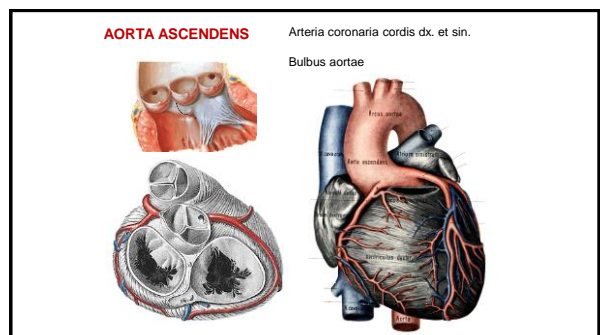
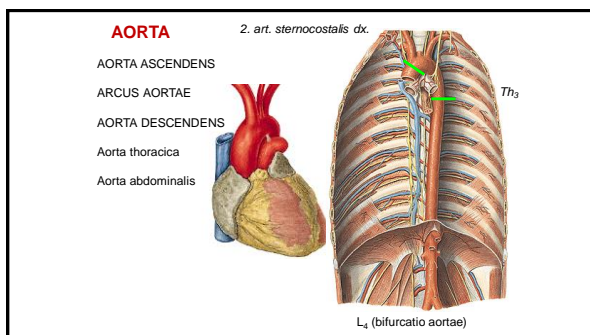
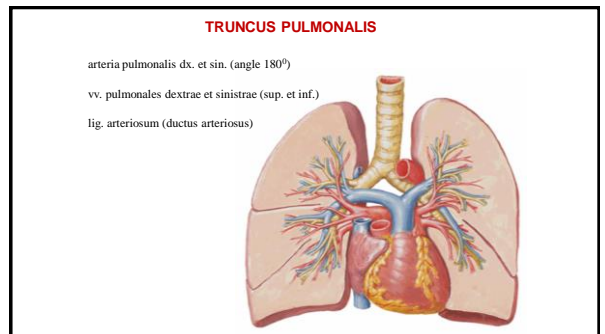
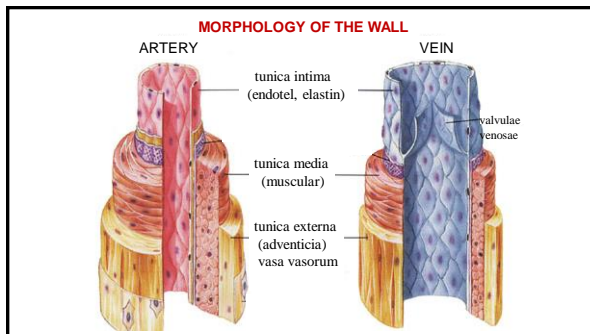
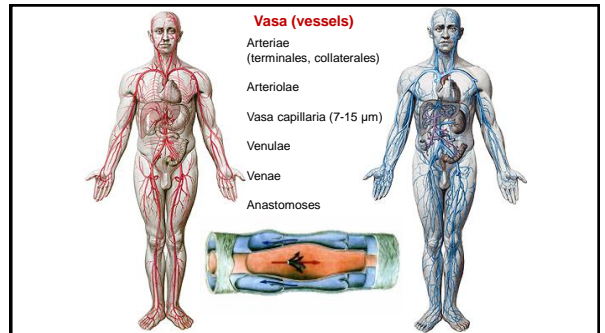


Overview of the arteries and veins, Lymphatic system

MUDr. Marek Joukal, Ph.D.

Department of Anatomy



ARCUS AORTAE

truncus brachiocephalicus (art. sternocostavicularis dx.)
 arteria carotis communis sin.
 arteria subclavia sin.

ARTERIA CAROTIS COMMUNIS

A. carotis interna et externa
 Trigonum caroticum
 Glomus caroticum (chemoreceptor)

ARTERIA CAROTIS EXTERNA

Ventral branches:
 a. thyroidea sup.
 a. lingualis
 a. facialis

Dorsal branches:
 a. occipitalis
 a. auricularis post.

Medial branches:
 a. pharyngea asc.

Lateral branches:
 a. sternocleidomastoidea

Terminal branches:
 a. maxillaris
 a. temporalis spf.

