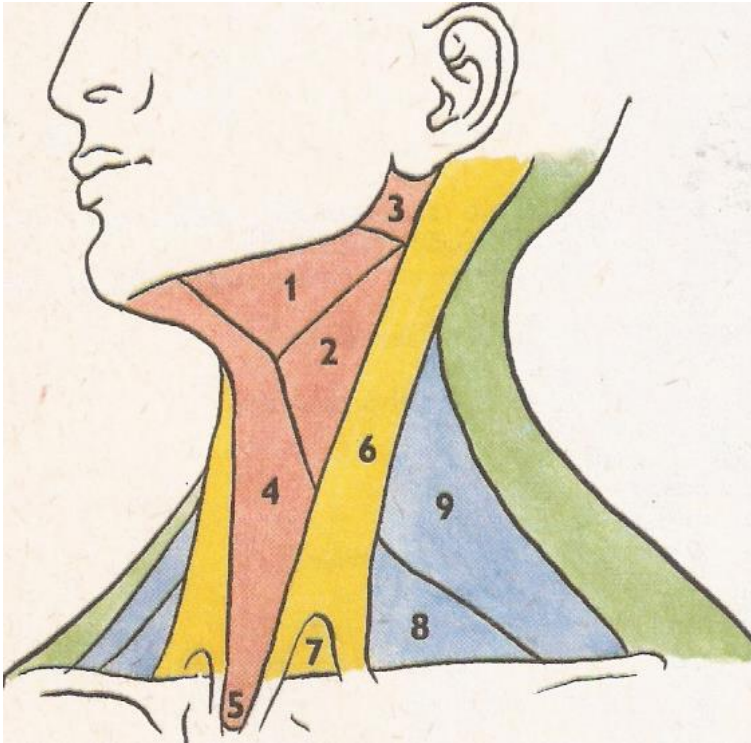
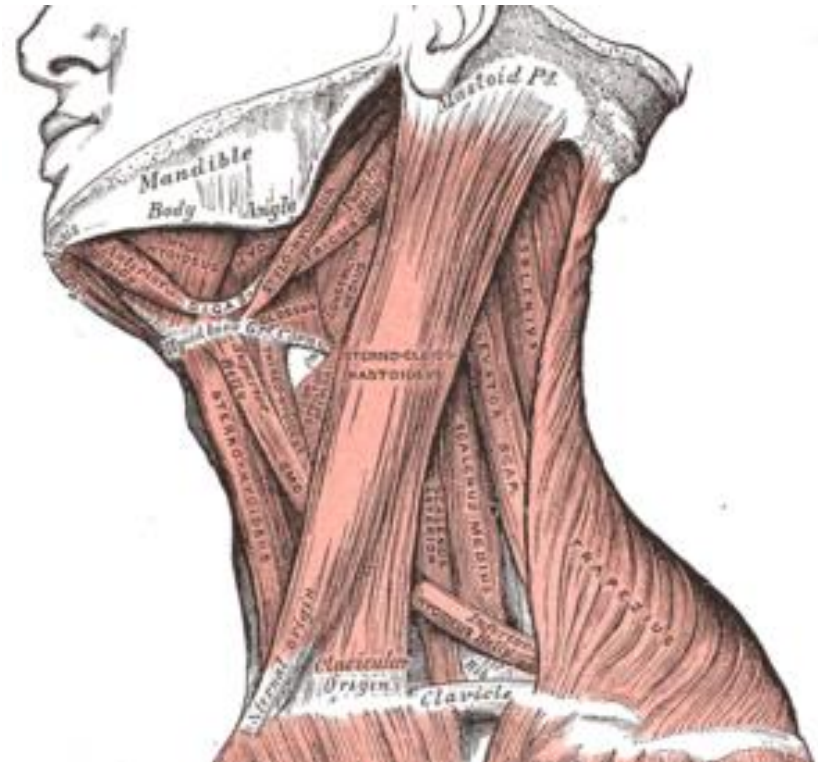


Klinická anatomie krku a hrudníku

Regiones colli



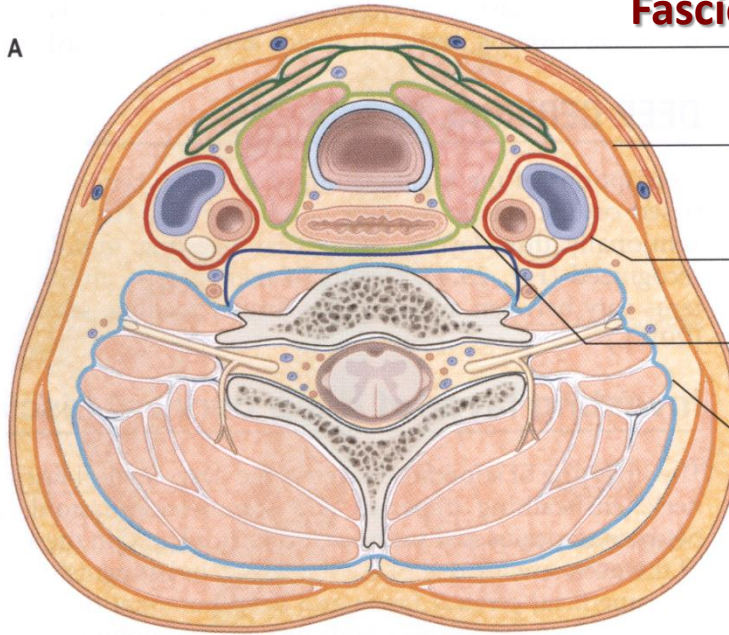
- 1) **trigonum submandibulare**
- 2) **trigonum caroticum**
- 3) **regio retromandibularis**
- 4) **regio mediana colli**
- 5) **fossa jugularis**



- 6) **regio sternocleidomastoidea**
- 7) **fossa supraclavicularis minor**
- 8) **trigonum omoclaviculare**
- 9) **trigonum omotrapezium**

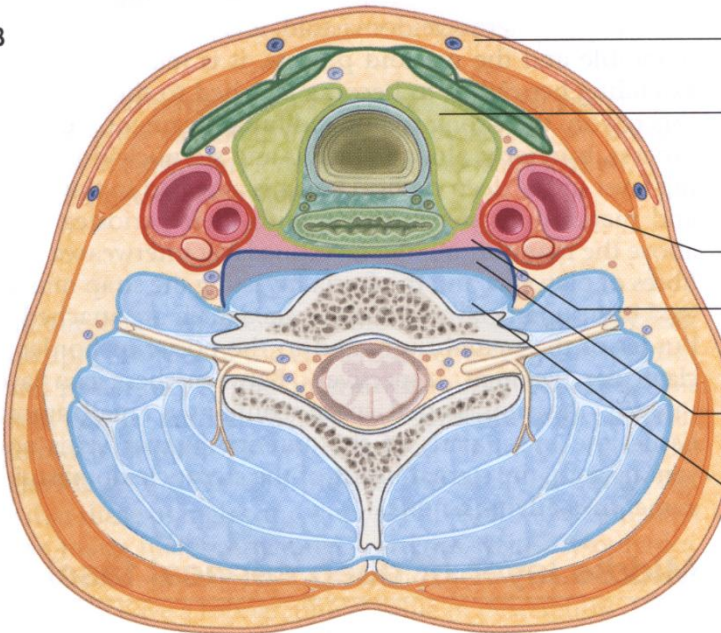
Fascie krku

A



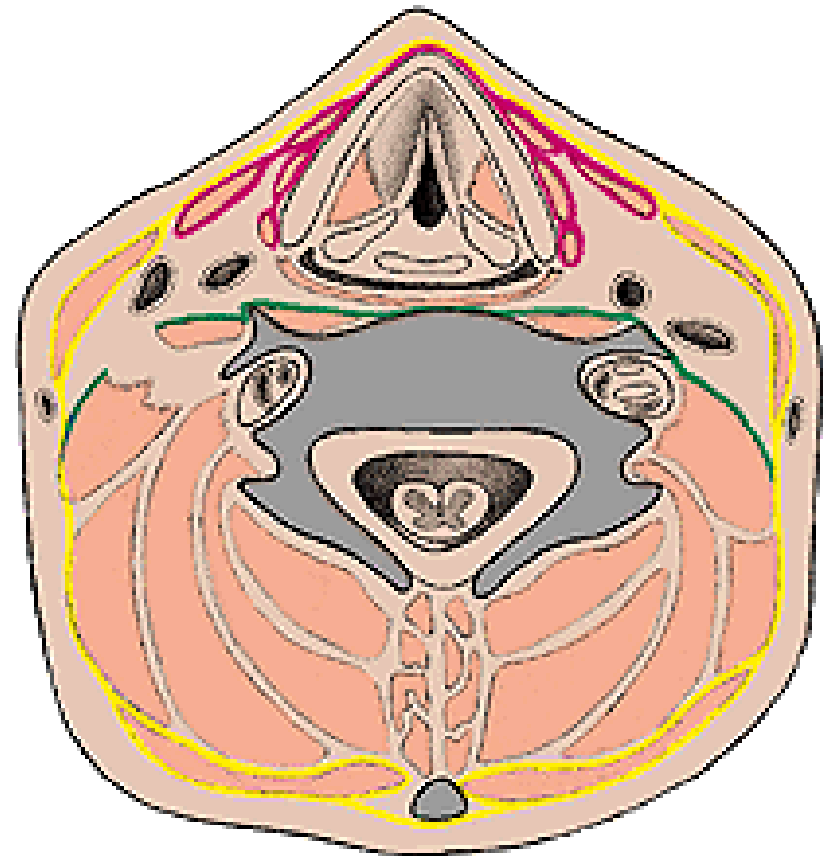
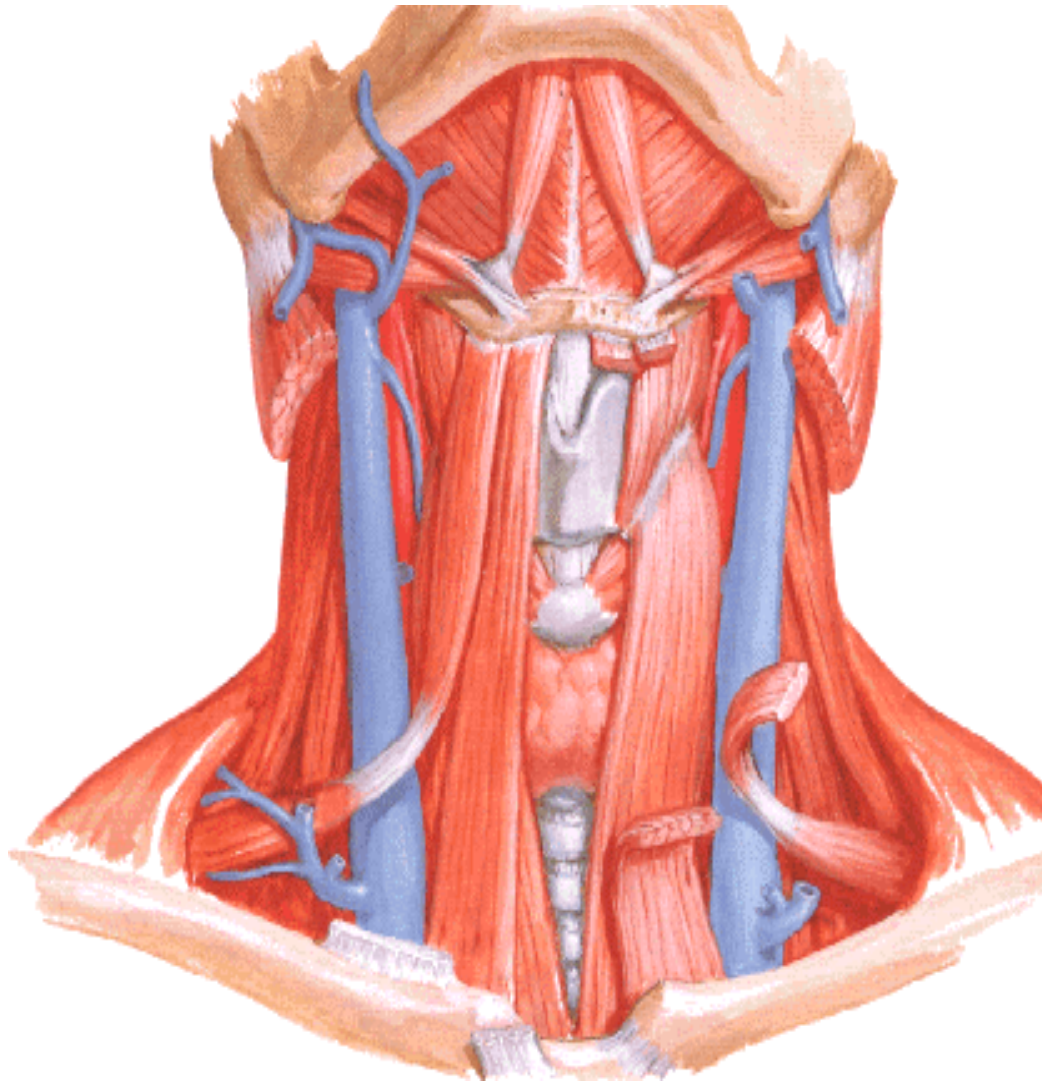
- Superficial cervical fascia
≡ Subcutaneous tissue/platysmal layer/SMAS
- Superficial layer of deep cervical fascia (SLDCF)
≡ Investing fascia/investing layer DCF/parotidomasseteric fascia
- Carotid sheath
- Middle layer of deep cervical fascia (MLDCF)
≡ Pretracheal fascia/visceral fascia/buccopharyngeal fascia
± Muscular layer
- Deep layer of deep cervical fascia (DLDCF)
≡ Prevertebral fascia
(± Separate component of alar fascia)

B

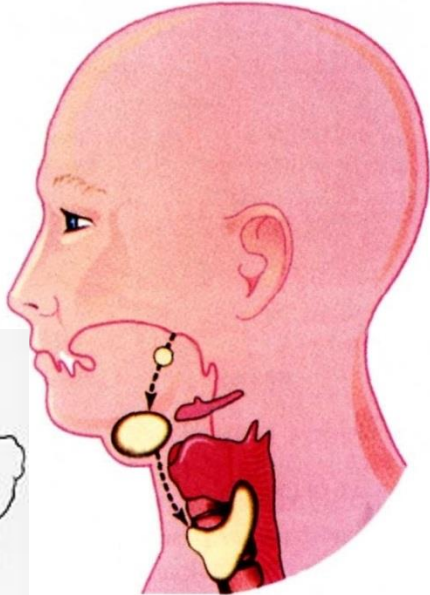
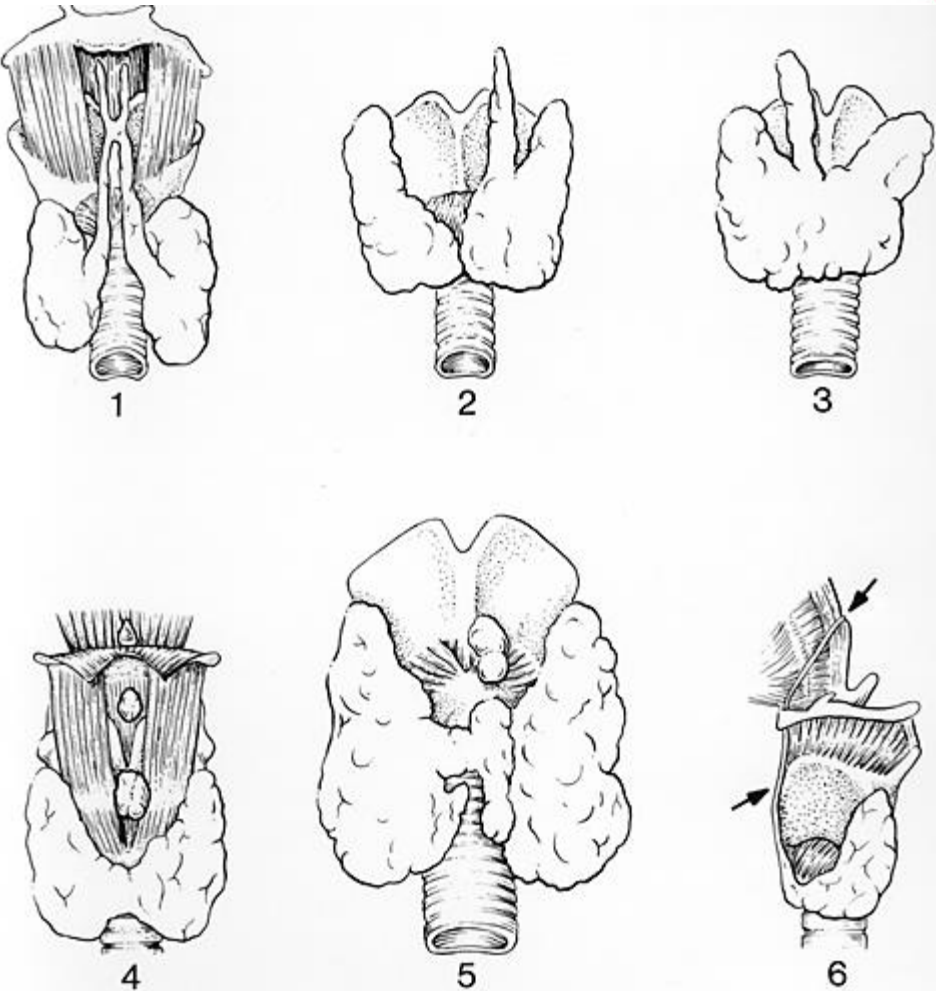
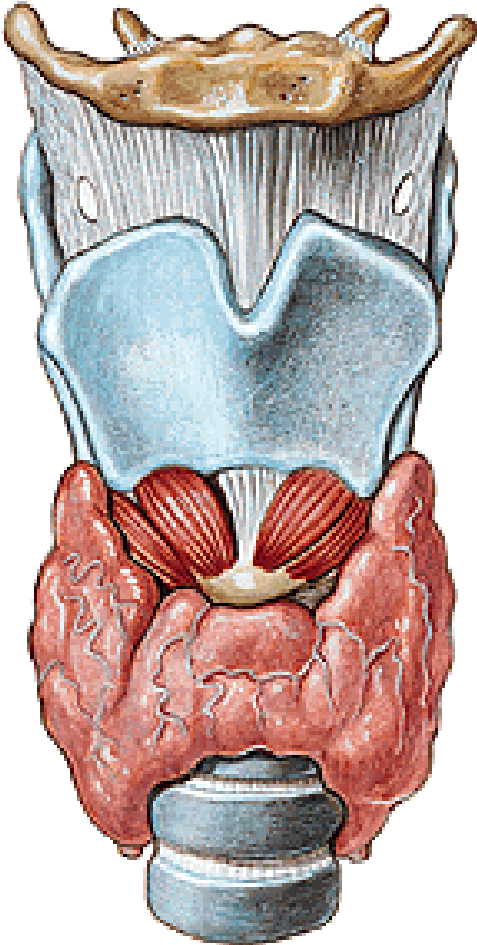


