis metacarpi
- 8. Ossis metatarsi
- 9. Coccygis

Caput

- 1. Costae
 - 2. Femoris
 - 3. Fibulae
 - 4. Humeri
 - 5. Mandibulae
 - 6. Phalangis
 - 7. Radii
 - 8. Ulnae
- Cervix
- 1. Uteri
 - 2. Vesicae urinariae

Assign adjectives to nouns



tumor • corpus • medicamentum • pes • os • foramen • diameter • vulnus



Benignus
Malignus
Novus



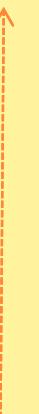
Novum
Bonum



Longum
sacrum



Obliqua



Humanum
Osseum
Adiposum
Alienum

Humanus
Sinister
dexter

Nutricium
Medium

Scissum
Sclopetarium
Contusum
Sectum
Punctum

Find Greek and Latin synonyms

16

ENGLISH

body

mouth

kidney

large intestine

brain

organ

liver

stitch

injury, wound

LATIN

corpus

os, oris

ren

intestinum crassum

cerebrum

organum

iecur

sutura

vulnus

GREEK

soma

stoma

nephros

colon

encephalon

organon

hepar

r(h)aphe

trauma

Add loose attributes, TASK 5



- Cavitas + septum nasi
 - Operatio + cervix uteri
 - Corpus + vertebra thoracica
 - Fractura + os sacrum
 - Luxatio + crus
 - Morbus infectiosus + abdomen
 - Dolor acutus + caput
-
- Cavitas **septi** nasi
 - Operatio **cervicis** uteri
 - Corpus **vertebrae** thoracic**ae**
 - Fractura **ossis** sacri
 - Luxatio **cruris**
 - Morbus infectiosus **abdominis**
 - Dolor acutus **capitis**

Change for nominative plural, TASK 7



- sphincter
- foramen nutricium
- dolor chronicus
- vas longum
- musculus adductor
- femur fractum
- cartilago thyreoidea
- vulnus punctum

sphincteres
foramina nutricia
dolores chronicí
vasa longa
musculi adductores
femora fracta
cartilagines thyreoideae
vulnera puncta

Connect with the preposition to form the phrase, TASK 6

- inter
- post
- sub (position)
- propter
- ad
- pro
- per
- cum
- contra

**phalanges digitorum
operationem carcinomatis
lobo dextro pulmonis
dolorem acutum cordis
cavitatem nasi
injectione subcutanea
os
vulnere secto
ulcus ventriculi**

Fill in the missing ending, TASK 9



- Vitium acquisit um ren is
- Operatio tumor is benign i in cavitat e
or is
- Fractura complicat a femor is sinistr i
- Luxatio articulation is
- Injectio contra dolor em acut um
- Periculum carcinomat is cervic is uter i
- Oculus post operation em irid is
- Medicamentum bon um contra encephalitid em
adult orum
- Excisio tumor is benign i
- Medicamentum bon um contra colitid em acut am

Form phrases with different types of injuries

1. Vulnus + sclopetarius, a, um + dorsum

Vulnus sclopetarium dorsi

2. Sutura + vulnus + lacer, a, um + caput

Sutura vulneris laceri capitis

3. Oedema + propter + vulnus + contusus, a, um + femur

Oedema propter vulnus contusum femoris

4. Infectio + in + vulnus + scissus, a, um + digitus + II

Infectio in vulnere scisso digiti secundi

5. Vulnus (pl.) + sectus, a, um + antebrachium

Vulnera secta antebrachii

6. Sepsis + post + vulnus (pl.) + morsus, a, um + caput

Sepsis post vulnera morsa capitis

7. Corpus (pl.) + alienus, a, um + in + vulnus (pl.) + punctus, a, um + abdomen

Corpora aliena in vulneribus punctis abdominis



Reading authentic records 2

- read and translate the diagnosis, re-write it without abbreviations



Oznámení ústavu, oddn. pracoviště
prin. MUDr. A. Mauermann

pro

Příjmení, jméno rok nar. č. prot.