ARTERIA THYROIDEA SUP.

a. laryngea sup.
 r. cricothyroideus
 rr. glandulares
 (r. infrahyoideus)
 (r. sternocleidomastoideus)

ARTERIA LINGUALIS

Trigonum Pirogovi

r. suprahyoideus
 a. sublingualis
 rr. dorsales linguae
 a. profunda linguae

Béclard's angle

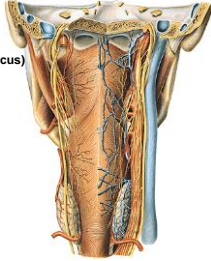
ARTERIA FACIALIS

a. labialis sup. et inf.
 (circulus arteriosus oris)
 a. alaris nasi
 a. angularis

a. palatina ascendens, r. tonsillaris
 a. submental, rr. glandulares

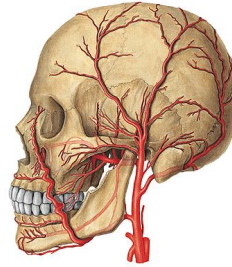
ARTERIA PHARYNGEA ASCENDENS

- rr. pharyngei
- a. meningea post. (foramen jugulare)
- a. tympanica inf. (canaliculus tympanicus)



ARTERIA OCCIPITALIS

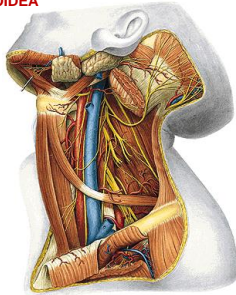
- rr. musculares (r. sternocleidom.)
- r. auricularis
- r. mastoideus
- rr. occipitales



A. STERNOCLEIDOMASTOIDEA

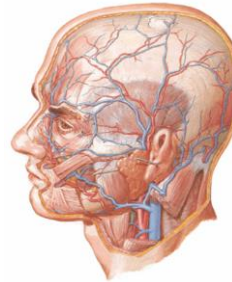
A. AURICULARIS POST.

- rr. musculares
- rr. glandulares
- r. auricularis
- a. stylomastoidea
 - a. tympanica post.
 - rr. mastoidei
 - r. stapediales
- r. occipitalis



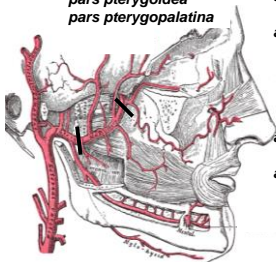
ARTERIA TEMPORALIS SUPERFICIALIS

- rr. parotidei
- a. transversa faciei
- rr. auriculares ant.
- a. zygomaticoorbitalis
- a. temporalis media
- r. frontalis
- r. parietalis



A. MAXILLARIS

- pars mandibularis
- pars pterygoidea
- pars pterygopalatina



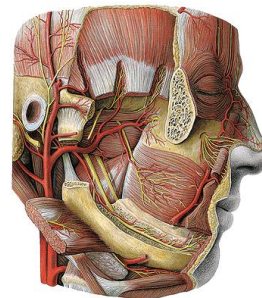
Pars mandibularis

- a. meningea media
- a. alveolaris inf.
 - r. mylohyoideus
- rr. dentales
- rr. gingivales
- a. mentalis
- a. auricularis prof.
- a. tympanica ant.

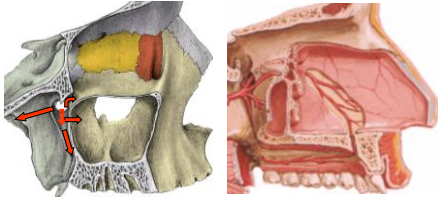
ARTERIA MAXILLARIS

Pars pterygoidea

- a. masseterica
- aa. temporales prof.
- rr. pterygoidei
- a. bucalis



A. MAXILLARIS - pars pterygopalatina



- a. infraorbitalis
- a. alveolaris sup. post.
- a. palatina descendens
- a. canalis pterygoidei
- a. sphenopalatina

ARTERIA SUBCLAVIA

Fissura scalenorum

Pars intrascalenica (med.)

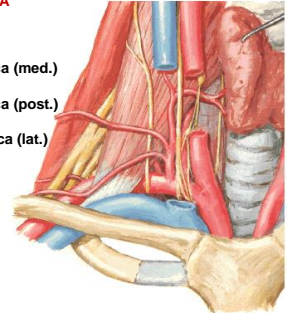
Pars interscalenica (post.)

Pars extrascalenica (lat.)