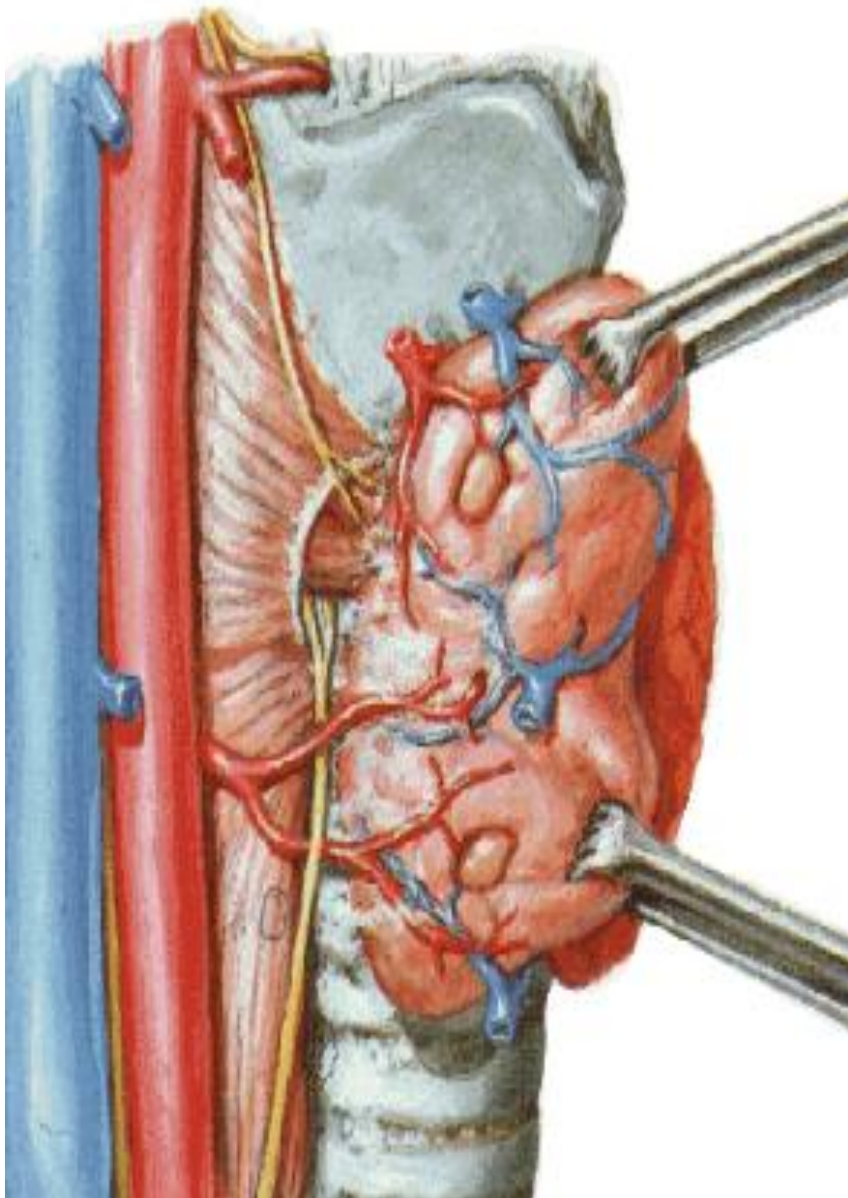
- Superficial space
- Central compartment ≡ Visceral space or compartment
≡ Pretracheal space
± Oesophageal compartment
- Carotid space ≡ Carotid sheath
- Retropharyngeal space
± Retrovisceral or retro-oesophageal space
- 'Danger' space
≡ Third space
≡ Posterior compartment of retropharyngeal space
- Prevertebral space
≡ Perivertebral space
± Paraspinal space

Regio coli anterior

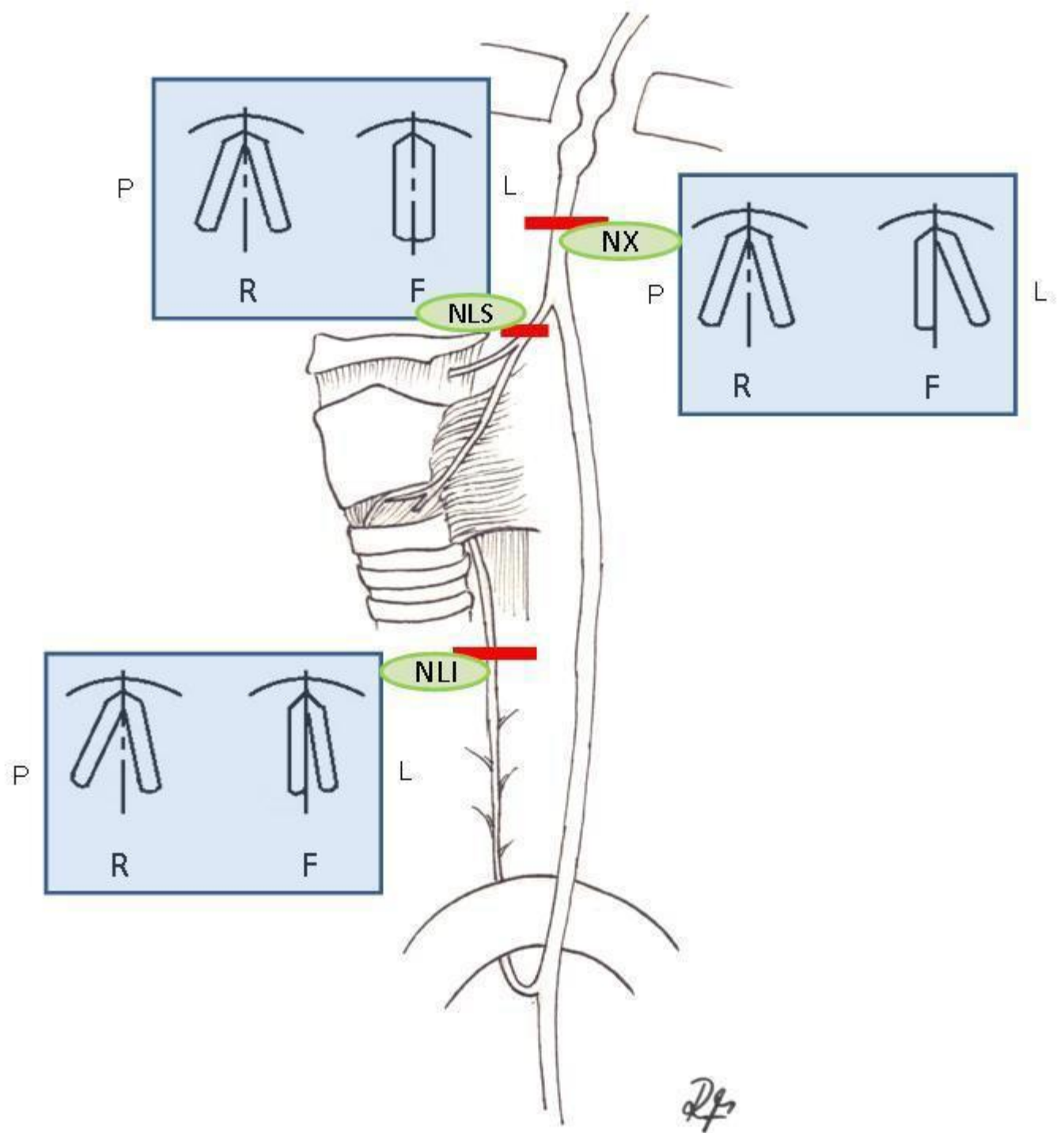


Glandula thyroidea



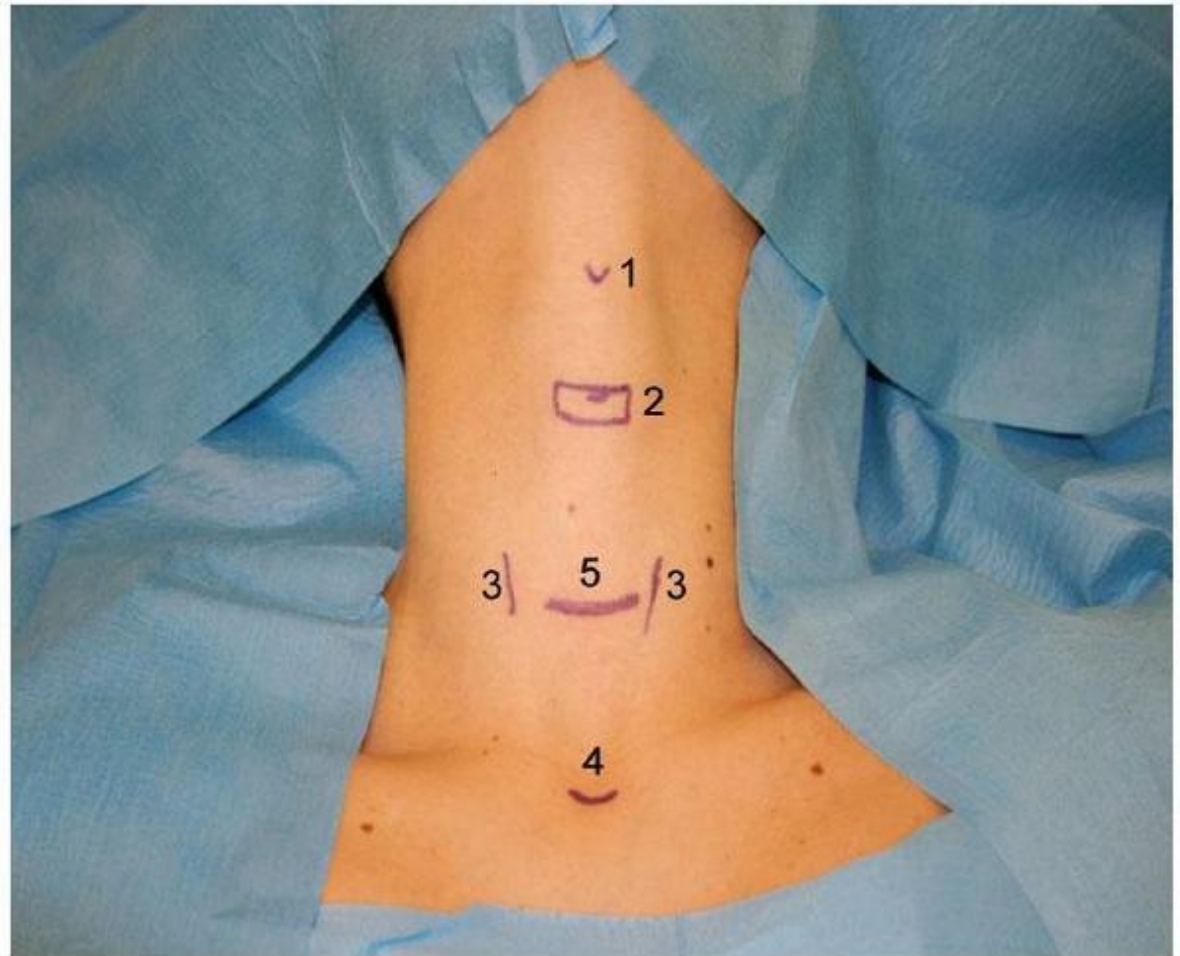
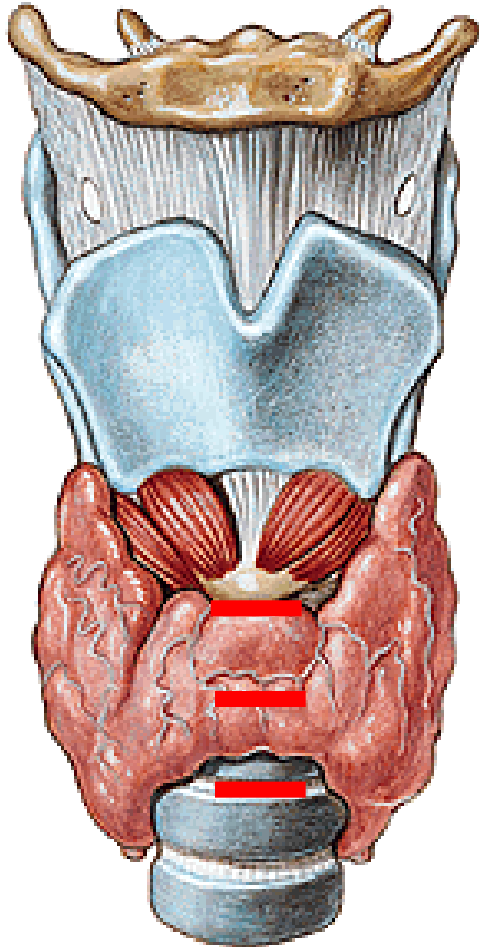


- Ramus externus n. laryngei sup.,
vasa laryngea sup.
- Ramus externus n. laryngei sup.
- Vasa thyroidea superiora (rr.
Glandulares
- Nervus laryngeus recurrens
- Wangúv bod
- Vasa thyroidea inf.
- Glandulae parathyroideae

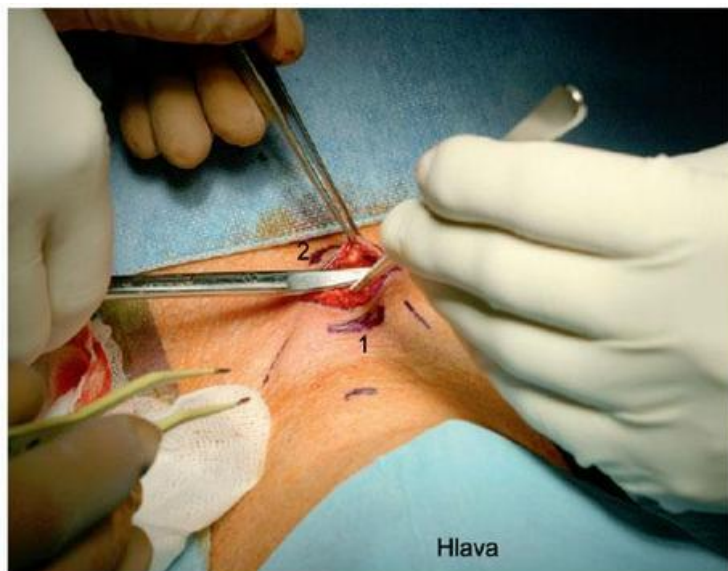




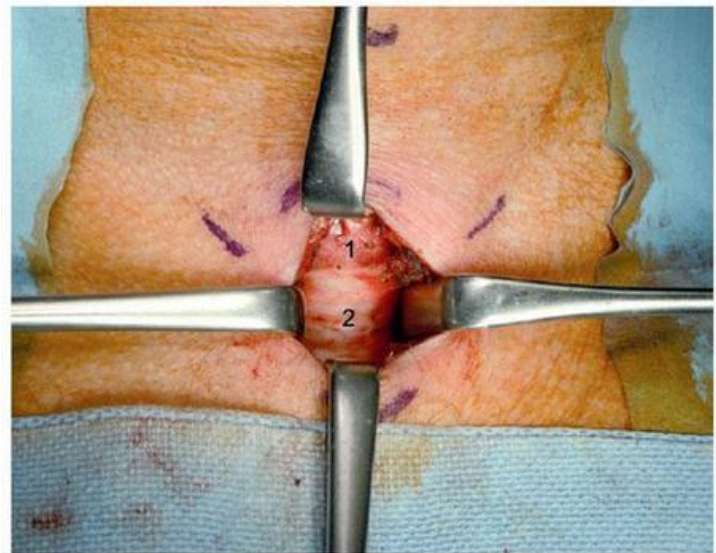
Tracheostomia



■ Obr. 1 – Orientační struktury na krku při tracheostomii, 1 – prominence štítné chrupavky, 2 – prstencová chrupavka, 3 – mediální okraje m. sternohyoidomastoideus, 4 – jugulární jamka, 5 – místo incize



■ Obr. 2 – Incize a preparace podkoží, 1 – prstencová chrupavka, 2 – jugulární jamka



■ Obr. 4 – Stav před incizí průdušnice, 1 – prstencová chrupavka, 2 – 1., 2. a 3. tracheální prstenec

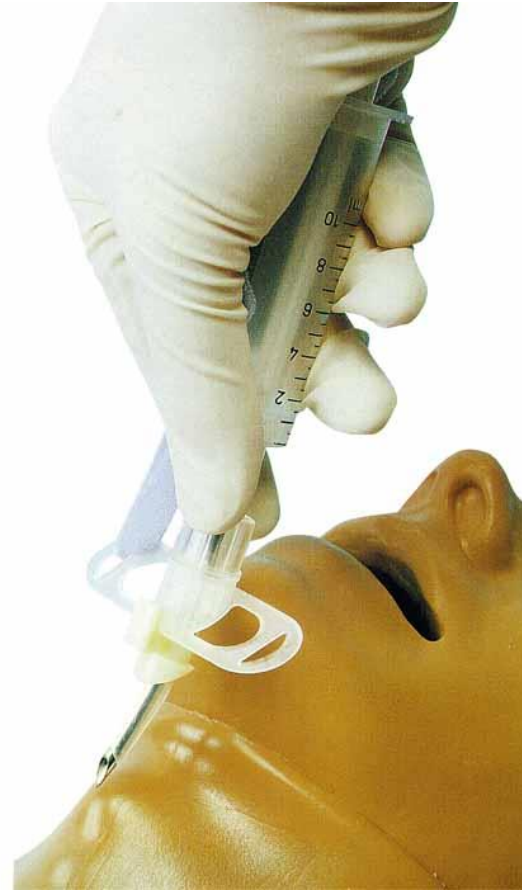
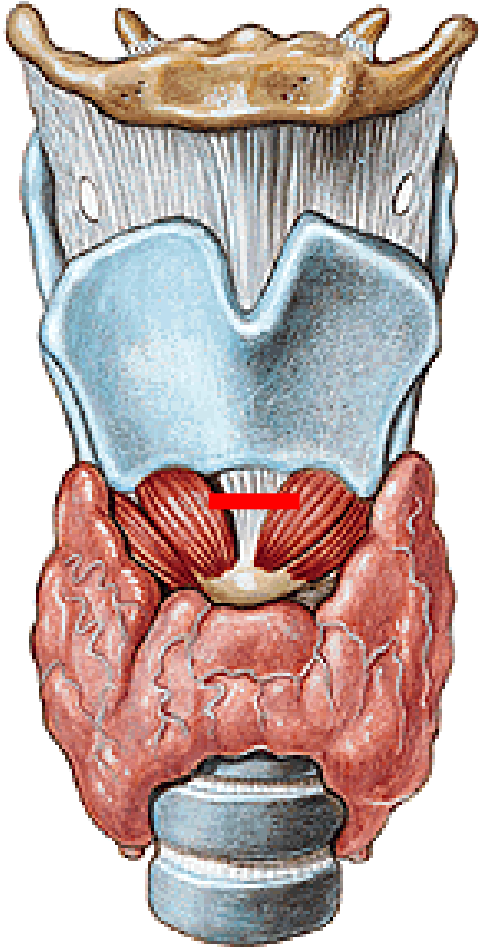


■ Obr. 3 – Přerušení isthmus štítné žlázy, 1 – projekce prstencové chrupavky, 2 – trachea, 3 – přerušovaný isthmus štítné žlázy



■ Obr. 5 – Björkûv lalok, 1 – 3. tracheální prstenec, 2 – tracheální rourka, 3 – chrupavka prstencová, 4 – tracheální háček