Klin. dg. Provedeno vyšetření dne

28. VIII. 1990

zranil se o lavičku

Dg-Vulnus scissum cruris l.dx./reg.lat./

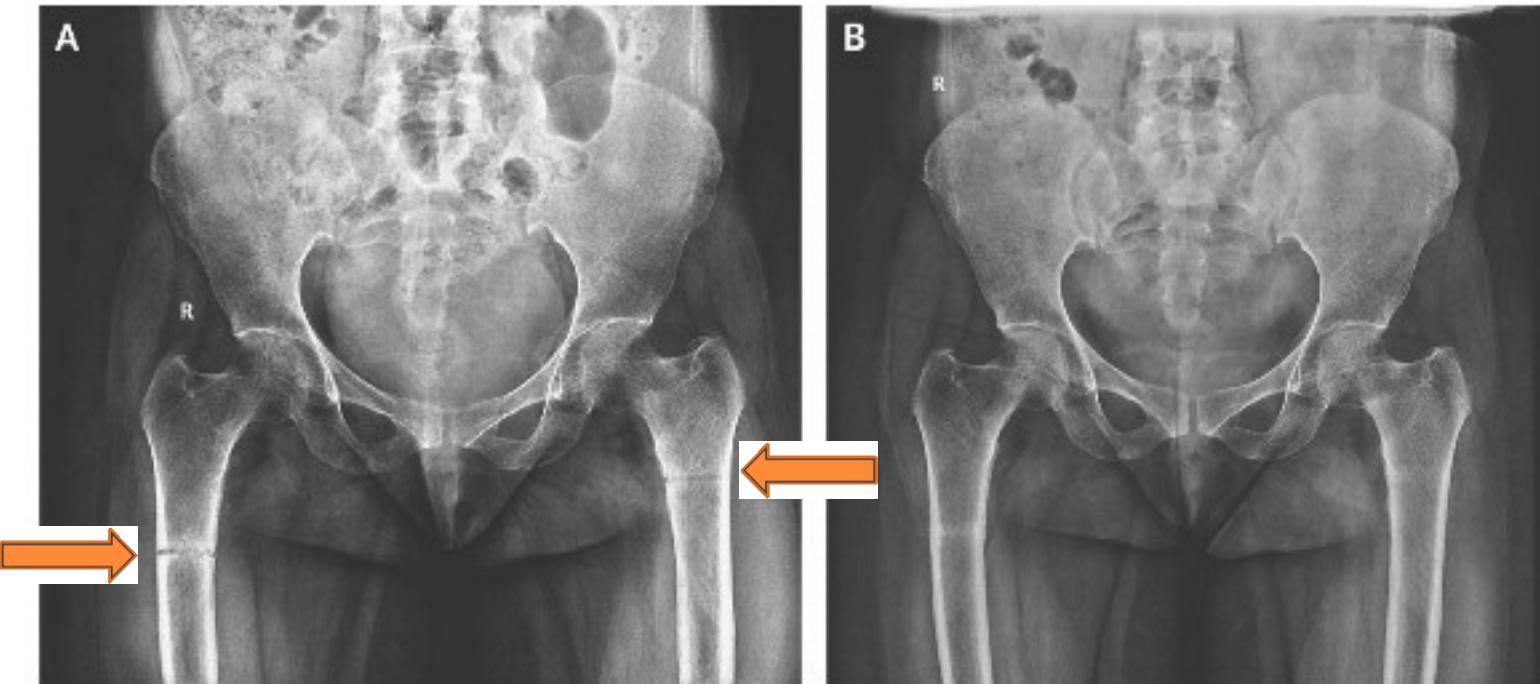
Therapie-RES, TAT

Doporučujeme-vzhledem k velikosti rány příliš nechodit, kontrola a převaz za 2 dny na chir.amb.polikliniky. Stehy ponechat nejméně 14 dní.