Sulcus a. subclaviae

cupula pleurae

costa prima



ARTERIA SUBCLAVIA

Pars intrascalenica:

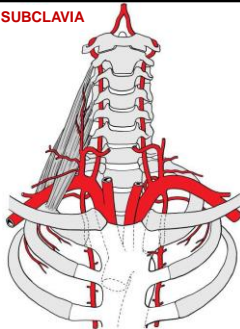
- a. vertebralis
- a. thoracica interna
- tr. thyrocervicalis

Pars interscalenica:

- tr. costocervicalis

Pars extrascalenica:

- a. transversa colli



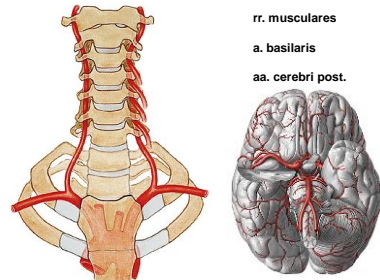
ARTERIA VERTEBRALIS

rr. spinales

rr. musculares

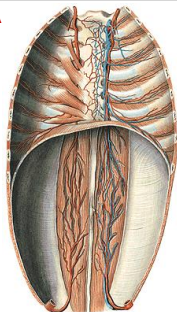
a. basilaris

aa. cerebri post.

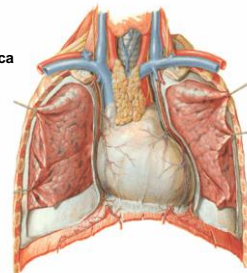


ARTERIA THORACICA INTERNA

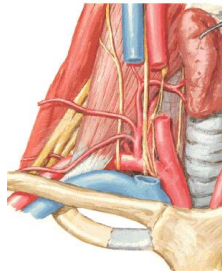
- a. musculophrenica
- a. epigastrica sup.
- aa. intercostales ant. (rr. perforantes, rr. mammarii)
- a. pericardiophrenica
- rr. mediastinales (aa. thymicae, rr. bronchiales, rr. sternales)



A. pericardiophrenica



TRUNCUS THYROCERVICALIS



- a. thyroidea inf.
- a. cervicalis ascendens
- a. cervicalis spf.
- a. suprascapularis



TRUNCUS COSTOCERVICALIS



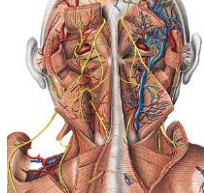
- a. cervicalis prof.
- a. intercostalis suprema



ARTERIA TRANSVERSA COLLI



- r. ascendens (superficialis)
- r. descendens (profundus)
= a. dorsalis scapulae



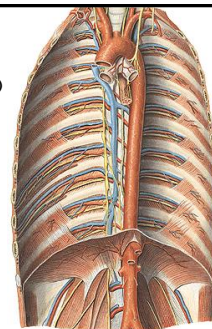
AORTA THORACICA

Parietal branches

- aa. intercostales post. (VAN)
- a. subcostalis
- a. phrenica sup.

Visceral branches:

- rr. bronchiales
- rr. oesophagei
- rr. pericardiaci



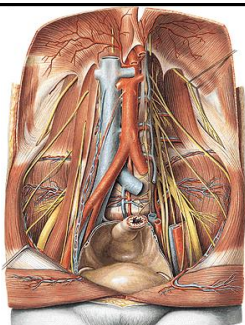
AORTA ABDOMINALIS

Parietal branches

- a. phrenica inf.
(a. suprarenalis sup.)

4 aa. lumbales

- a. sacralis mediana
(a. lumbalis ima,
rr. sacrales)



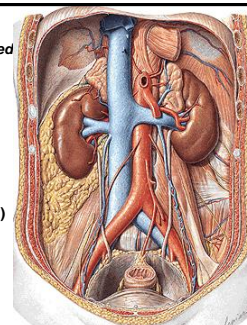
AORTA ABDOMINALIS

Visceral branches - paired

a. suprarenalis media

- a. renalis
 - r. uretericus
 - a. suprarenalis inf.
 - rr. praepelvis
 - r. retropelvis

- a. testicularis (a. ovarica)
 - rr. ureterici
(r. tubarius)



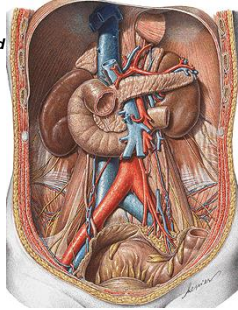
AORTA ABDOMINALIS

Visceral branches – unpaired

truncus coeliacus Th₁₂

a. mesenterica sup. L₁

a. mesenterica inf. L₃



TRUNCUS COELIACUS

a. gastrica sin.

a. hepatica communis

a. hepatica propria

a. gastrica dx.

r. dexter (a. cystica)