Coniostomia



Laryngocele

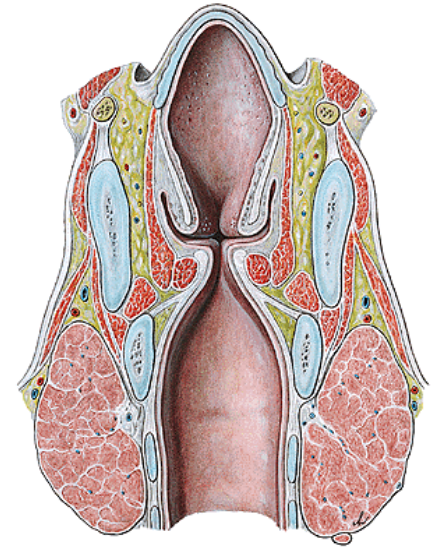
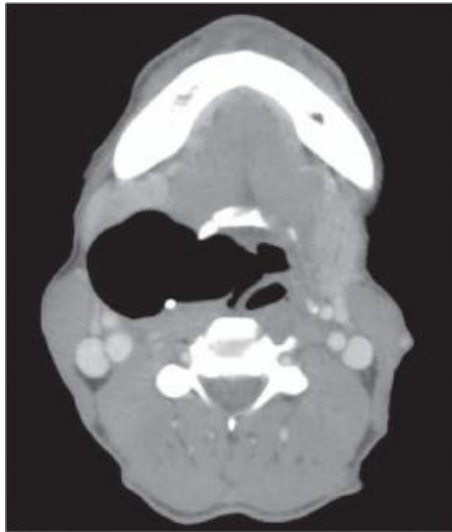
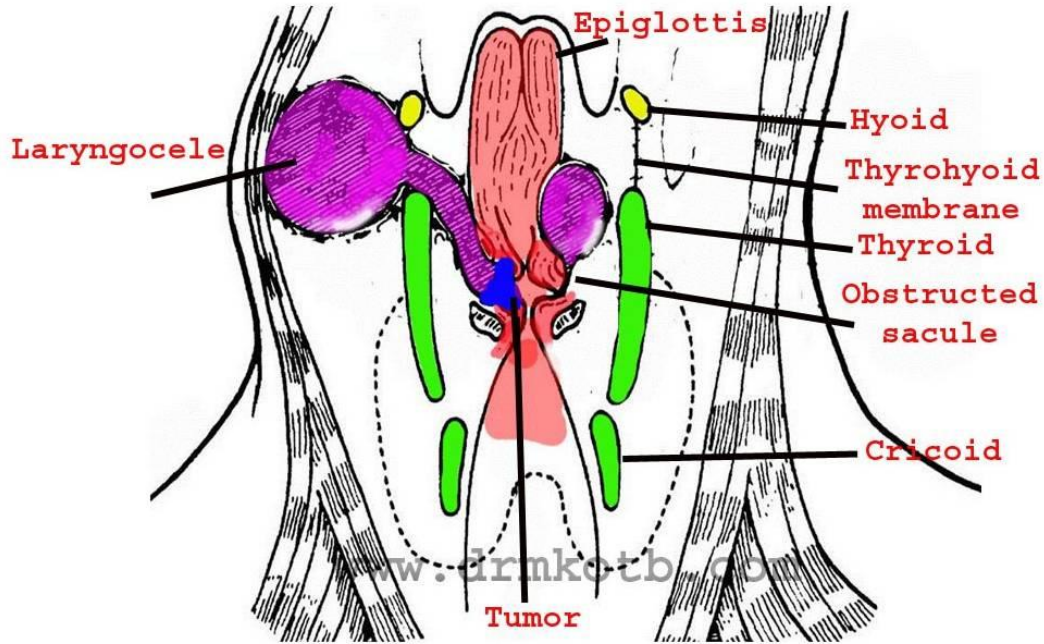
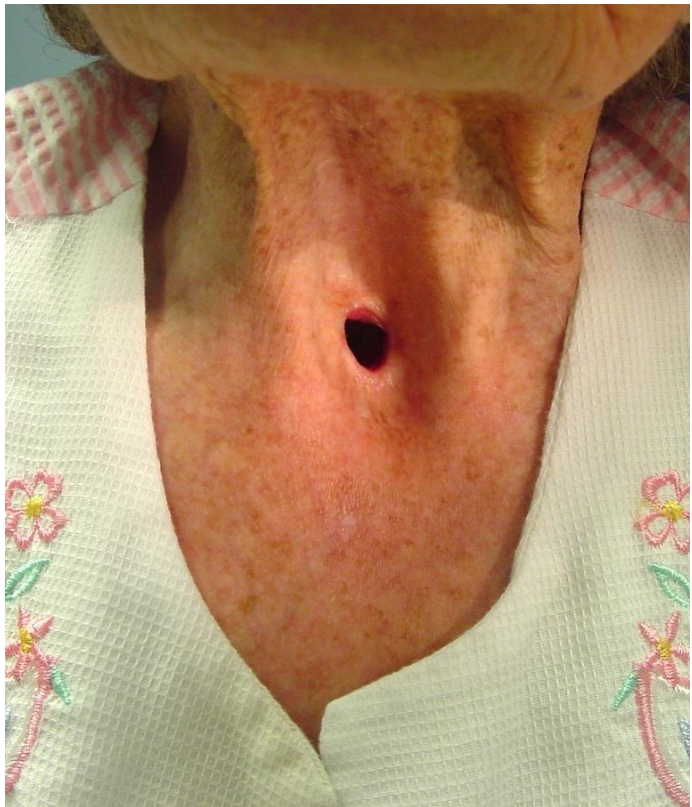
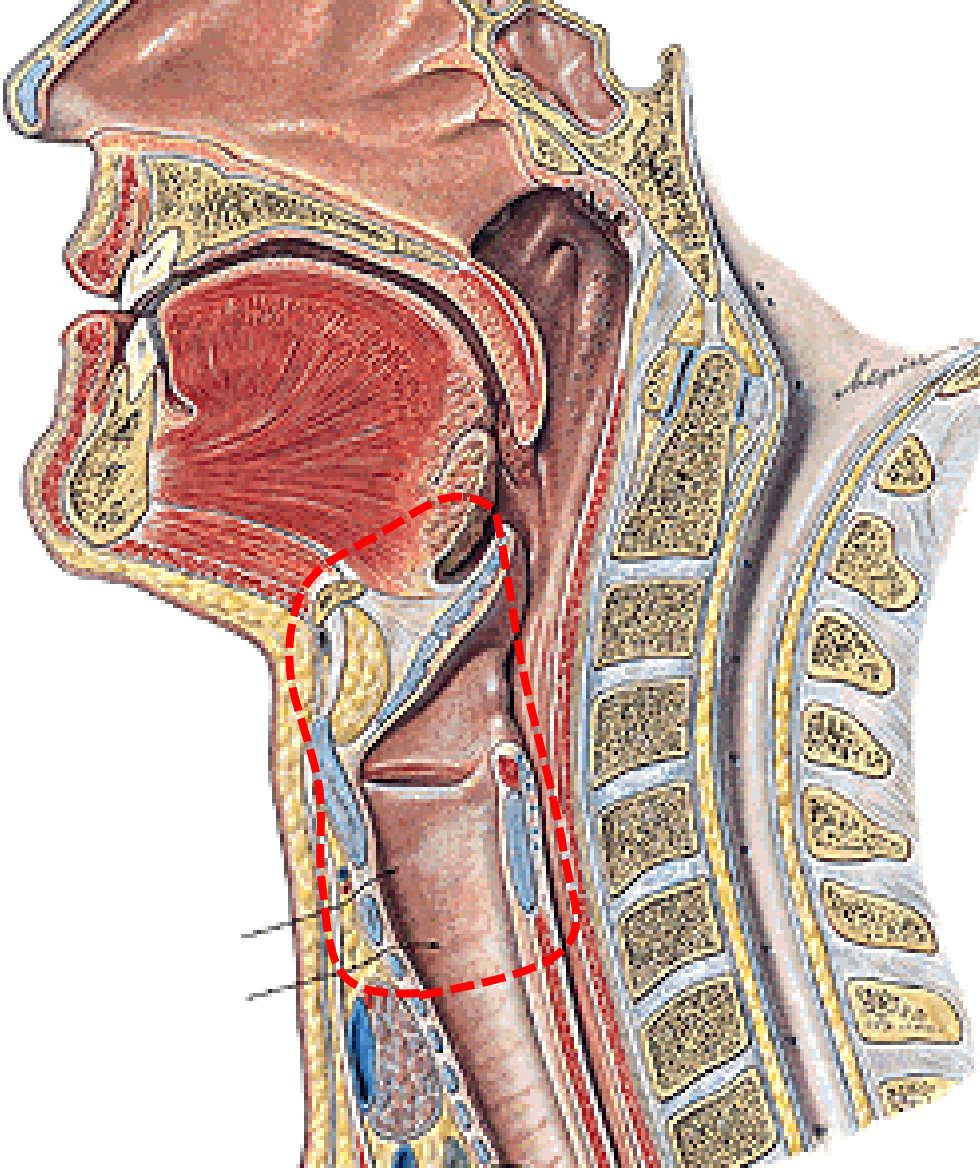
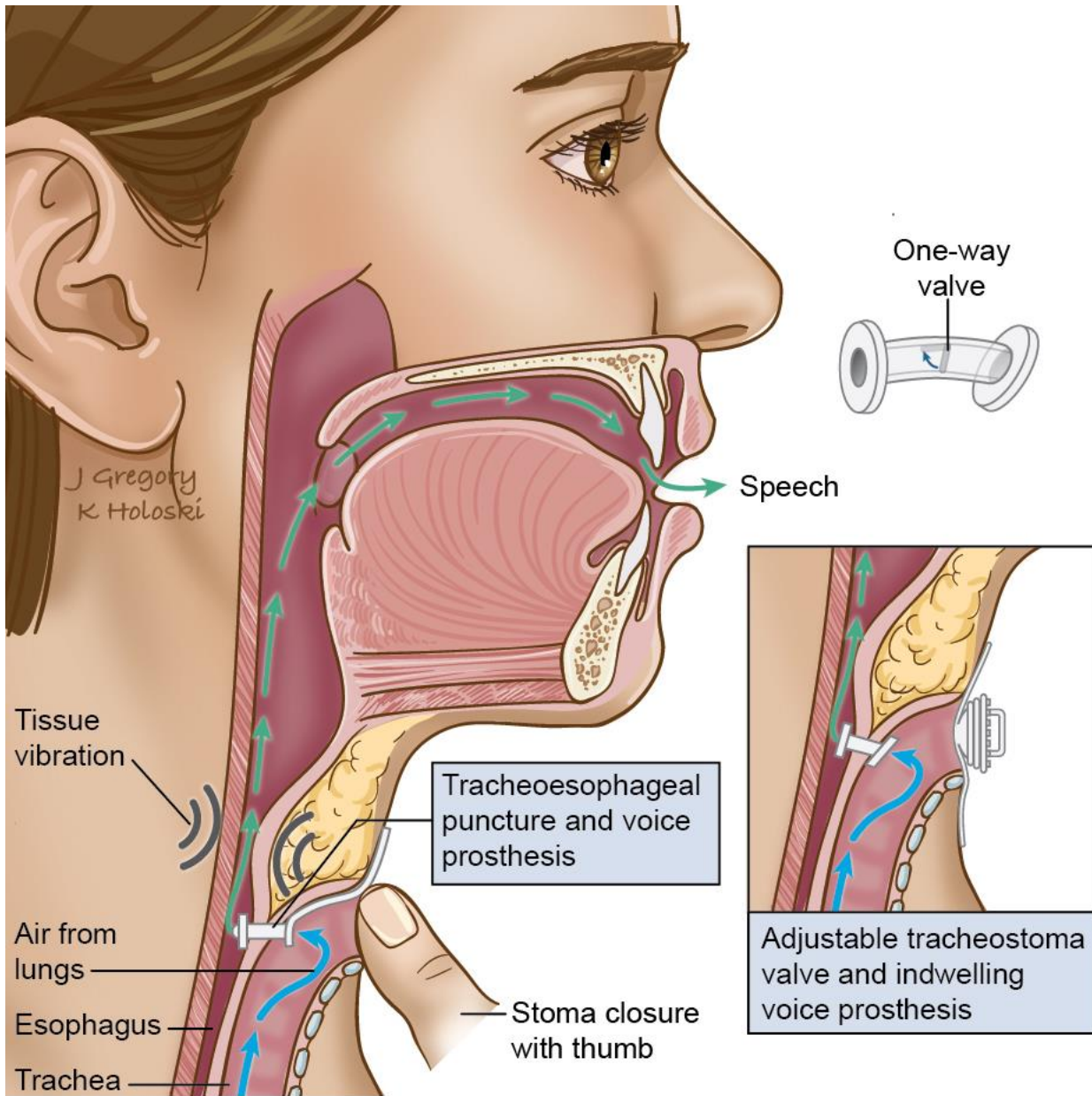


Figure 5. Axial multidetector CT images (A) and coronal reconstruction (B) demonstrate air-filled sacular formation communicating with the airway. Three-dimensional reconstruction with volume rendering (C) demonstrates laryngocele and its relation with the airway.

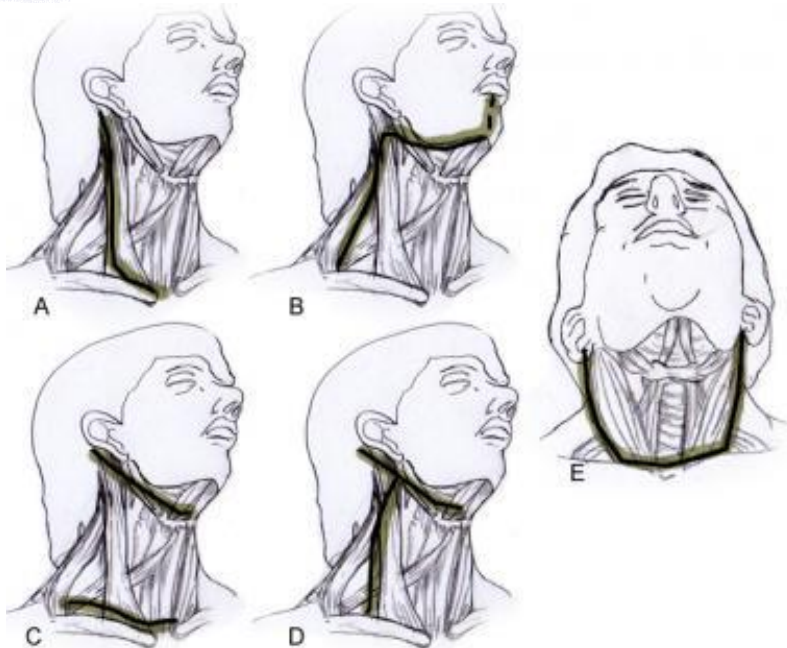
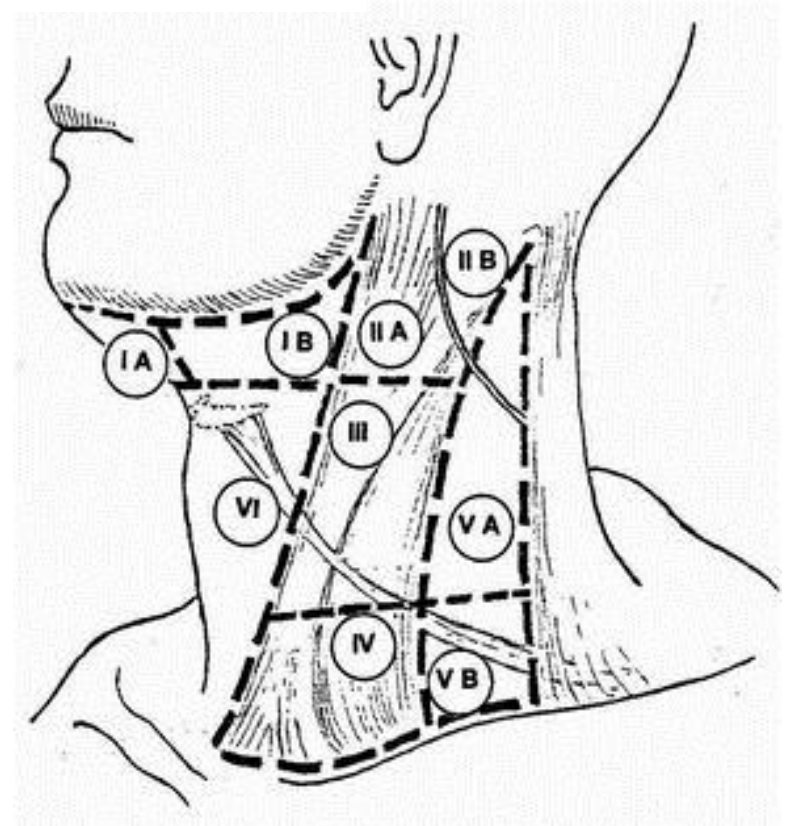
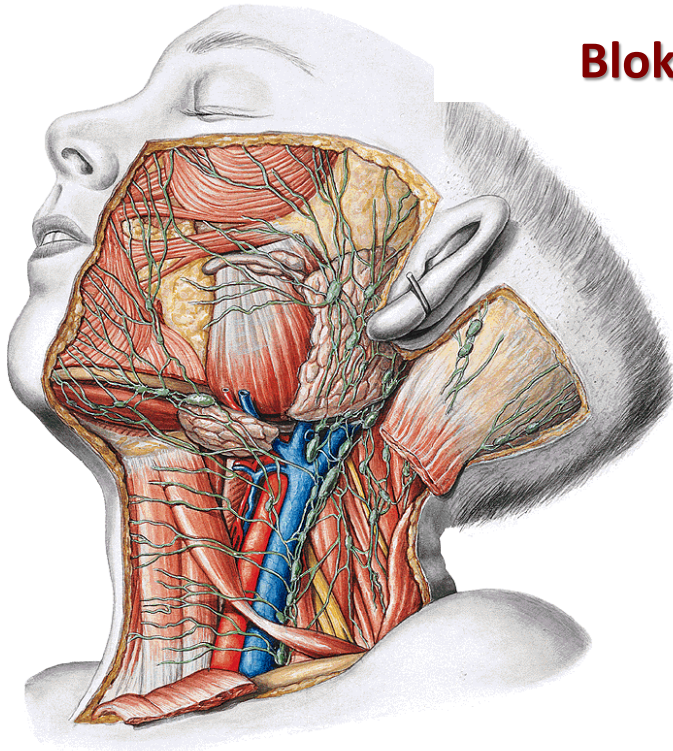
Laryngectomy totalis