Nr. 141
Chirurgické oddělení
MUDr. A. Mauermann

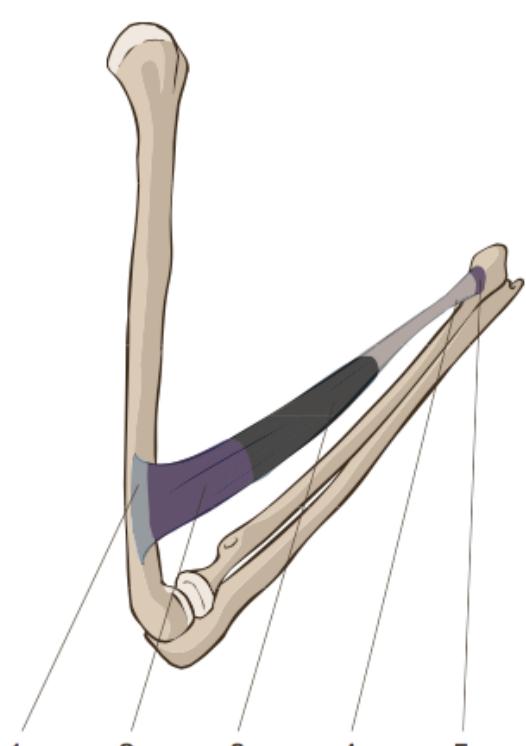
30 VIII 1990 bei einer Bank, 14 Tage

2



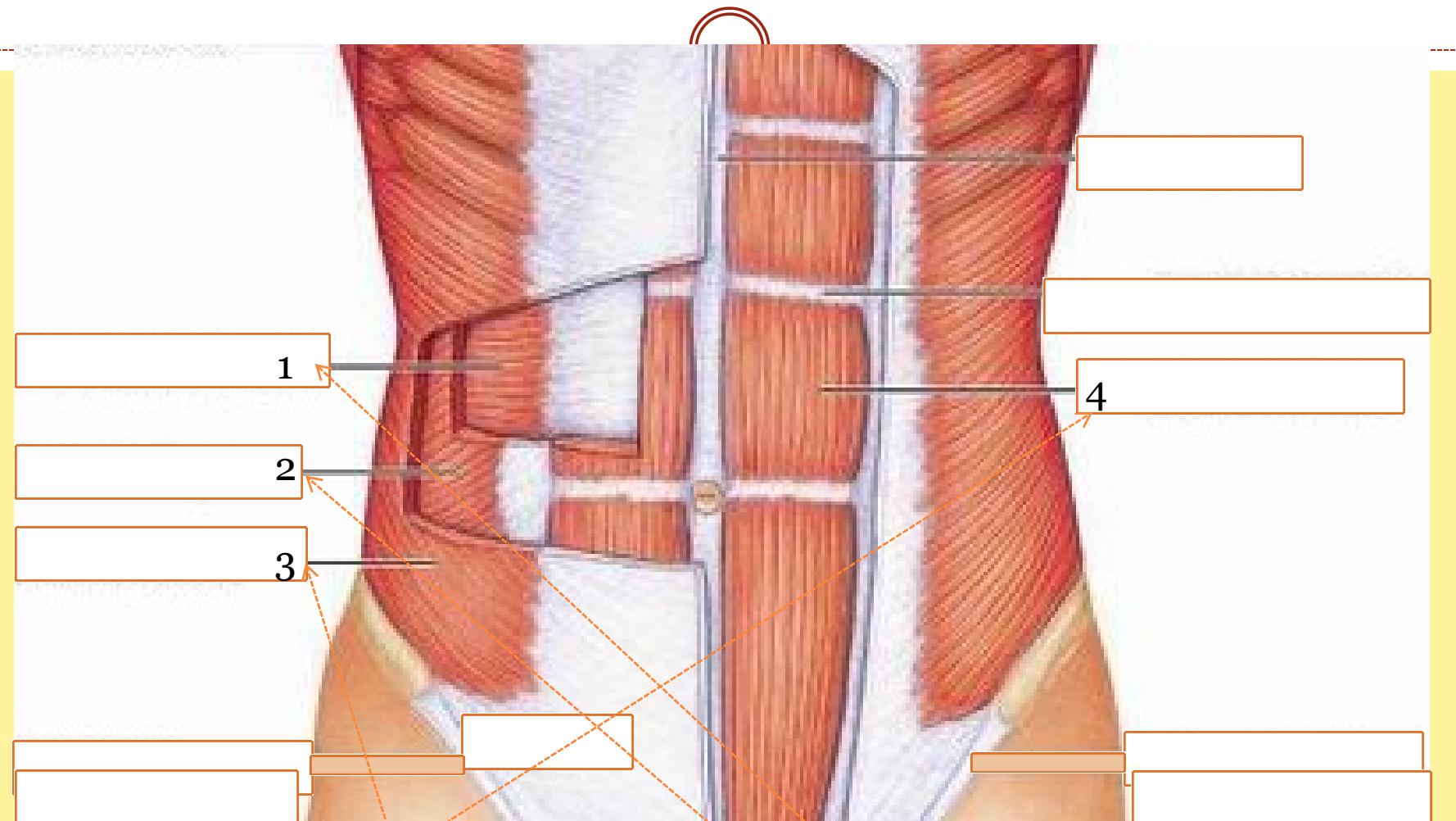
A 45-year-old woman presented with a 3-month history of generalized body pains nonresponsive to analgesics. Along with a low back pain, she had progressive difficulty in getting up from sitting and supine positions and in walking. There was no history of trauma or any medication intake. She is an orthodox believer who wears a black veil outdoors and is completely covered, with little exposure to the sun. An anteroposterior radio-graph of the pelvis showed an **undisplaced transverse fracture of the shaft of both femurs**. The patient was treated with therapeutic doses of calcium and vitamin D supplements.