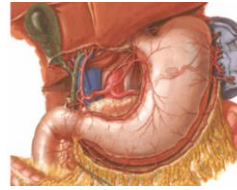
r. sinister

a. gastroduodenalis

a. gastropiploica dx.

a. pancreaticoduodenalis. sup.

a. lienalis



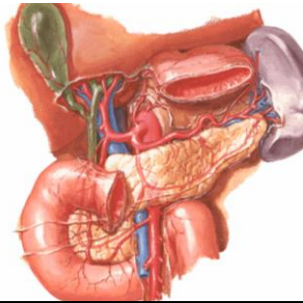
ARTERIA LIENALIS

rr. pancreatici

a. gastropiploica sin.

aa. gastricae breves

rr. lienales



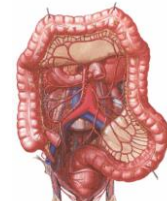
ARTERIA MESENTERICA SUP.



a. pancreaticoduodenalis inf.

aa. jejunales et ilei (10-18)

a. ileocolica



a. colica dx.

a. colica media

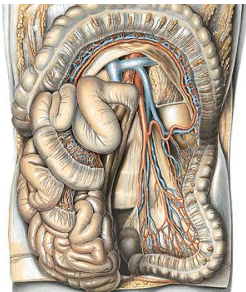
ARTERIA MESENTERICA INFERIOR

a. colica sinistra

aa. sigmoideae

a. rectalis sup.

anastomosis magna
(Halleri)

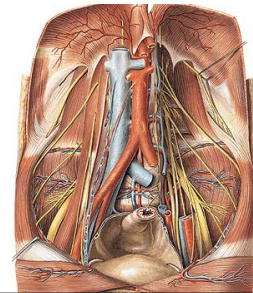


ARTERIA ILIACA COMMUNIS

A. iliaca externa

A. iliaca interna

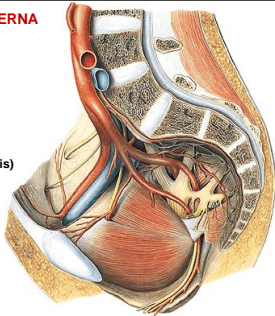
(bifurcatio aortae L₄)



ARTERIA ILIACA INTERNA

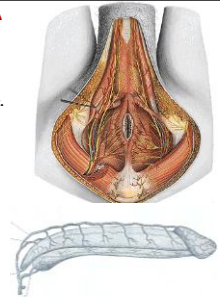
Parietal branches

- a. iliolumbalis
- a. sacralis lat.
- a. obturatoria
(r. pubicus - corona mortis)
- a. glutea sup.
- a. glutea inf.
- a. pudenda interna



ARTERIA PUDENDA INTERNA

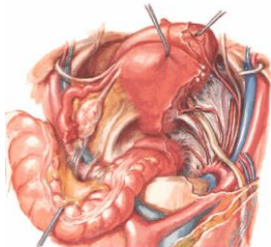
- a. rectalis inf.
- a. perinealis – rr. scrotales post.
(rr. labiales post.)
- a. penis (a. clitoridis)
 - a. profunda penis (clitoridis)
 - a. dorsalis penis (clitoridis)



ARTERIA ILIACA INTERNA

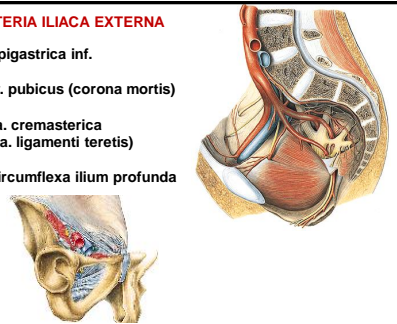
Visceral branches

- aa. vesicales sup.
(a. umbilicalis)
- a. vesicalis inf.
- a. rectalis media
- ♂ a. ductus deferentis
- ♀ a. uterina

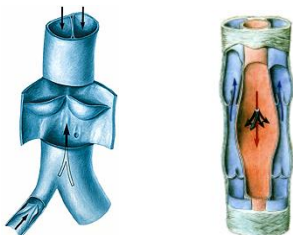


ARTERIA ILIACA EXTERNA

- a. epigastrica inf.
 - r. pubicus (corona mortis)
- a. cremasterica
(a. ligamenti teretis)
- a. circumflexa iliium profunda