Electrolarynx

Bloková disekce krční uzlin

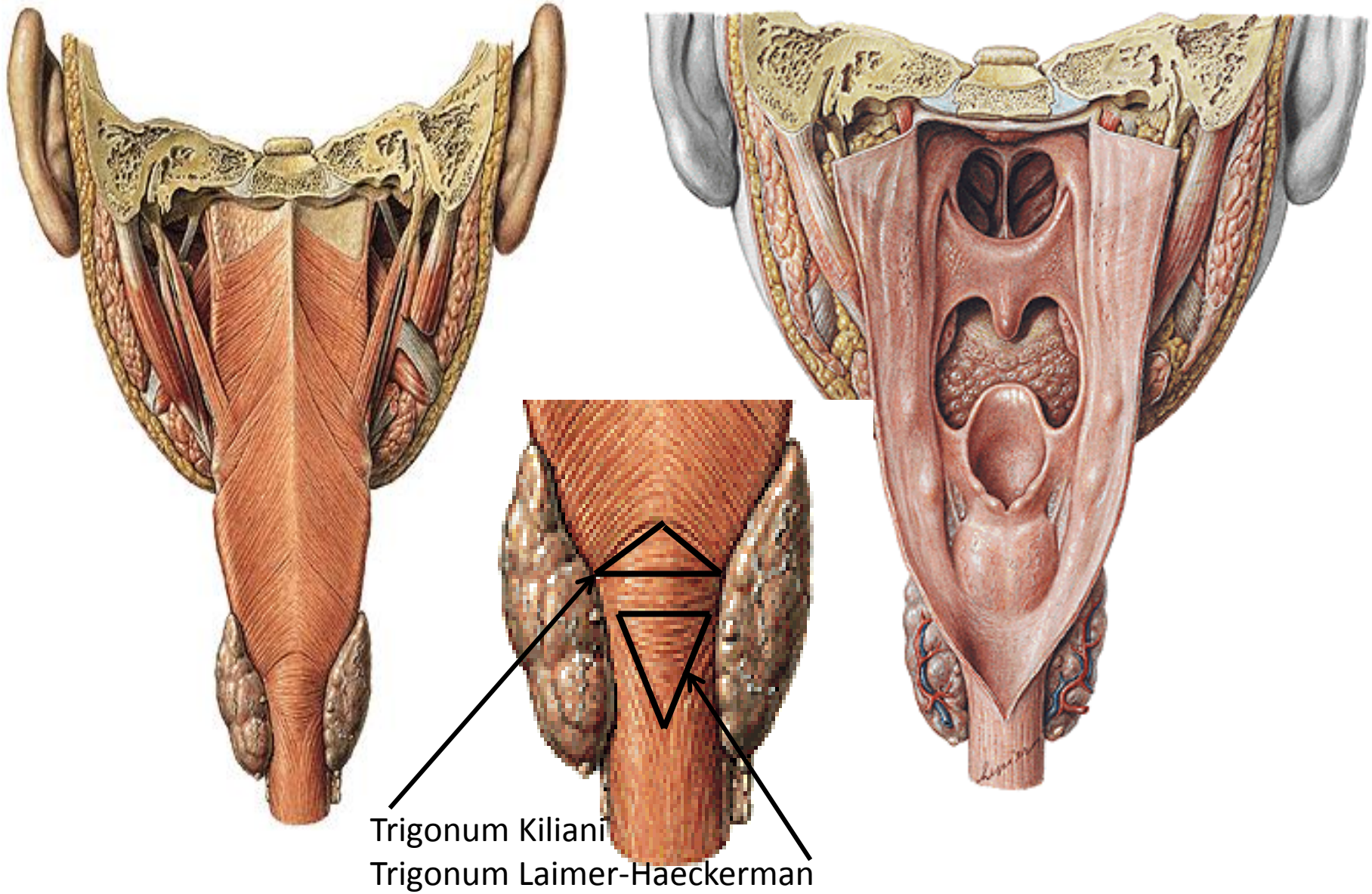


Ila-Ilb – n. XI

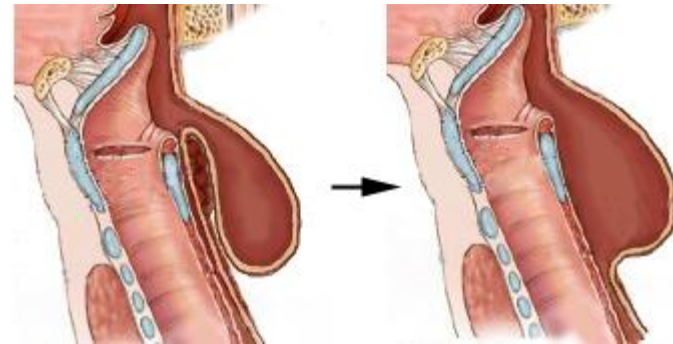
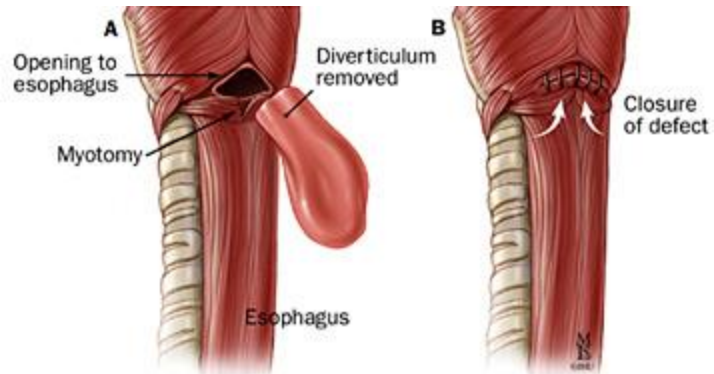
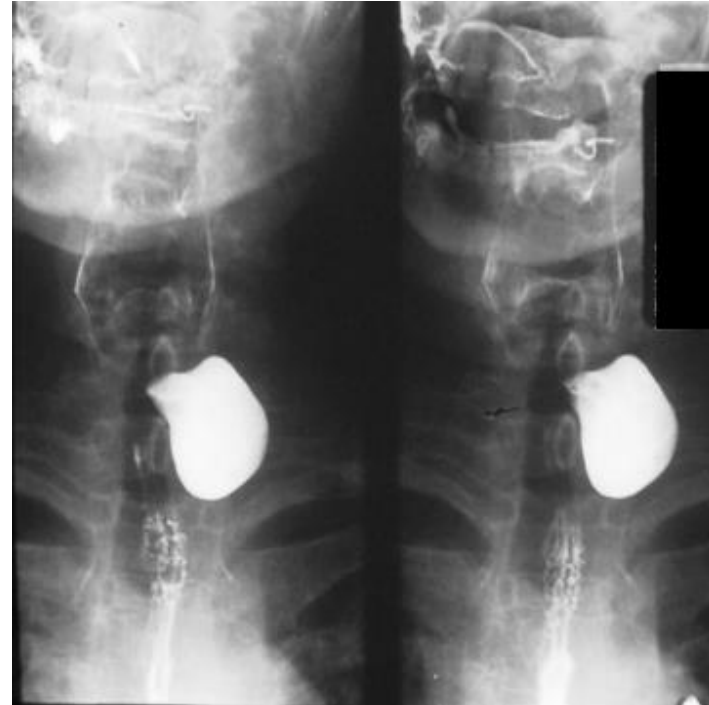
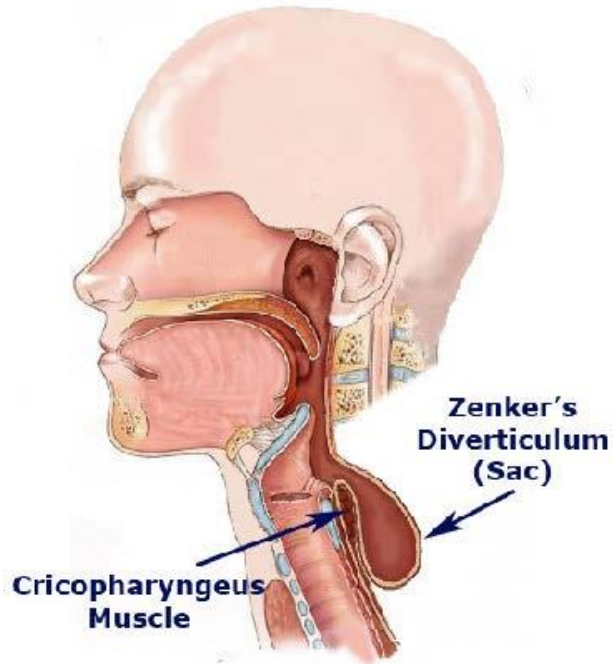
II-III – bifurcation of carotis, os hyoideum

III-IV – m. omohyoideus, cartilago cricoidea

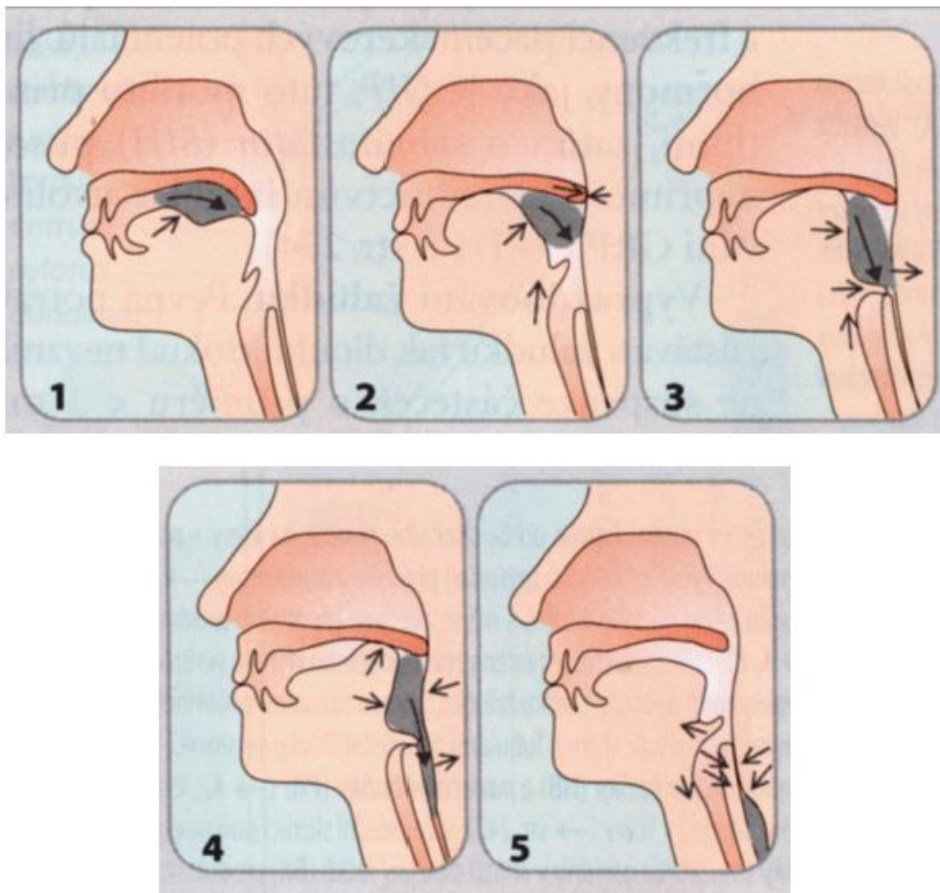
Pharynx



Zenkerüv divertikl

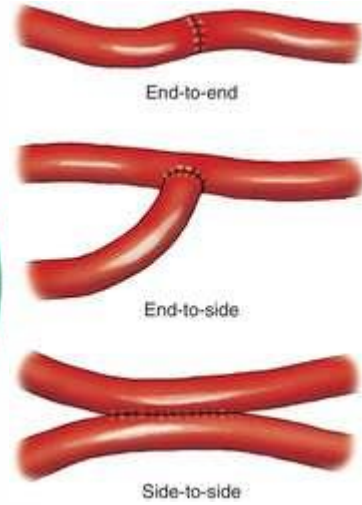
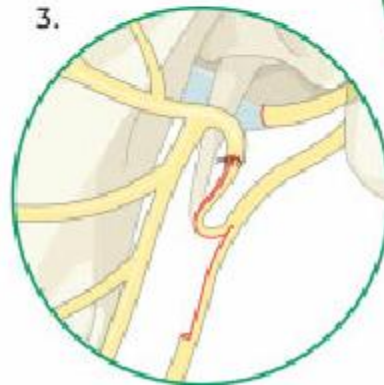
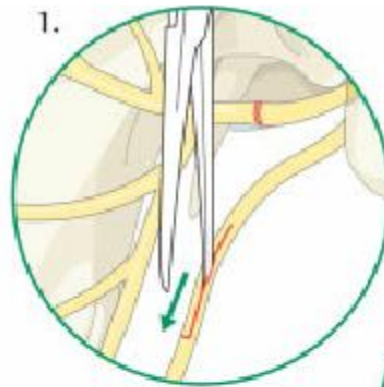
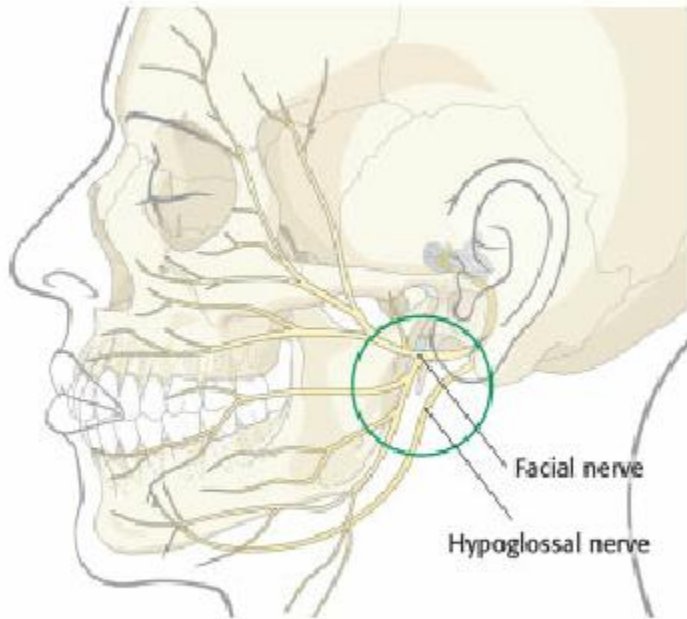


Polykací akt



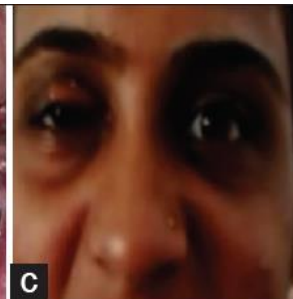
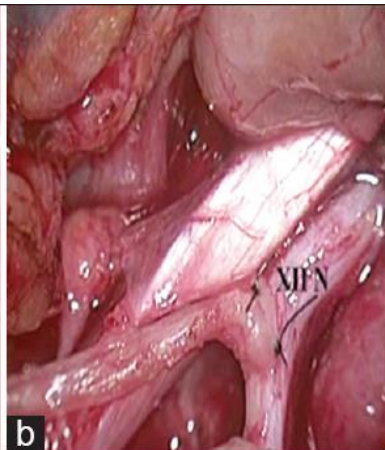
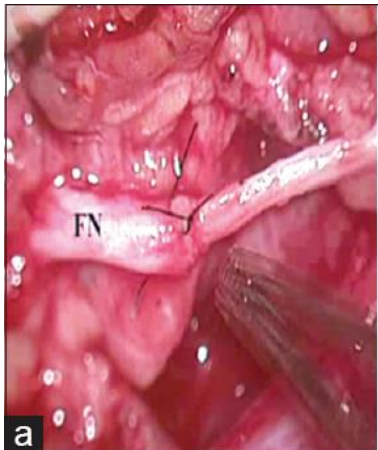
- 1 Posouvání sousta jazykem do hltanu
- 2 Reflexní uzávěr dutiny nosní
- 3 Zástava dýchání a uzávěr hlasové štěrbiny a přiklopky hrtanové
- 4 Otvírání horního jícnového svěrače
- 5 Peristaltická vlna jícnu

Hypoglossus – Facialis anastomosis

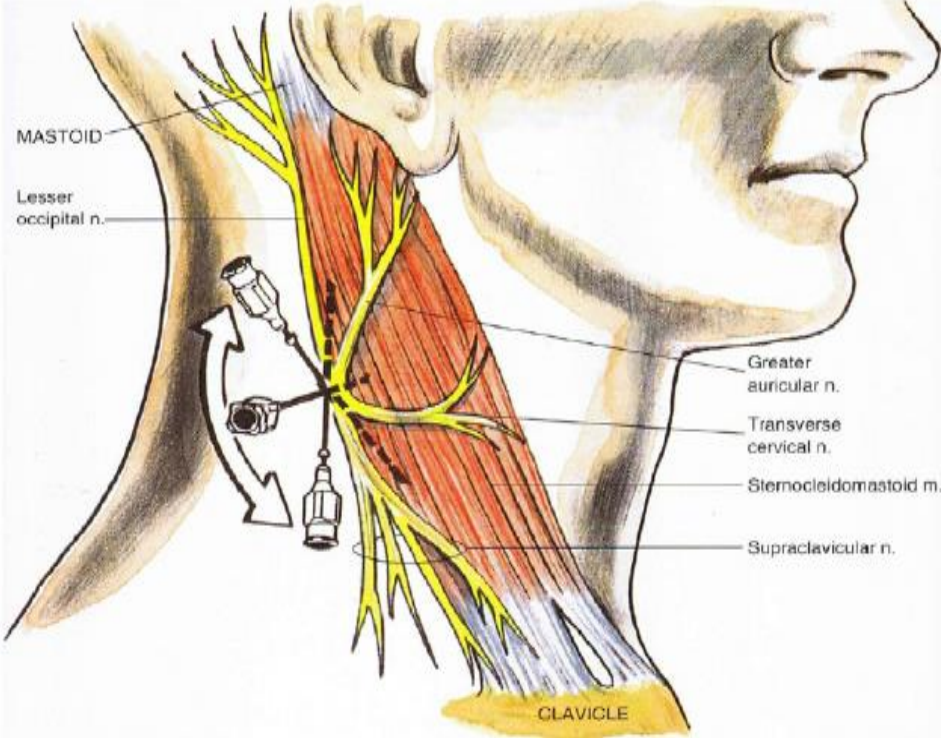
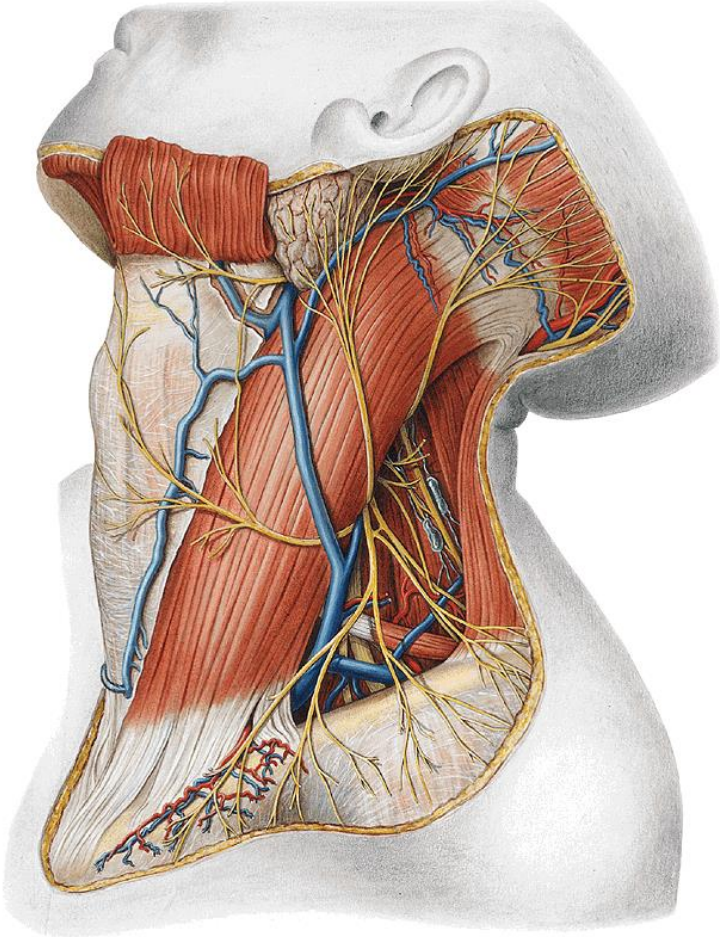