Fill in what is missing



venter	ventris	f.	muscle belly	3
cauda	caudae	f.	tail	4
origo	originis	f.	origin	1
caput	capitis	n.	head	2
insertio	insertion	f.	insertion	5

Names of muscles by fiber direction



m. rectus abdominis

m. externus obliquus abdominis

m. transversus abdominis

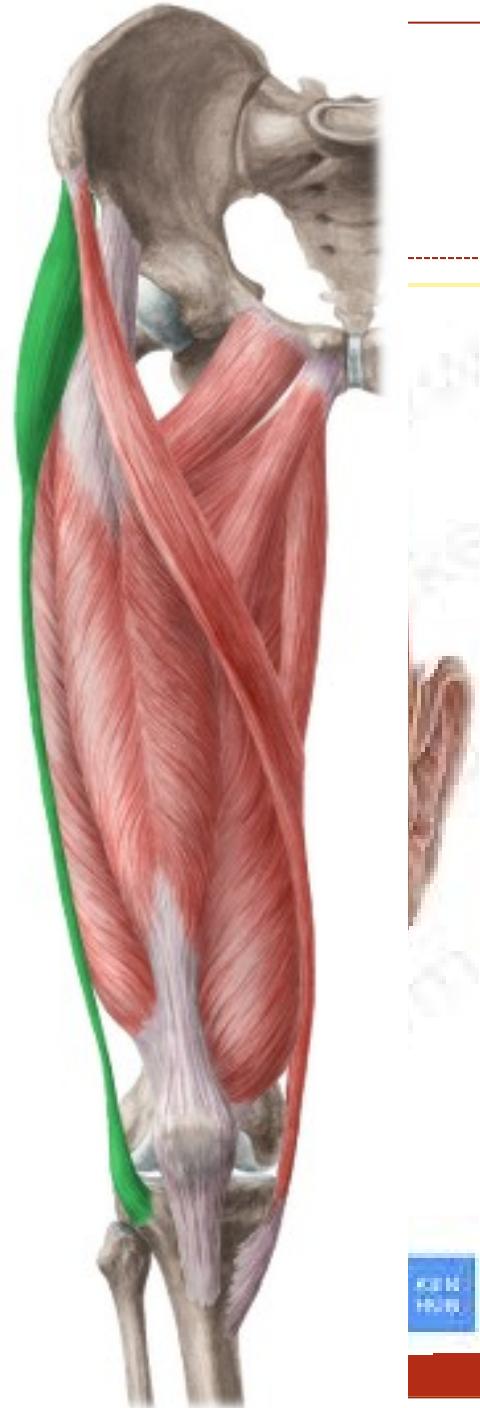
m. internus obliquus abdominis

The muscle(s) that...