VEINS

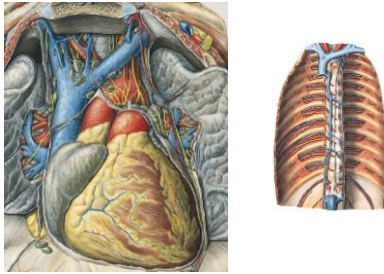


v. cava superior

v. cava inferior



VENA CAVA SUPERIOR



VENAE BRACHIOCEPHALICAE

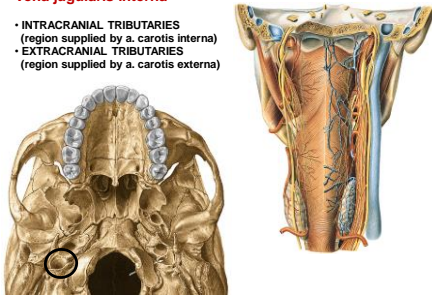
Angulus venosus dx. a sin.



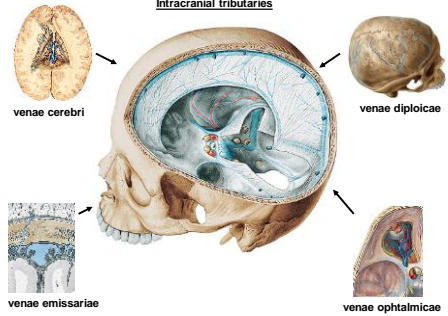
- vv. thyroideae inferiores – plexus thyroideus impar
- vv. thymicae, vv. mediastinales, vv. pericardiacae
- v. vertebralis
- v. thoracica interna
- v. intercostalis suprema

Vena jugularis interna

- INTRACRANIAL TRIBUTARIES (region supplied by a. carotis interna)
- EXTRACRANIAL TRIBUTARIES (region supplied by a. carotis externa)



Intracranial tributaries



Extracranial tributaries

Anterior (separately, from stem...)

- v. facialis
- v. lingualis
- v. thyroidea superior
- v. thyroidea media

Medial

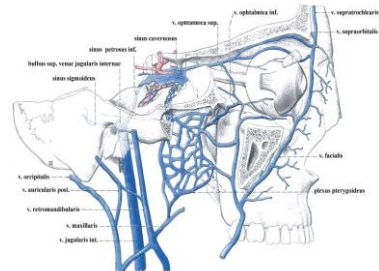
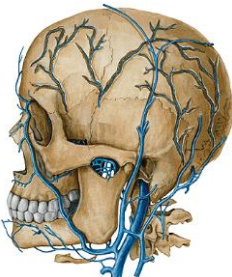
v. pharyngea (plexus pharyngeus)