a

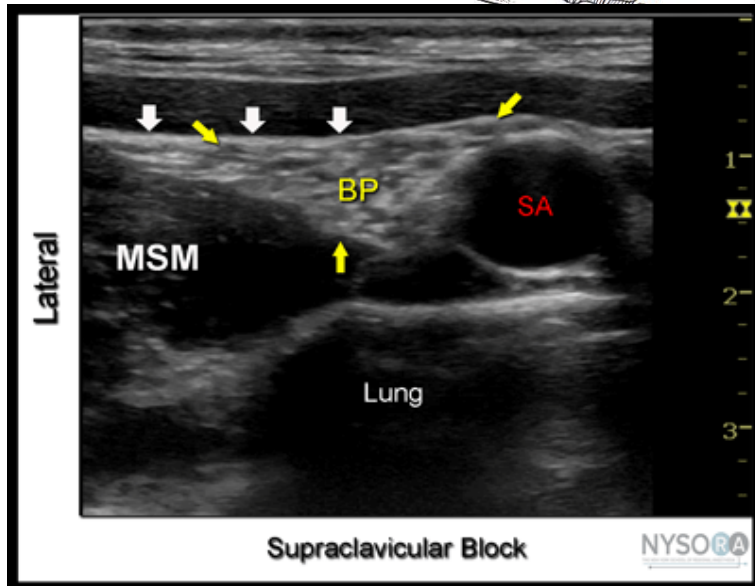
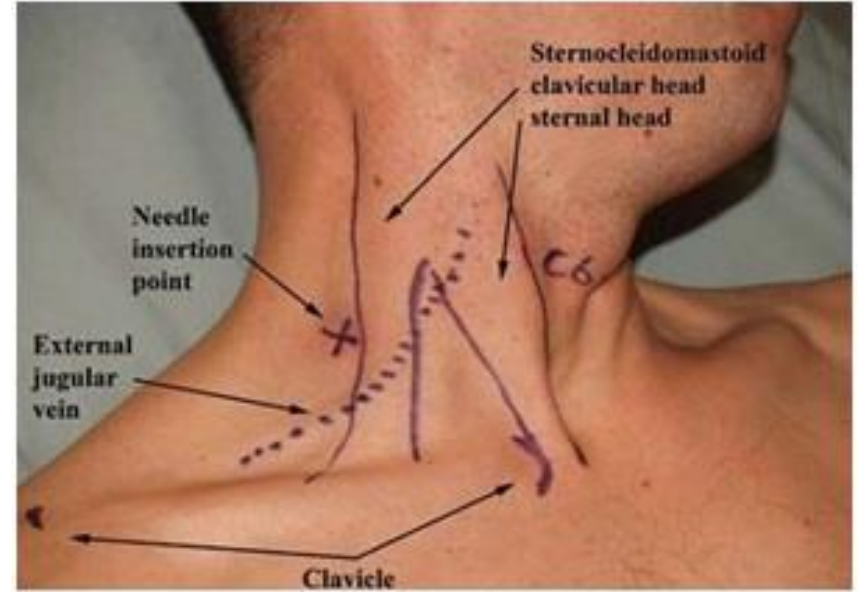
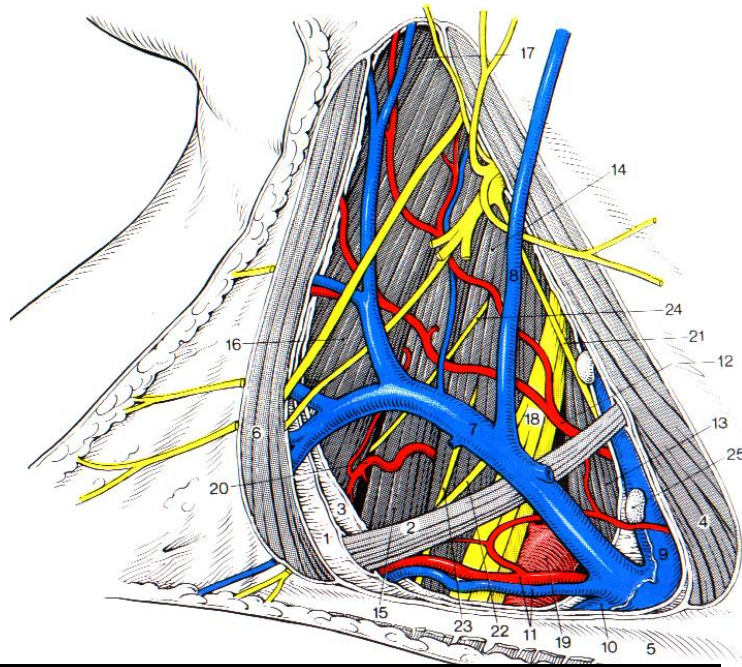
b



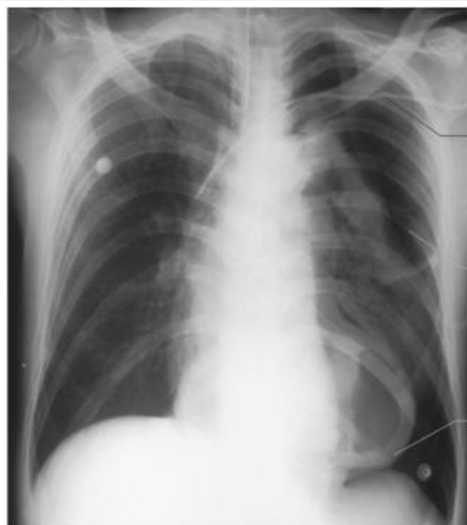
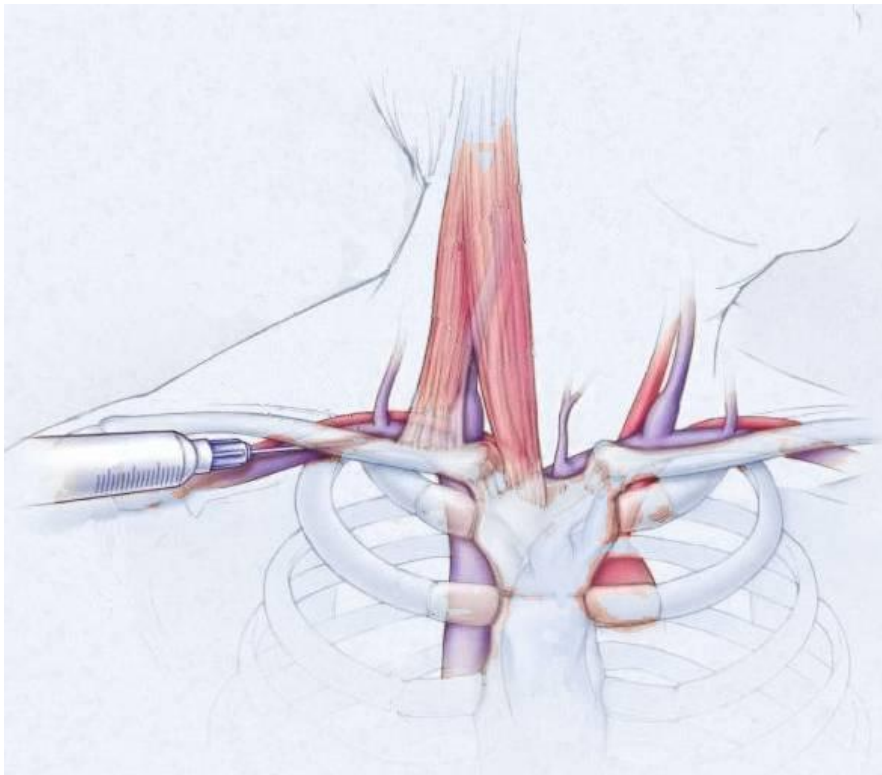
Blok plexus cervicalis



Blok plexus brachialis



Centrální venózní katetr

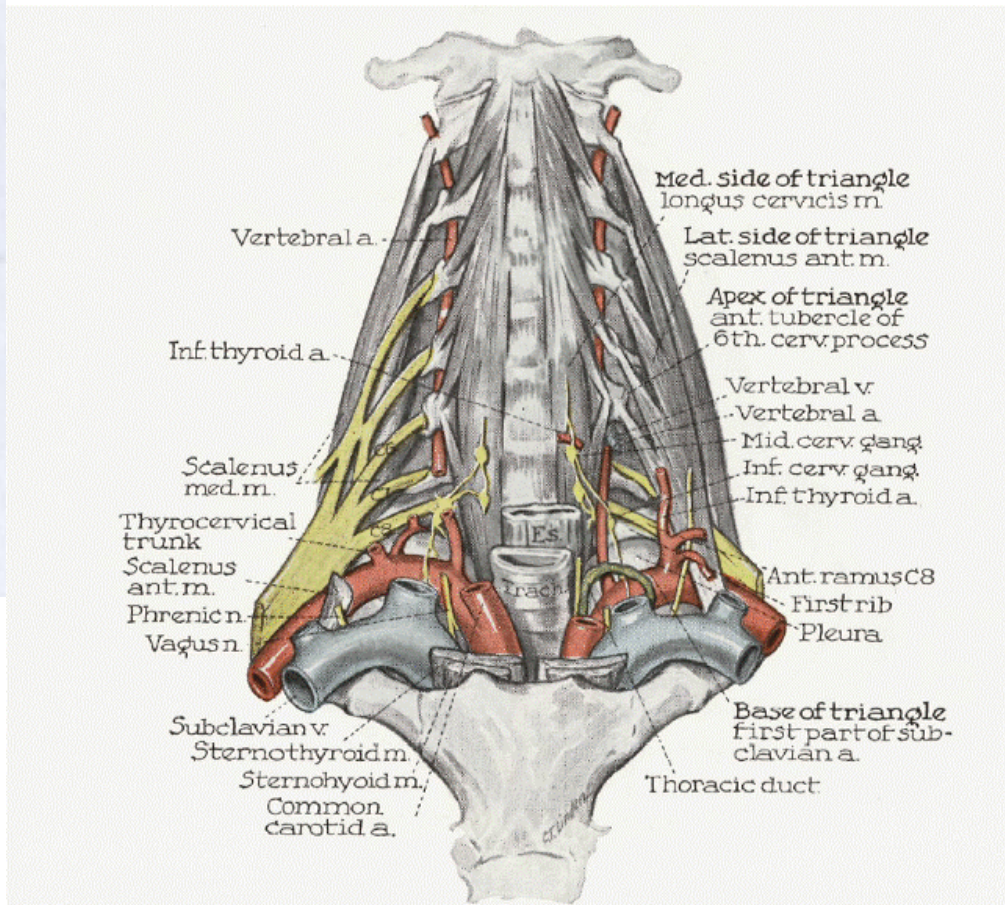


Left
subclavian
central line

Line related
pneumothorax

Nasogastric
tube in hiatus
hernia

Vena subclavia



Centrální venózní katetr – vena jugularis interna

ANTERIOR APPROACH

Insert needle along the medial edge of the sternocleidomastoid, 2–3 fingerbreadths above the clavicle.

Entry angle = 30° to 45°.

Aim towards the ipsilateral nipple.

Note: Palpate the carotid artery during venipuncture. The artery may be slightly retracted medially.

CENTRAL APPROACH

Insert needle at the apex of the triangle formed by the heads of the sternocleidomastoid muscle and the clavicle.

Entry angle = 30°.

Aim towards the ipsilateral nipple.

Note: Estimate the course of the IJ vein by placing three fingers lightly over the carotid artery as it runs parallel to the vein. The vein lies just lateral to the artery, albeit often minimally so.

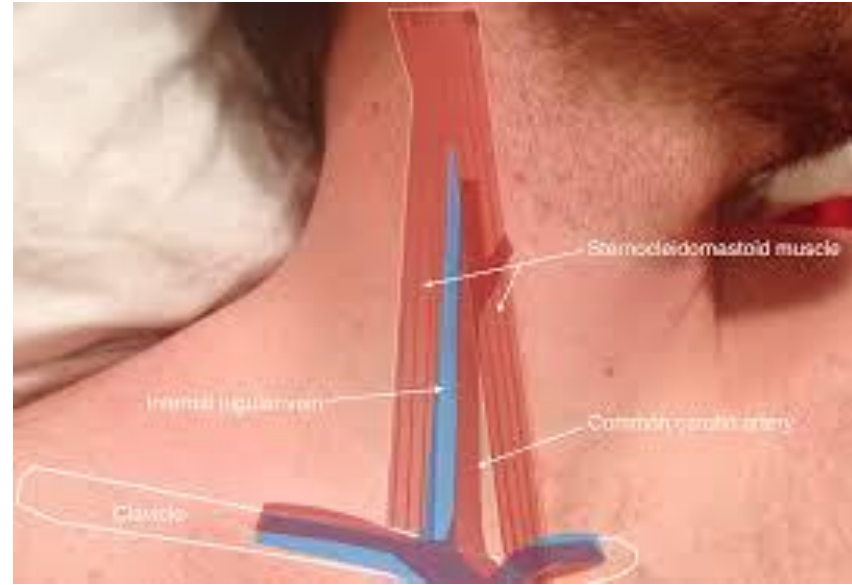
POSTERIOR APPROACH

Insert needle at the posterior (lateral) edge of the sternocleidomastoid, midway between the mastoid process and the clavicle.

Entry angle = 45°.

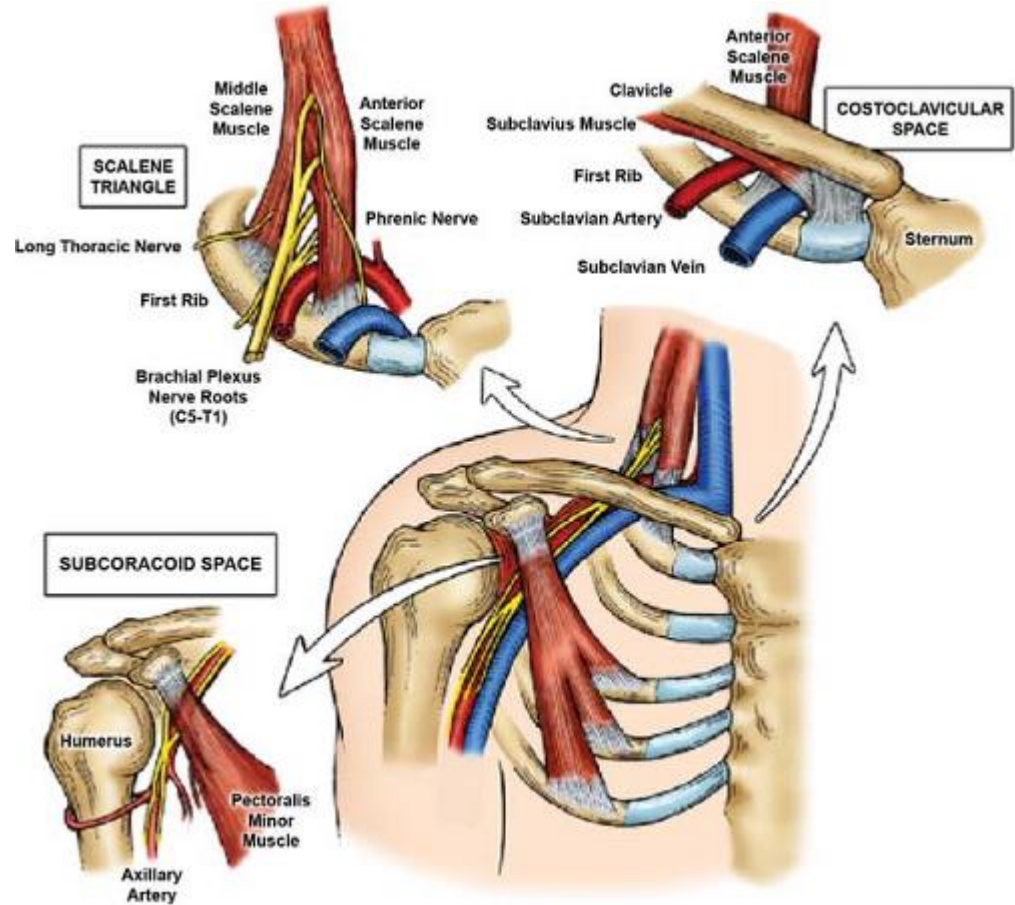
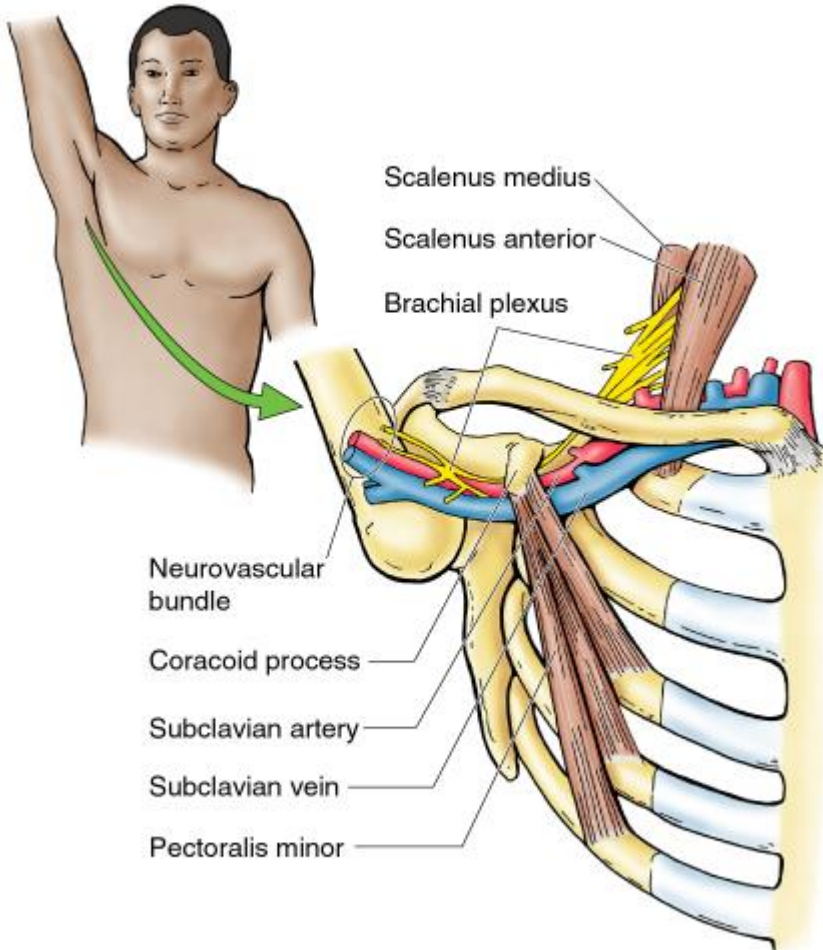
Aim towards the suprasternal notch.

Note: Avoid the external jugular vein, which crosses the posterior SCM border. During needle advancement, apply pressure to the SCM to lift the body of the muscle. The vein is usually reached at a depth of 7 cm.