...moves the little finger away from other fingers **is...**

...helps the face to form a smile because it elevates the angles of the mouth at each corner **is...**

...stretches the wide band that encloses the thigh muscles **is...**



Name the action performed by the given muscle

Musculus **abductor** pollicis longus >> **abductio, onis, f.**

Musculus **adductor** hallucis longus

Adductio, onis, f.

Musculus **compressor** urethrae

Compressio, onis, f.

Musculus **constrictor** pharyngis medius

Constrictio, onis, f.

Musculus **depressor** anguli oris

Depressio, onis, f.

Musculus **dilatator** pupillae

Dilatatio, onis, f.

Musculus **extensor** carpi

Extensio, onis, f.

Musculus **flexor** digitorum profundus

Flexio, onis, f.

Musculus **levator** glandulae thyr(e)oideae

Levatio, onis, f.

Musculi **rotatores** thoracis

Rotatio, onis, f.

Musculus **tensor** fasciae latae

Tensio, onis, f.

Specific features of the 3rd declension

-Latin I-stems



- Masculine and feminine nouns
 - have the same numbers of syllables in the nominative and the genitive singular:
 - ✖ *ca-na-lis, ca-na-lis*
 - ✖ *pel-vis, pel-vis*
 - ✖ *pu-bes, pu-bis*
 - a group of consonants is preceding the genitive ending *-is*
(i.e. the stem ends in a group of consonants)
 - ✖ *pars, part-is*
 - ✖ *dens, dent-is*
- Neutral nouns
 - words ending in nom. sg. in *-e, -al* or *-ar*
 - only few words: *animal, alis, n., calcar, aris, n., cochlear, aris, n., rete, is, n.*

Declension paradigms



Consonant	I-stems	EXCEPTIONS
DOLOR	CORPUS	PELVIS
M. + F.	N.	M. + F. N. F.

PELVIS



I-STEM MASCULINE AND FEMININE GENDER NOUNS

	Sg.	Pl.
nom.	pelvis	pelv-es
gen.	pelv-is	pelv-ium
ak.	pelv-em	pelv-es
abl.	pelv-e	pelv-ibus

LATIN AND GREEK DECLENSIONS

Declens.	I.			II.				III.				IV.		V.		
Paradigm	vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies	
Gender	f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.	
Singular	1.	-a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/-xis/-osis	-ar/-e/-al	-us	-u	-es
	2.	-ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.	-am	-en	-am	-um	1	-um	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o	-e	-e	-e / (-i)	-i	-i	-u	-u	-e
Plural	1.	-ae	-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.	-arum	-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.	-as	-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.	-is	-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
	+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Compa -rative forms of adj. M+F	+ Compa -rative forms of adj. N	+ Adj. of 3rd decl. M + F		+ Adj. of 3rd decl. N				

The difference between paradigms PELVIS and DOLOR

Declens.	I.			II.				III.				IV.		V.		
Paradigm	vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies	
Gender	f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.	
Singular	1.	-a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/-xis/-osis	-ar/-e/-al	-us	-u	-es
	2.	-ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4.	-am	-en	-am	-um	1	-um	1	-em	1	-em	-im/-in	1	-um	1	-em
	6.	-a	-e	-a	-o	-o	-o	-o	-e	-e	-e / (-i)	-i	-i	-u	-u	-e
Plural	1.	-ae	-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2.	-arum	-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4.	-as	-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6.	-is	-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
	+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Compa -rative forms of adj. M+F	+ Com- parative forms of adj. N	+ Adj.▼ of 3rd decl. M + F		+ Adj. of 3rd decl. N				

The difference between paradigms PELVIS and DOLOR



	Sg.	Pl.		Sg.	Pl.
nom.	dolor	dolor-es	nom.	pelvis	pelv-es
gen.	dolor-is	dolor-um	gen.	pelv-is	pelv-ium
ak.	dolor-em	dolor-es	ak.	pelv-em	pelv-es
abl.	dolor-e	dolor-ibus	abl.	pelv-e	pelv-ibus