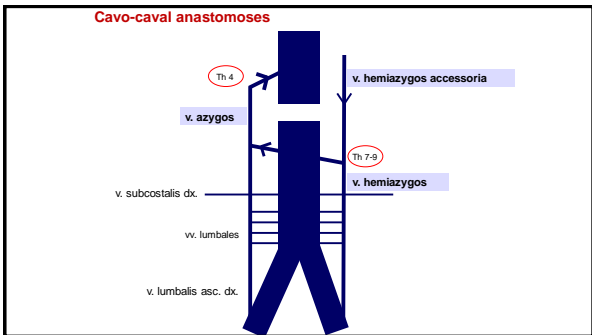
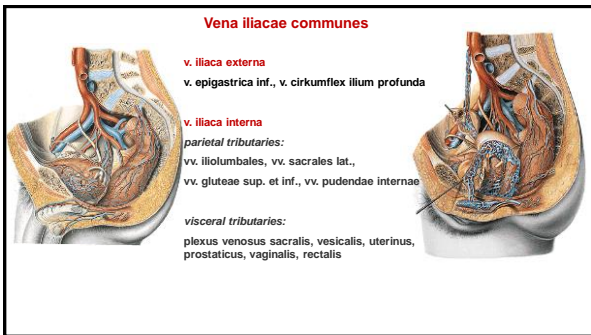
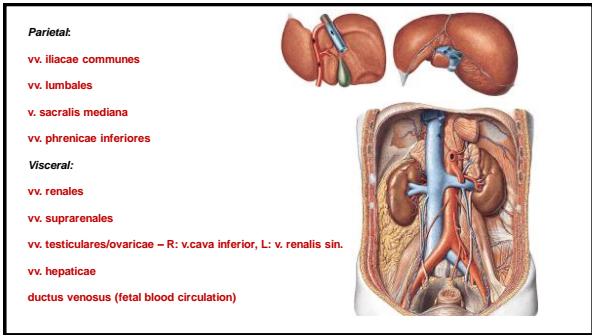
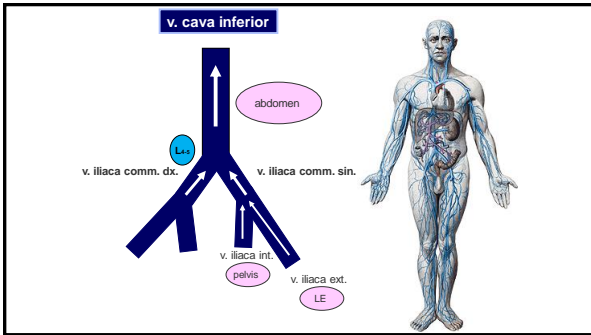
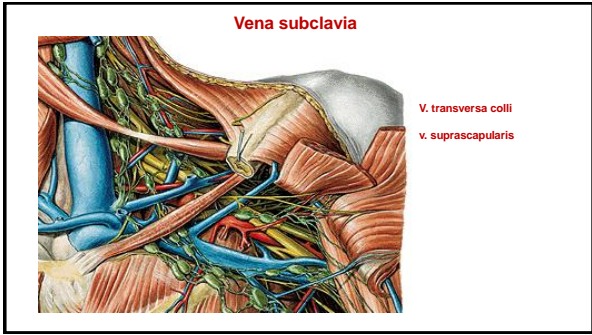
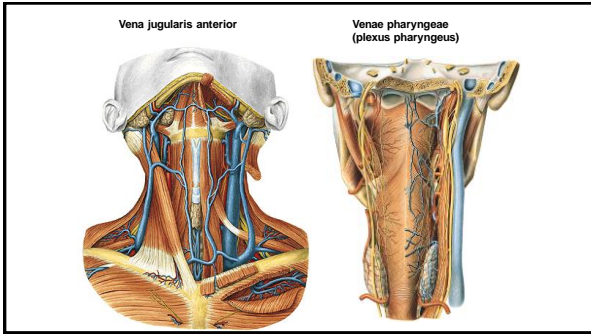
Vena jugularis externa

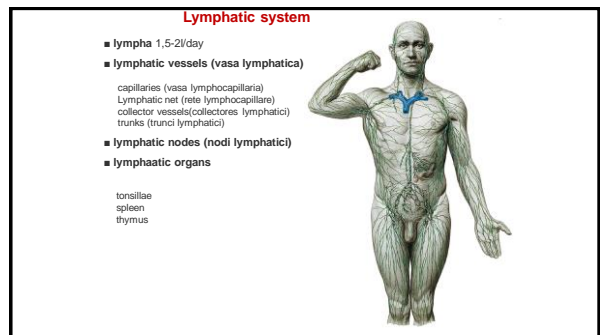
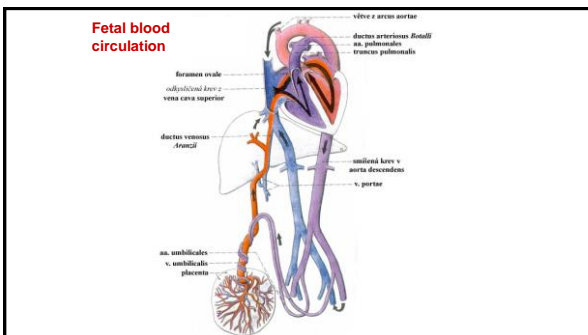
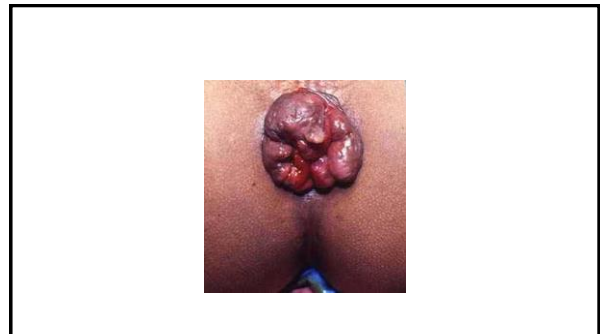
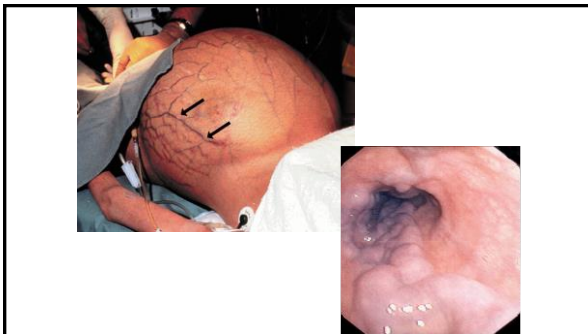
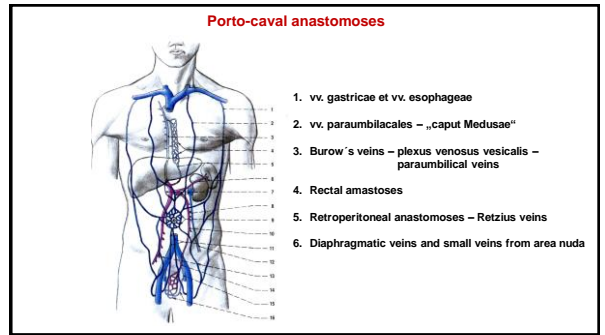
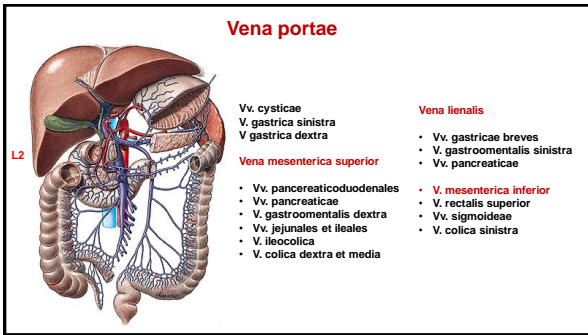
- v. auricularis posterior
- v. occipitalis