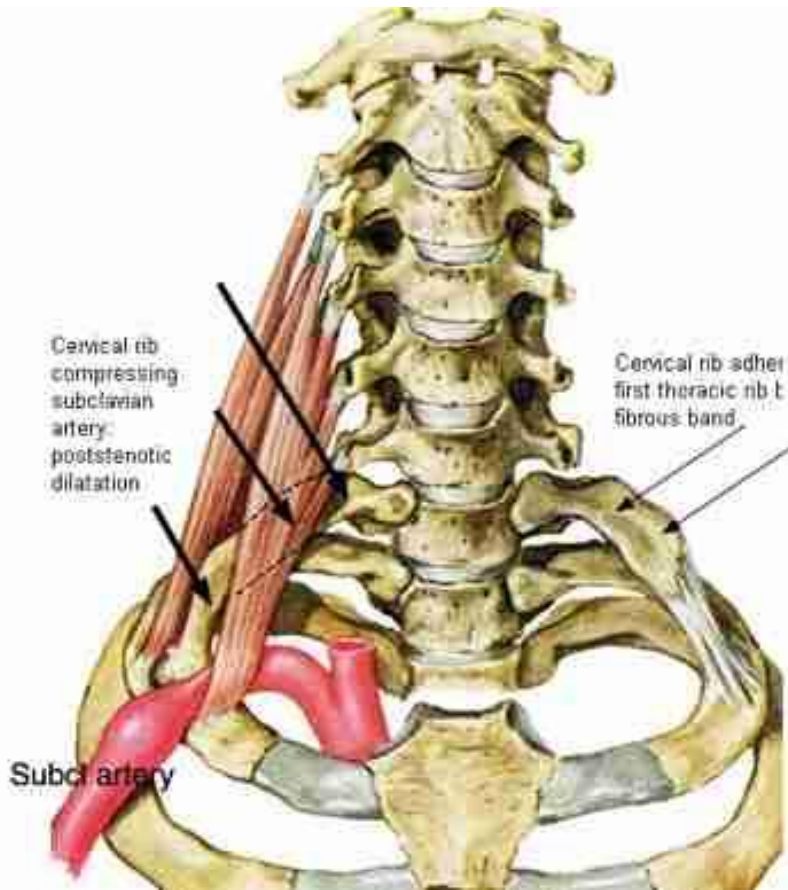


Thoracic outlet syndrome – Syndrom horní hrudní apertury

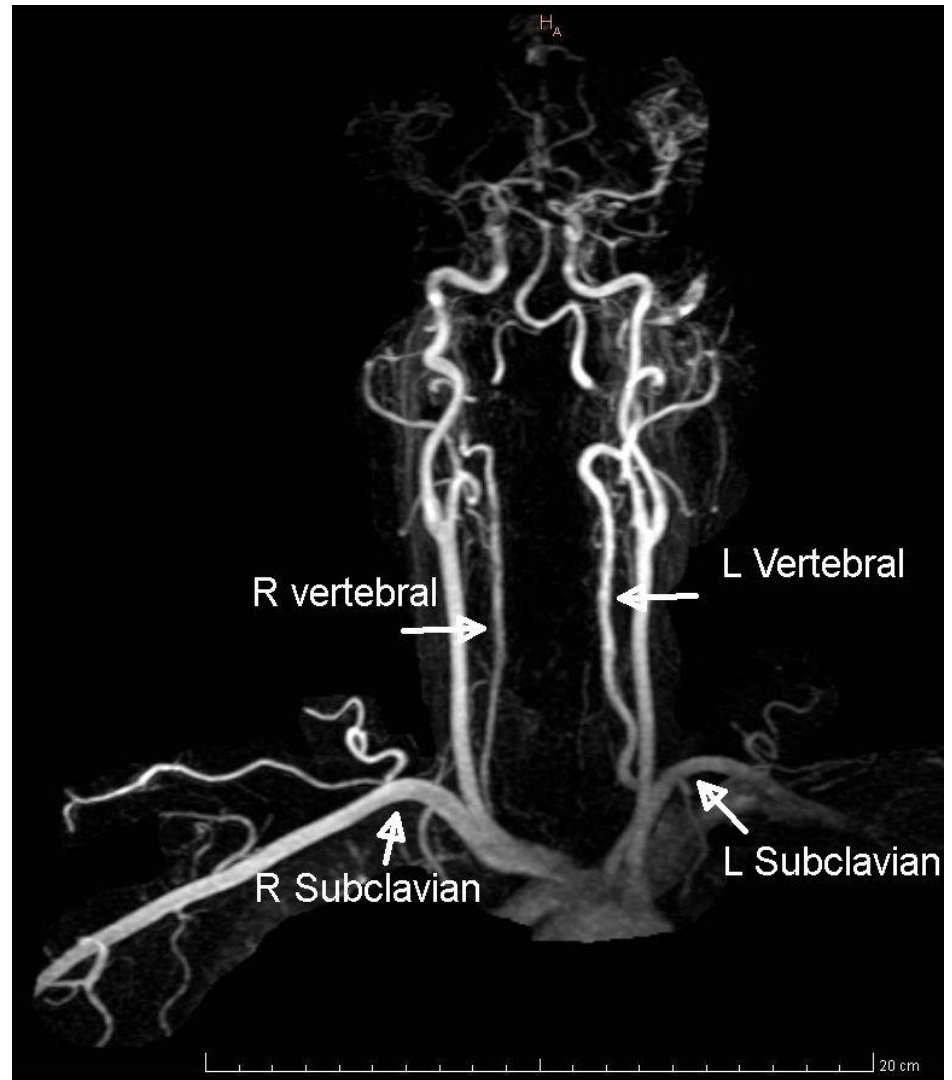
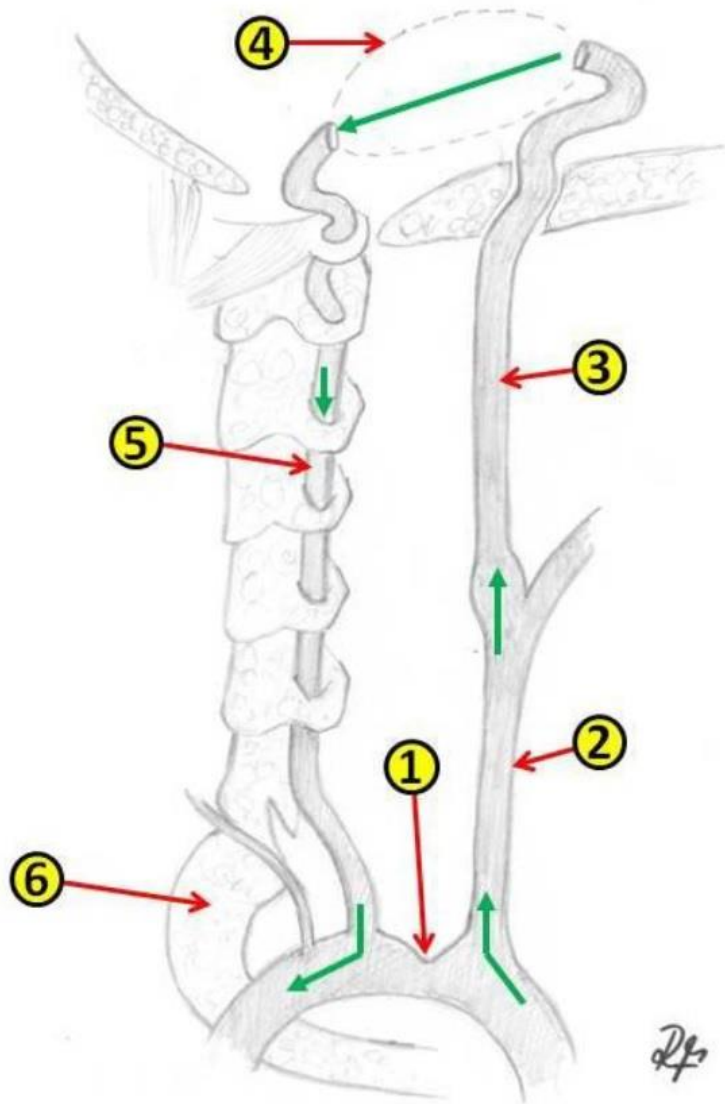
6.86. Compression of the neurovascular bundle in the axilla.



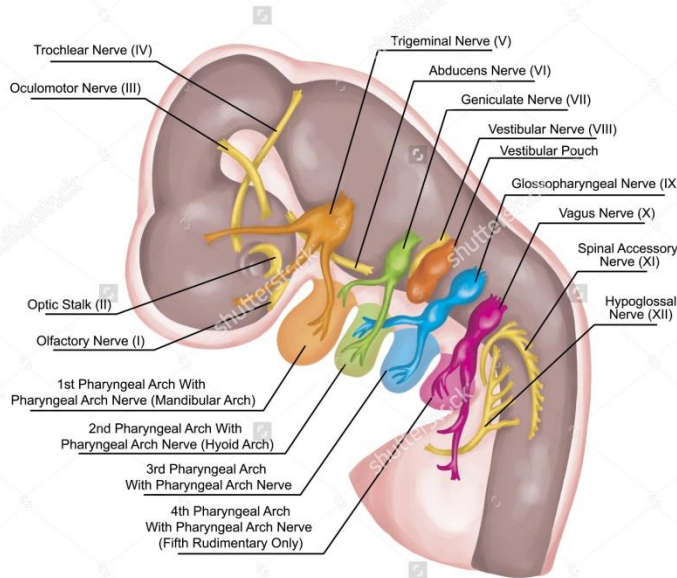
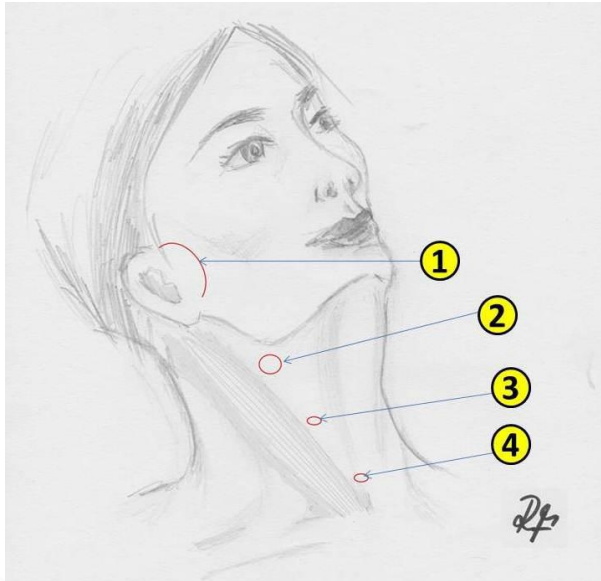
Krční žebro



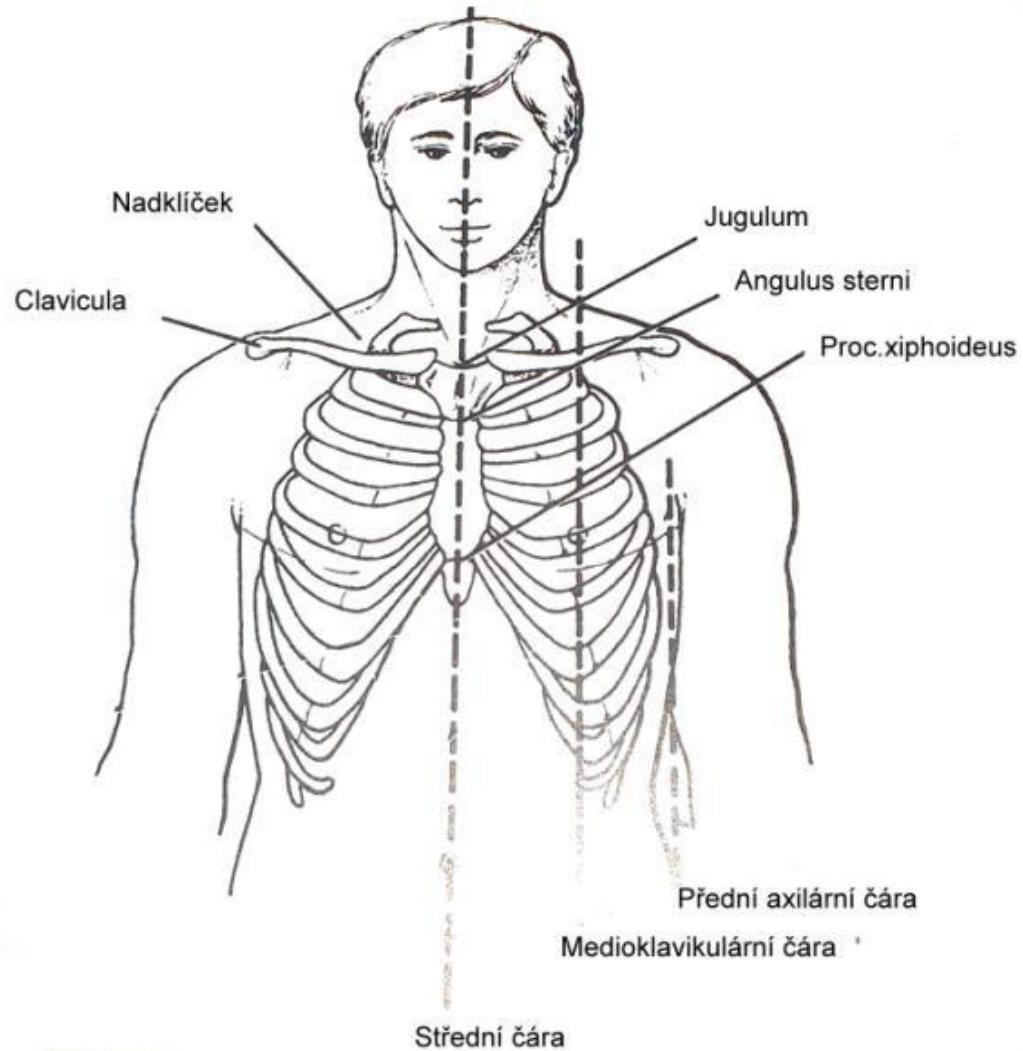
Subclavian steal phenomenon



Branhiogenní cysty



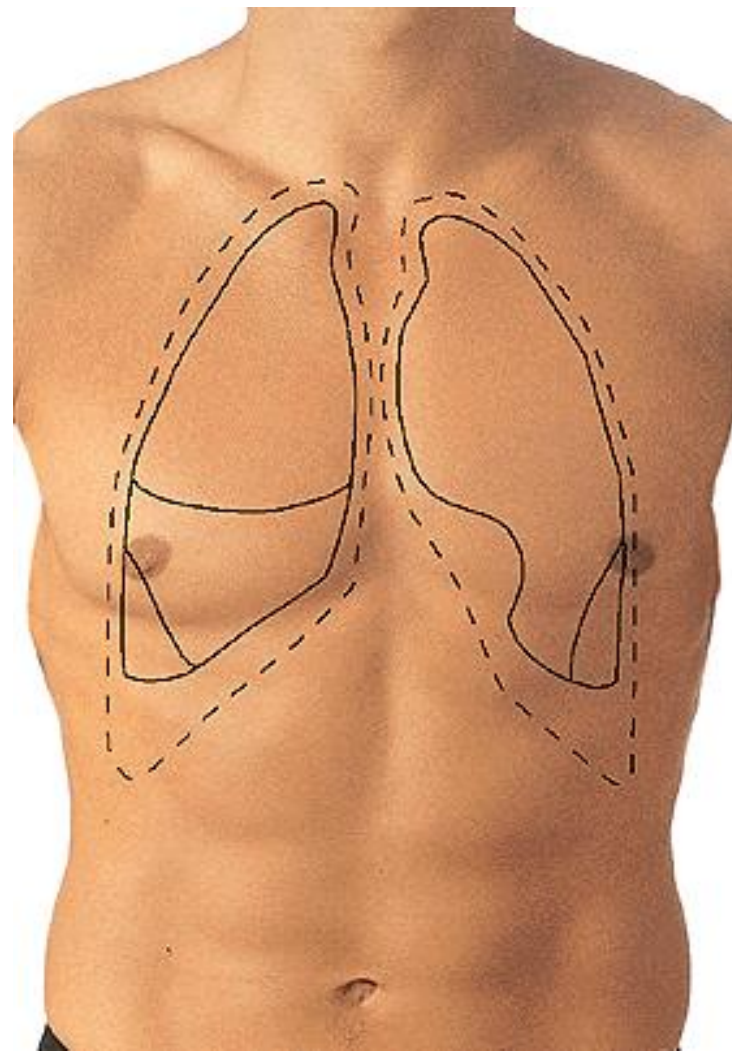
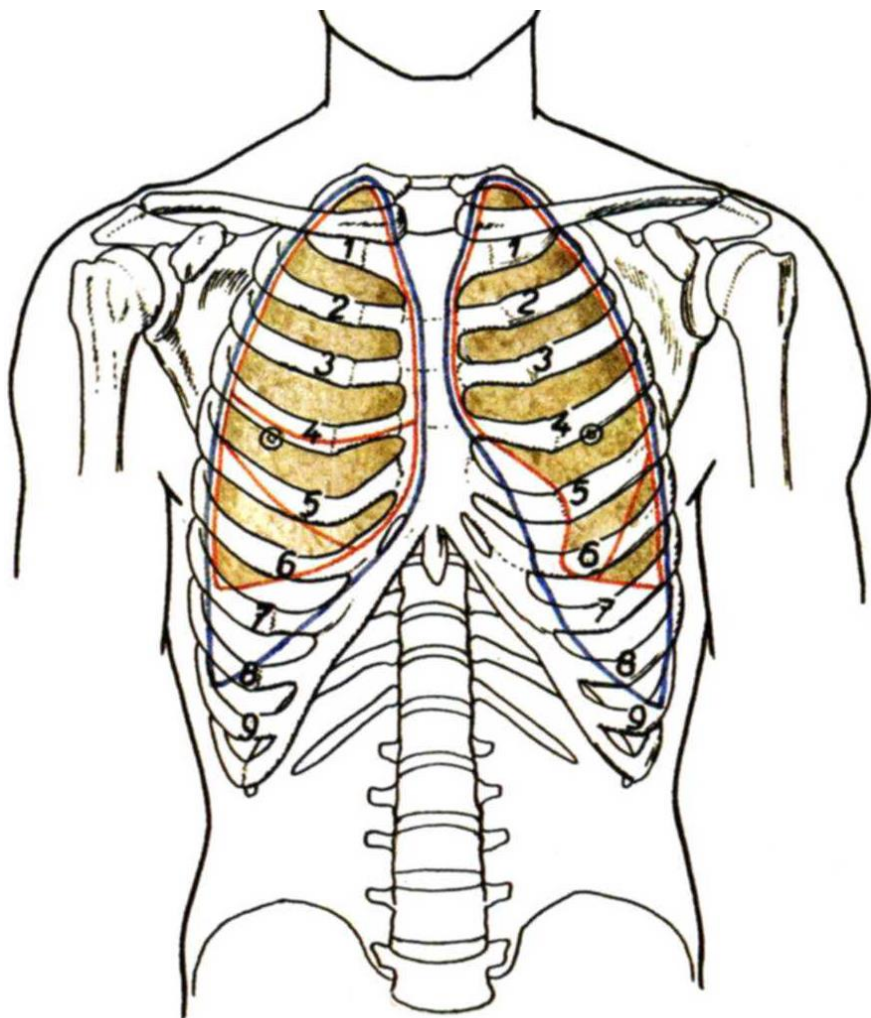
Hmatatelné útvary hrudníku