CONSONANT-STEM MASCULINE AND
FEMININE GENDER NOUNS

I-STEM MASCULINE AND FEMININE GENDER
NOUNS

RETE



I-STEM NEUTRAL GENDER NOUNS

	Sg.	Pl.
nom.	rete	ret-ia
gen.	ret-is	ret-ium
ak.	rete	ret-ia
abl.	ret-i	ret-ibus

NEUTRAL GENDER NOUNS

Declens.	I.			II.				III.					IV.		V.
Paradigm	vena	systole	diabetes	nervus	septum	nephros	colon	dolor	corpus	pelvis	dosis febris	rete	ductus	genu	facies
Gender	f.	f.	m.	m.	n.	m.	n.	m. + f.	n.	m. + f.	m. + f.	n.	m.	n.	f.
Singulär	1. -a	-e	-es	-us/-er	-um	-os	-on	?	?	-is/-es	-(s)is/-xis/-osis	-ar/-e/-al	-us	-u	-es
	2. -ae	-es	-ae	-i	-i	-i	-i	-is	-is	-is	-is/-eos	-is	-us	-us	-ei
	4. -am	-en	-am	-um	1	-um	1	-em	1	-em	-im/-in	1	-um	1	-em
	6. -a	-e	-a	-o	-o	-o	-o	-e	-e	-e / (-i)	-i	-i	-u	-u	-e
Plural	1. -ae	-ae	-ae	-i	-a	-i	-a	-es	-a	-es	-es	-ia	-us	-ua	-es
	2. -arum	-arum	-arum	-orum	-orum	-orum	-orum	-um	-um	-ium	-ium	-ium	-uum	-uum	-erum
	4. -as	-as	-as	-os	1	-os	1	-es	1	-es	-es	1	-us	1	-es
	6. -is	-is	-is	-is	-is	-is	-is	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ibus	-ebus
	+ Adj. of 1st decl. F			+ Adj. of 2nd decl. M	+ Adj. of 2nd decl. N			+Compa- rative forms of adj. M+F	+ Com- parative forms of adj. N	+ Adj.▼ of 3rd decl. M + F		+ Adj. of 3rd decl. N			

DOSIS



- Only feminine nouns decline according to paradigm *dosis*
- These words are mostly of Greek origin
 - in nominative singular they end in -sis, -xis, -osis
 - and the genitive singular is the same

	Sg.	Pl.
nom.	dosis	dos-es
gen.	dos-is / -eos	dos-ium
ak.	dos-im / -in	dos-es
abl.	dos-i	dos-ibus

Some Latin words are declined according to *dosis*, but they do not have **Greek endings**: febris, is, f., tussis, is, f., pertussis, is, f., sitis, is, f., tuberculosis, is, f.

EXCEPTIONS



1. *hepar, hepatis, n.* is declined like **CORPUS**
2. *axis, is, m.* is inflected like **PELVIS**
3. Nouns DENS, FONS, FRONS, LENS, MENS, MONS, MORS, PARS and PONS, are inflected like **PELVIS** (= gen. pl. -ium) even if they do not have equal number of syllables
4. Words inflected like **DOSIS** have very frequently irregular ending in genitive sg. **-eos** and in accusative sg. **-in.**
5. Nouns FEBRIS, TUSSIS, PERTUSSIS, SITIS, TUBERCULOSIS are inflected like **DOSIS**
6. **Greek nouns typical ending**
-osis > non-inflammatory degenerative disease
e. g. **arthrosis, nephrosis, spondylosis...**

Write down the stem and guess the paradigm word



• os, ossis, n.	oss-	~ corpus
• cutis, is, f.	cut-	~ pelvis
• mors, tis, f.	mort-	~ pelvis
• pulmo, onis, f.	pulmon-	~ dolor
• trauma, atis, n.	traumat-	~ corpus
• basis, is /eos, f.	bas-	~ dosis
• animal, alis, n.	animal-	~ rete
• latus, eris, n.	later-	~ corpus
• tussis, is, f.	tuss-	~ dosis
• pubes, is, f.	pub-	~ auris