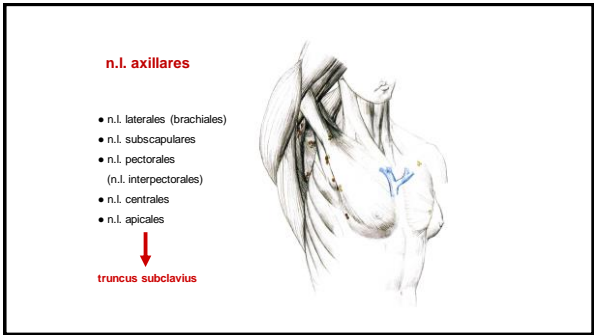
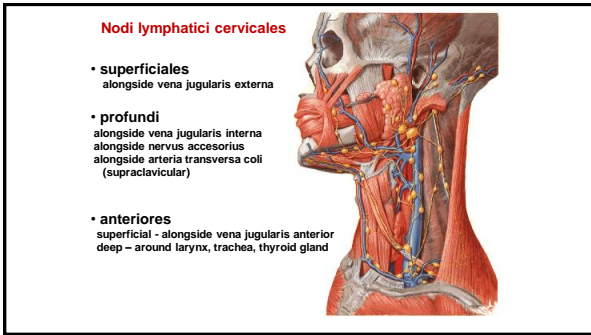
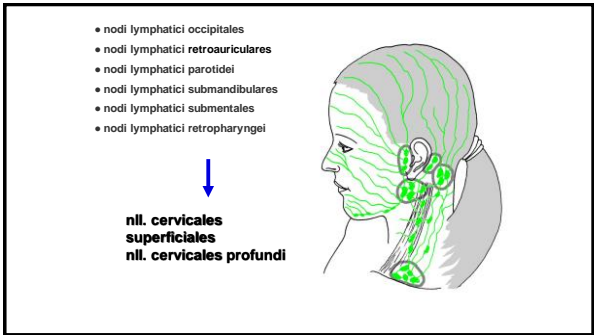
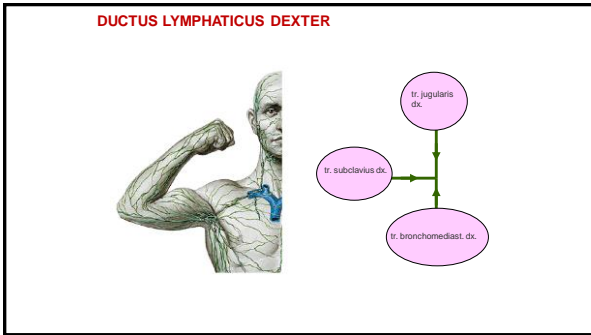
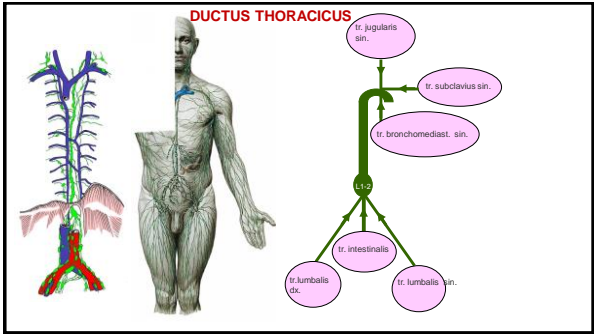
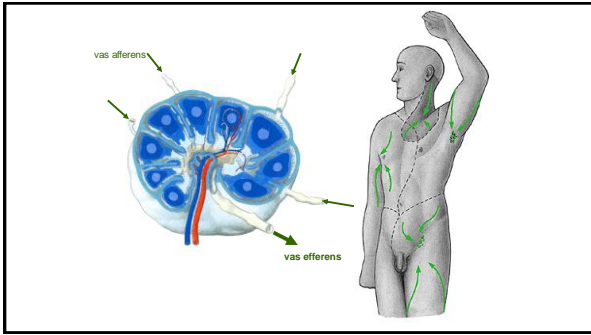
vena retromandibularis