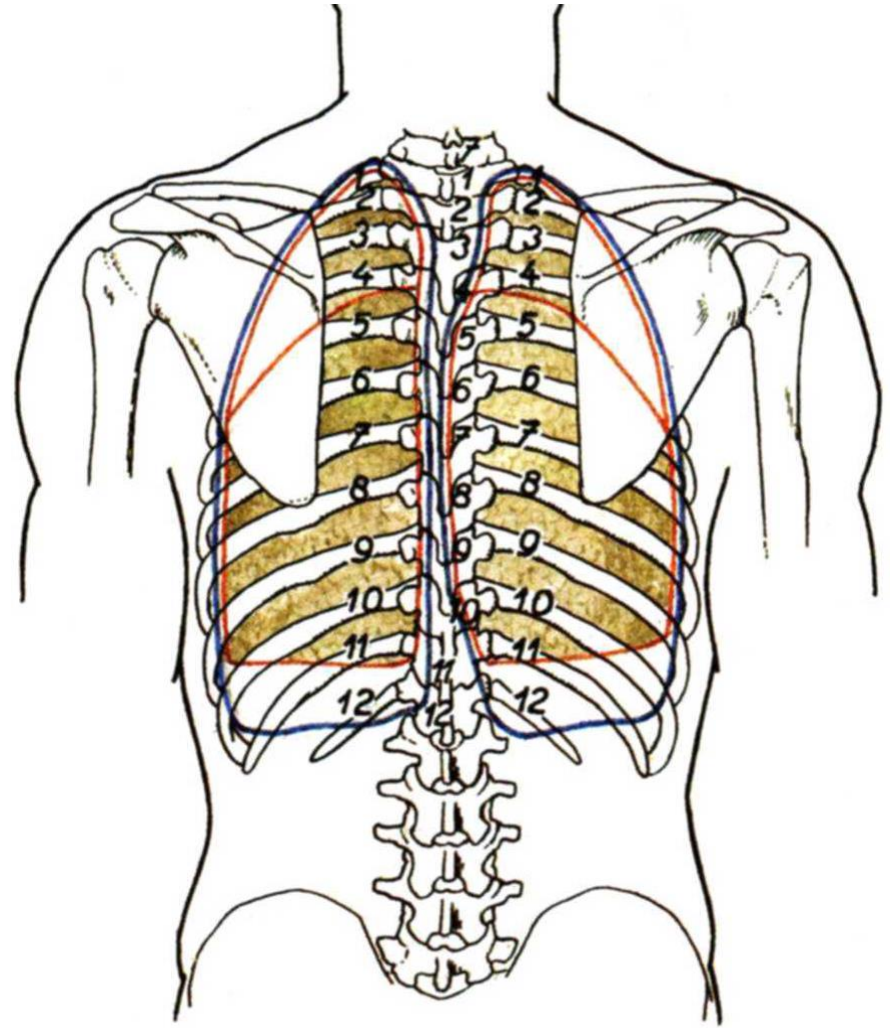
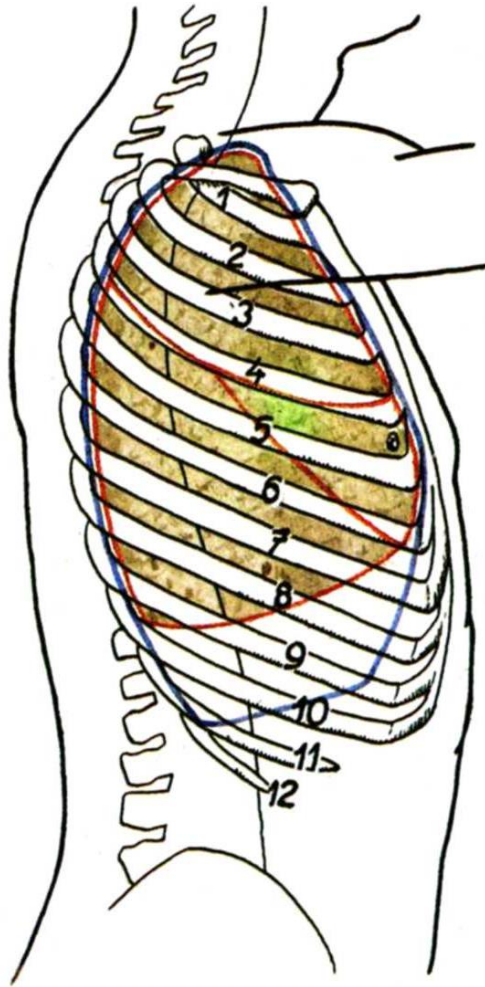
Projekce plic a pleury

area interpleuralis superior (thymica)

area interpleuralis inferior (pericardiaca)



Recessus retrooesophageus Th₄ – Th₁₂

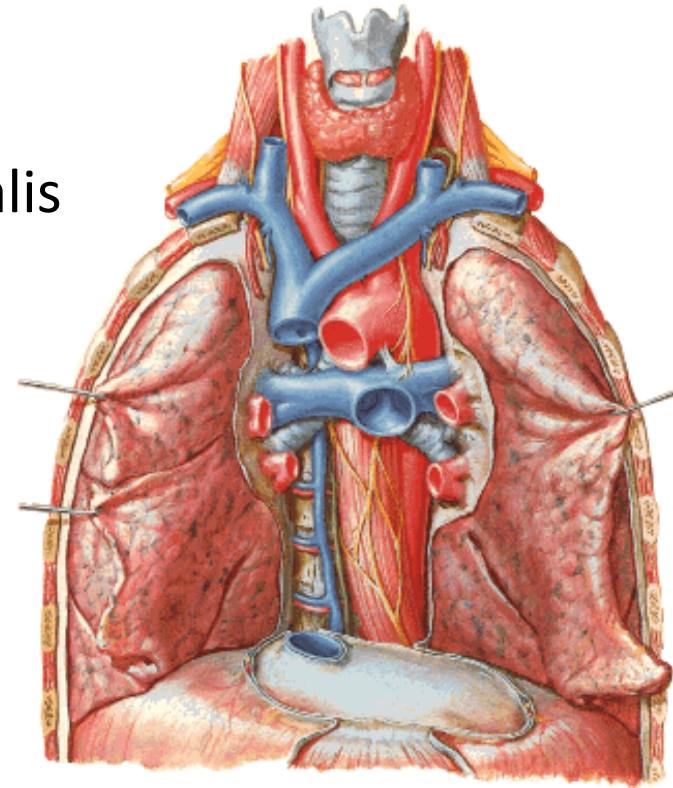
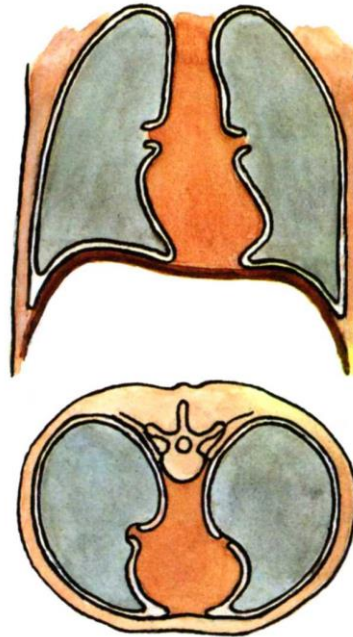
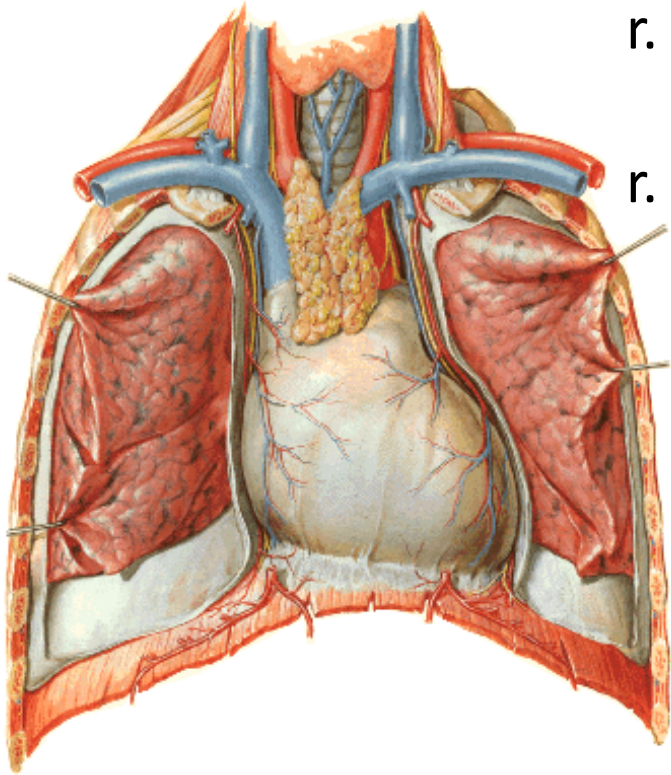


Recessus pleurae

r. costodiaphragmaticus

r. costomediastinalis

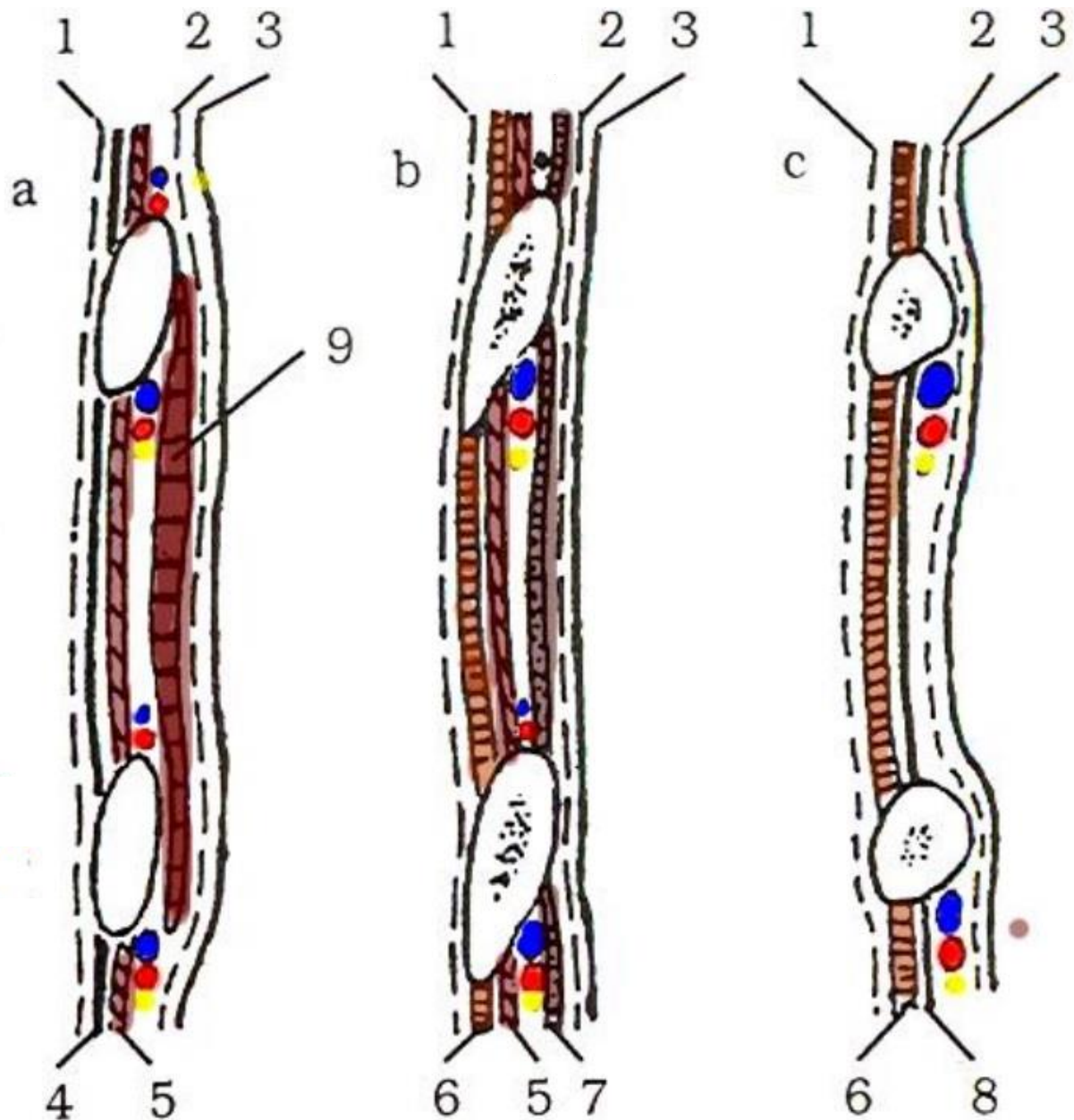
r. phrenicomediastinalis



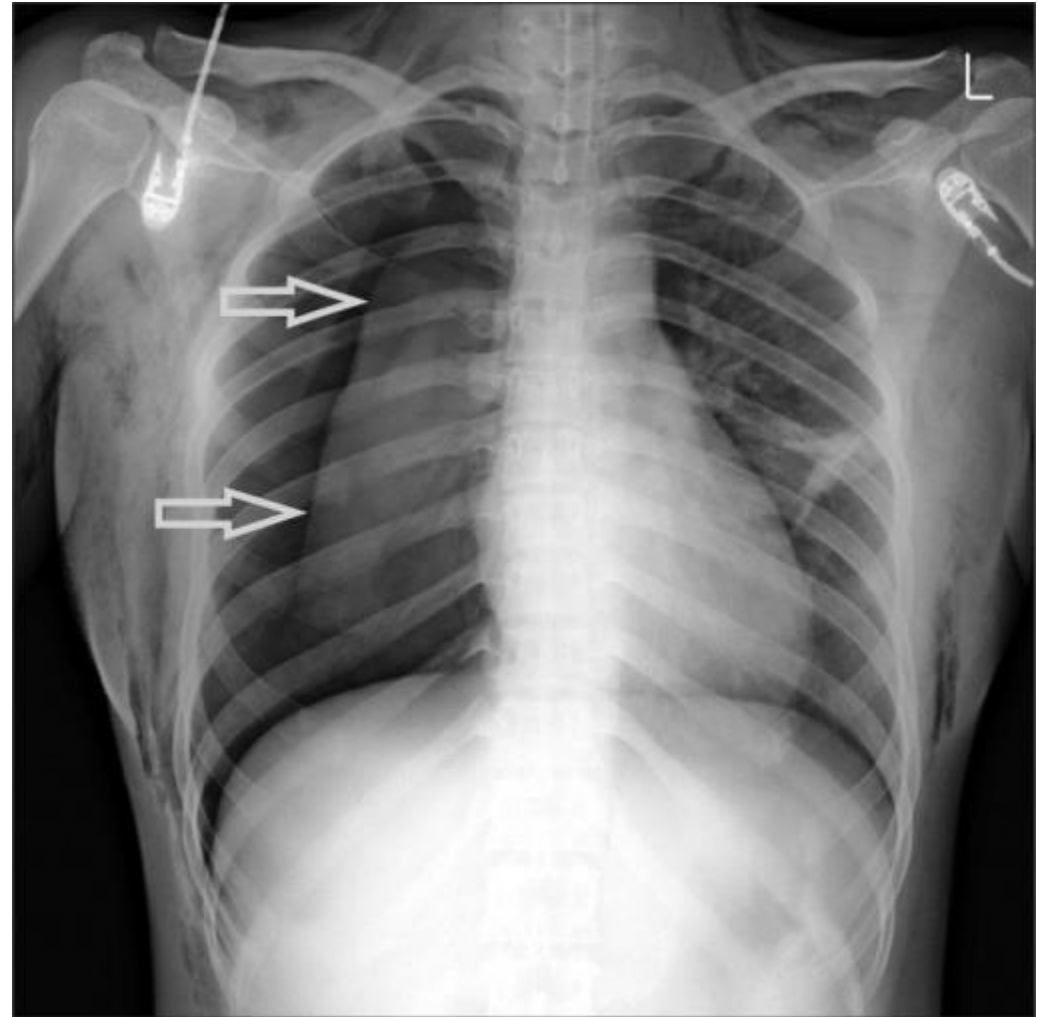
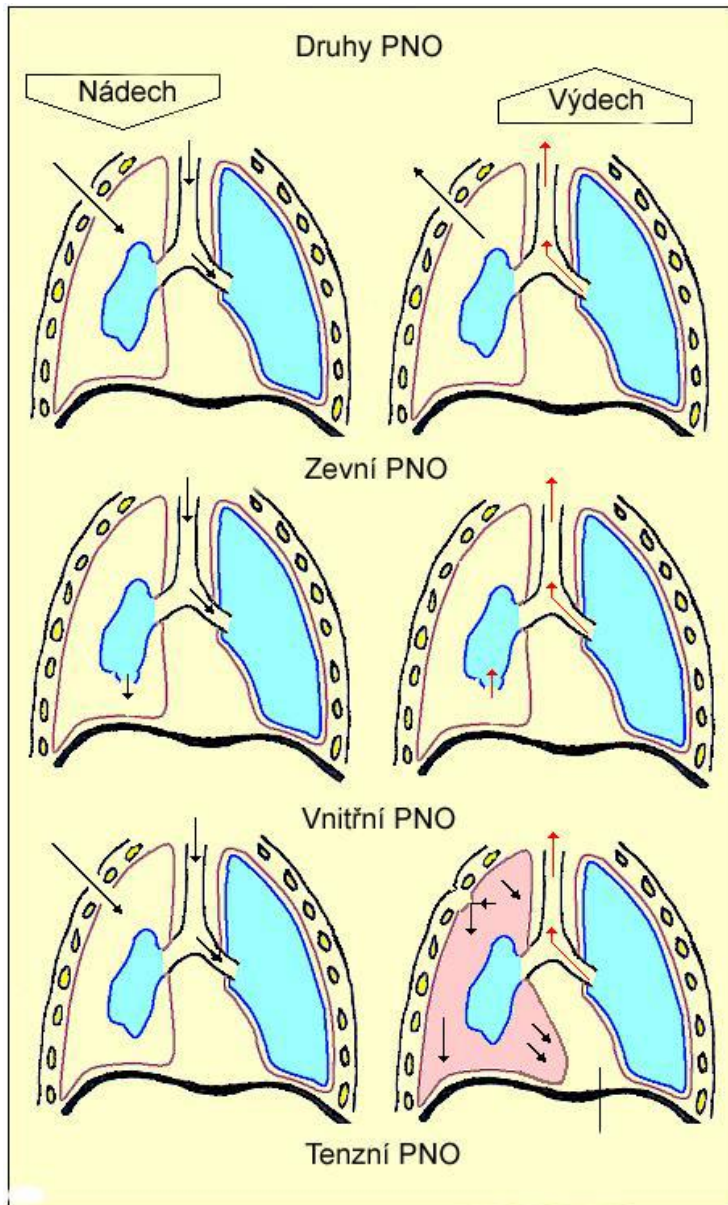
Stěna hrudní

A parasternalní
B přední axilární
C paravertebrální

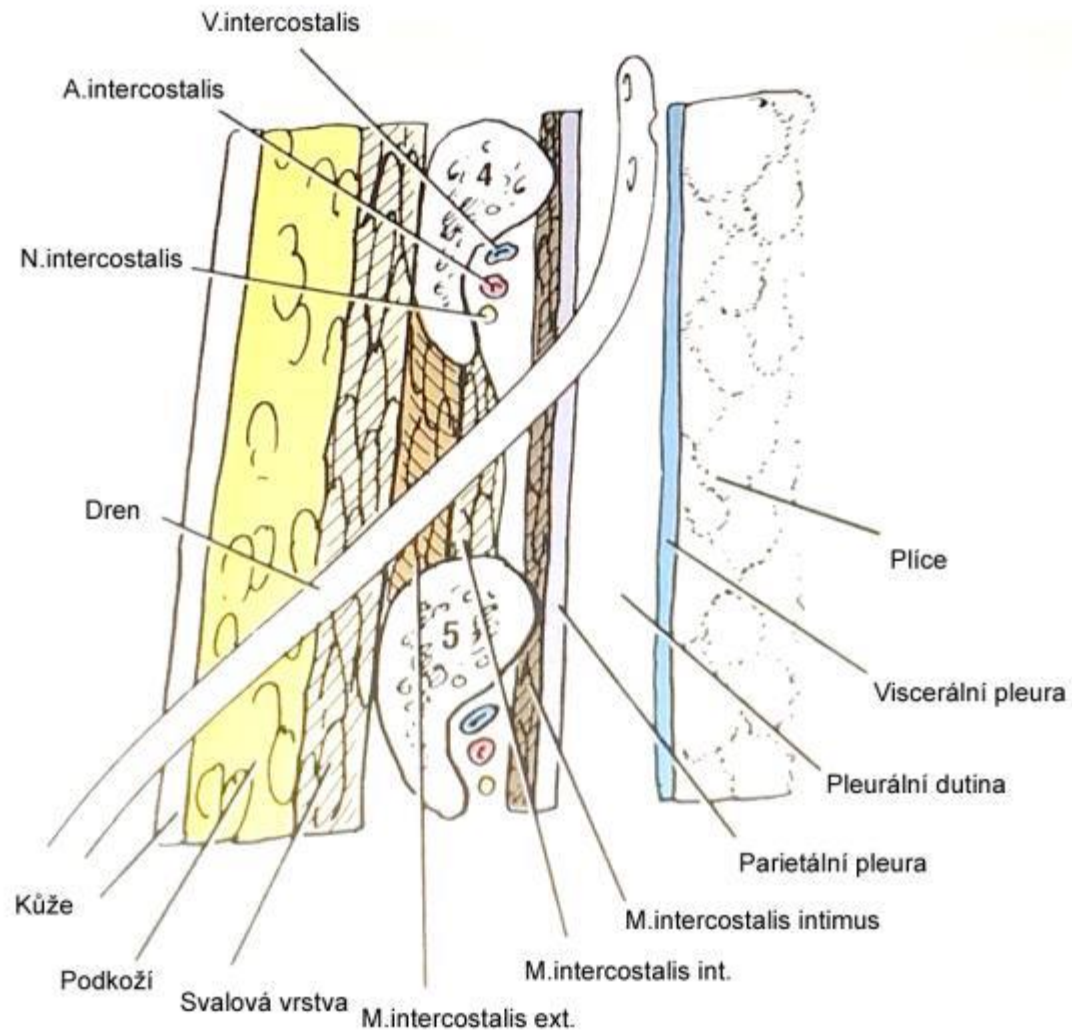
1 Fascia thoracica spf.
2 fascia endothoracica
3 pleura parietalis
4 membrana
intercostalis externa
5-7 mm. Intercostales
int., ext. et intimus
8 membrana
intercostalis int.
9 m. transversus
thoracis