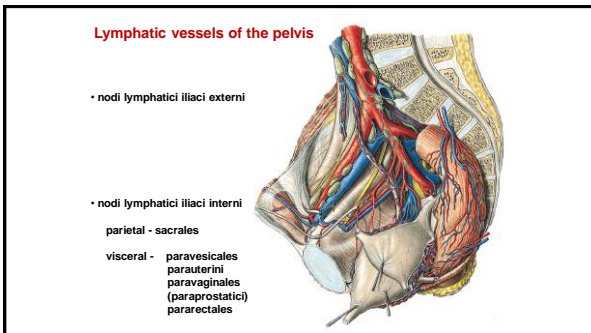
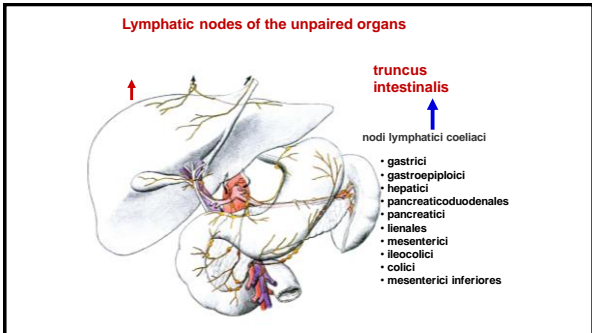
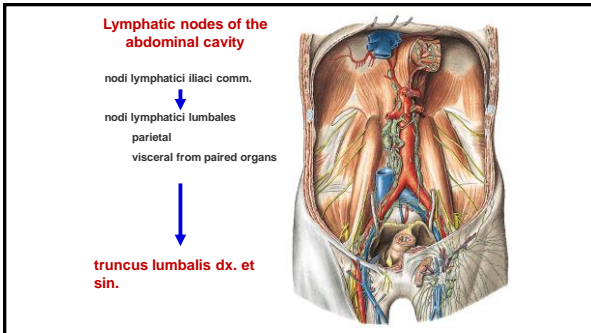
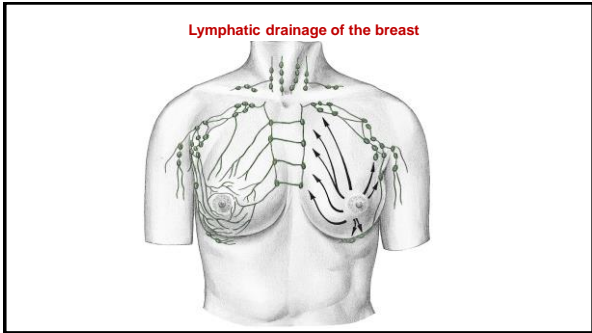
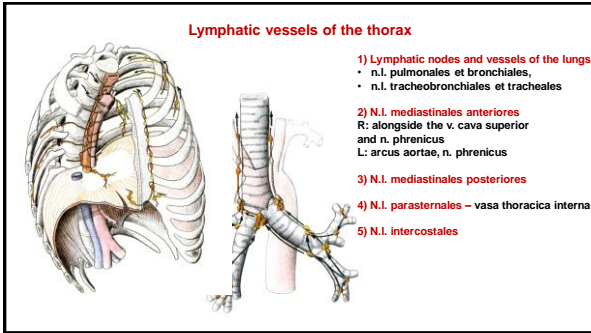
- v. temporalis superficialis
- v. maxillaris (plexus pterygoideus)











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