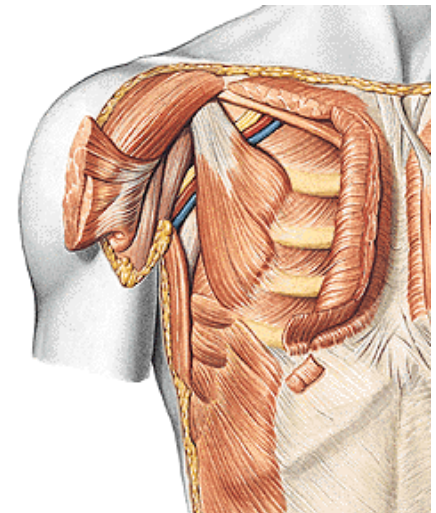
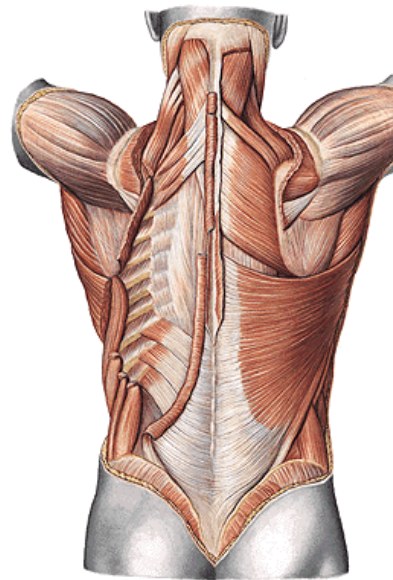
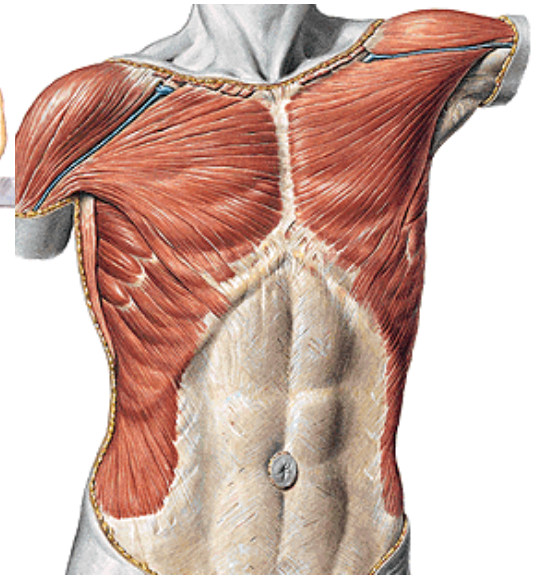
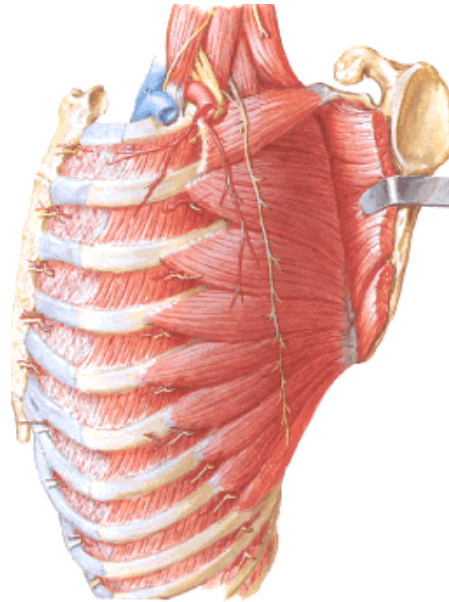
Pneumothorax



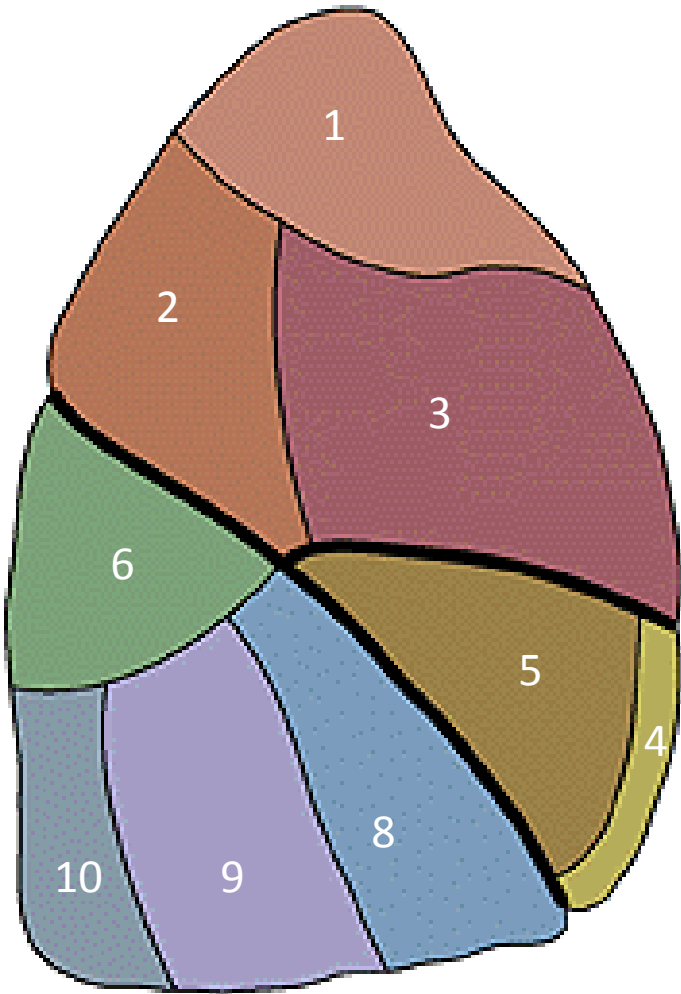
Punkce hrudníku



Usilovné dýchání



SEGMENTA BRONCHOPULMONALIA DEXTRA



LOBUS SUPERIOR

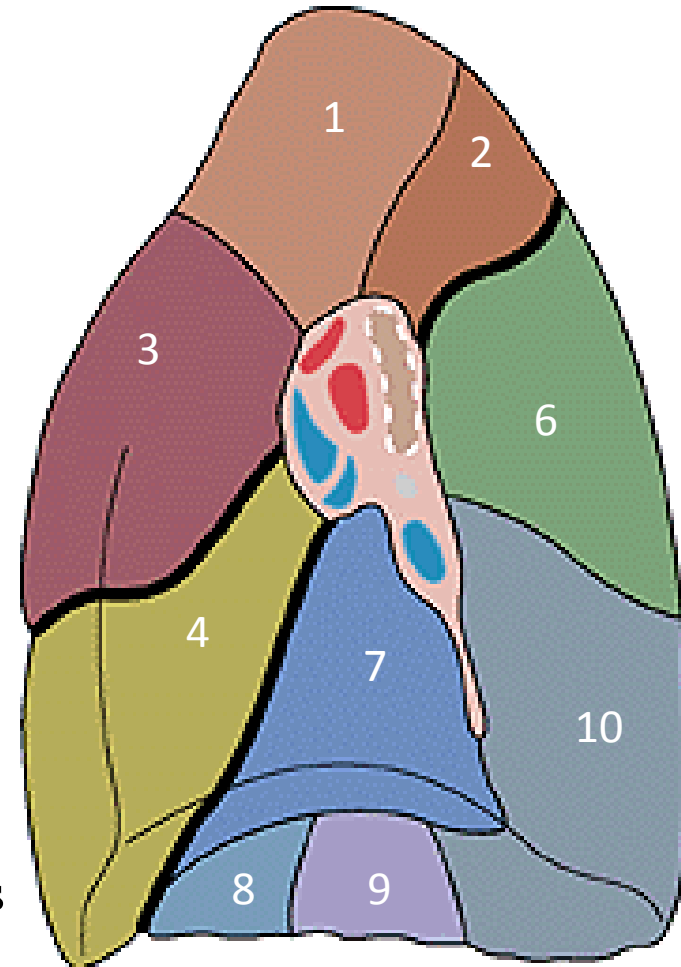
- (1) seg. apicale
- (2) seg. posterius
- (3) seg. anterior

LOBUS MEDIUS

- (4) seg. laterale
- (5) seg. mediale

LOBUS INFERIOR

- (6) seg. apicale
- (7) seg. basale mediale
- (8) seg. basale anterior
- (9) seg. basale laterale
- (10) seg. basale posterius



SEGMENTA BRONCHOPULMONALIA SINISTRA

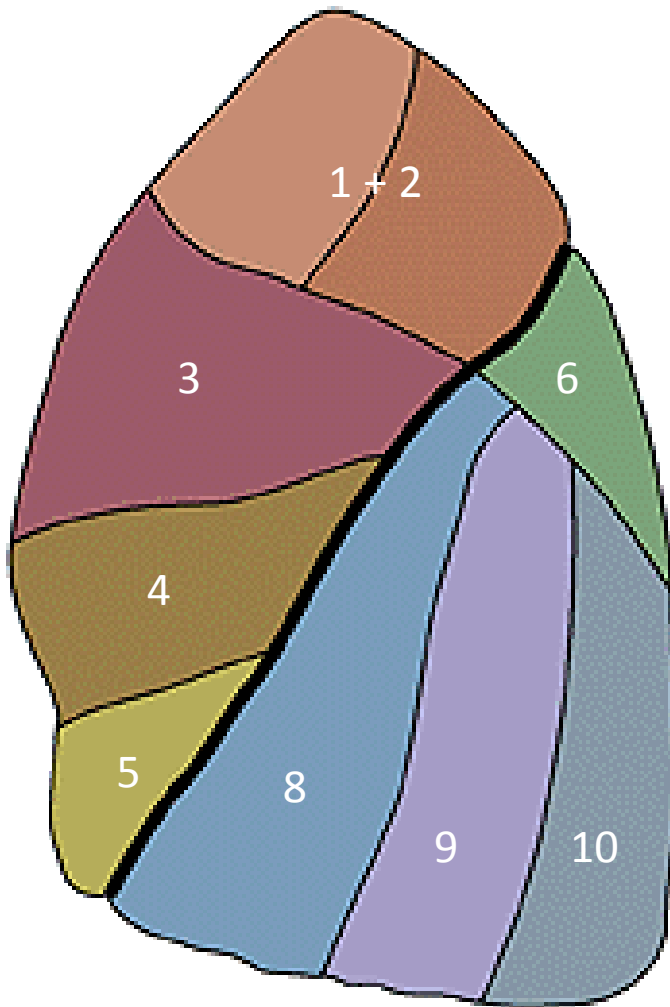
LOBUS SUPERIOR

(1+2) *seg. apicoposterius*

(3) seg. anterior

(4) seg. lingulare superius

(5) seg. lingulare inferius



LOBUS INFERIOR

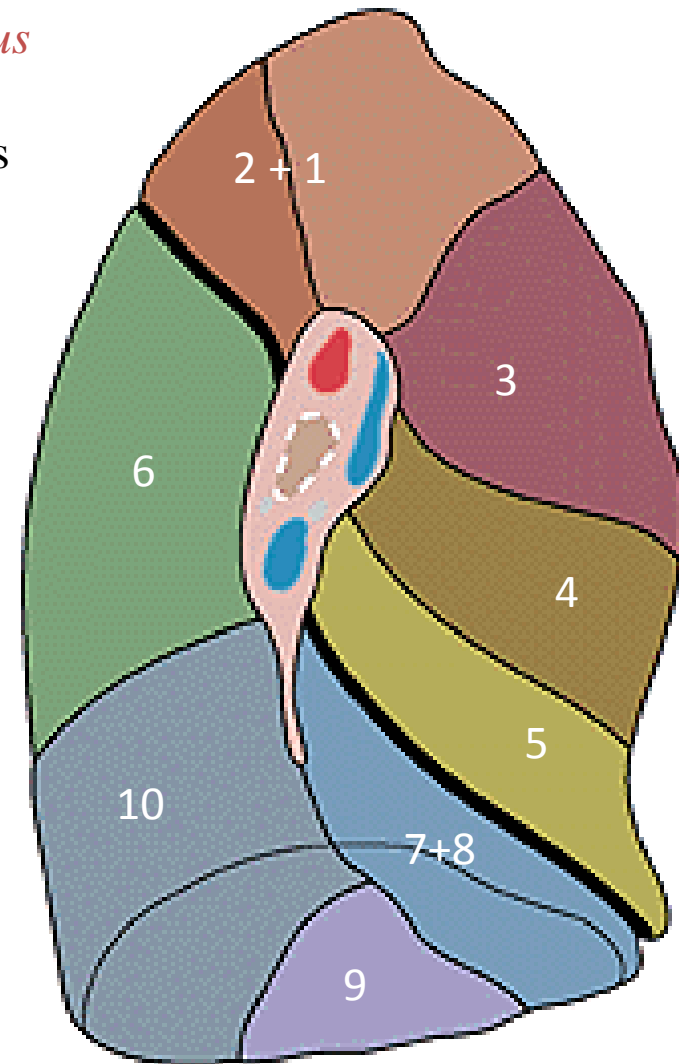
(6) seg. apicale

(7) *seg. basale mediale
redukováno*

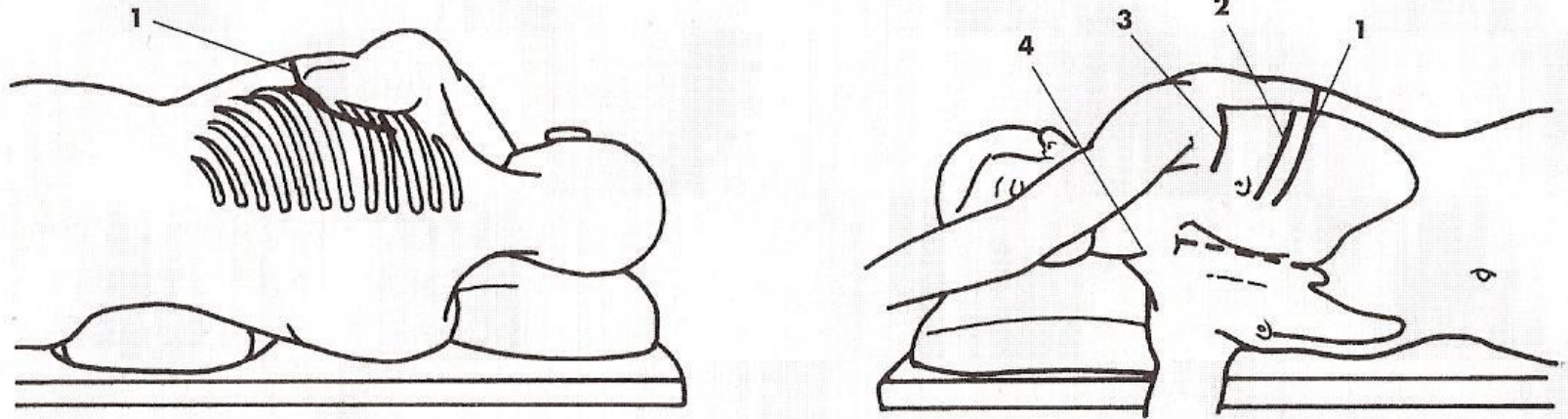
(8) seg. basale anterior

(9) seg. basale laterale

(10) seg. basale posterior

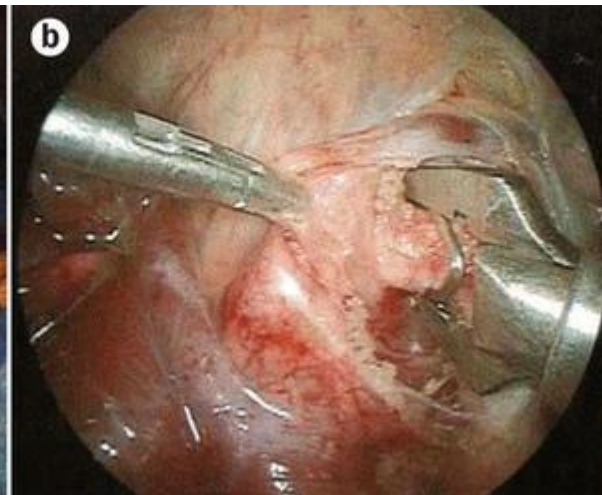
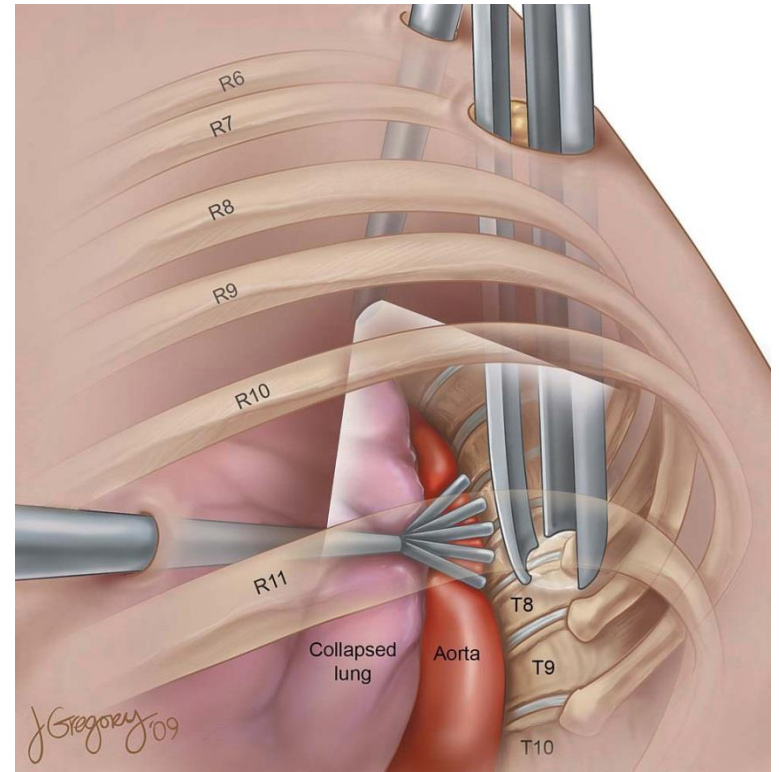
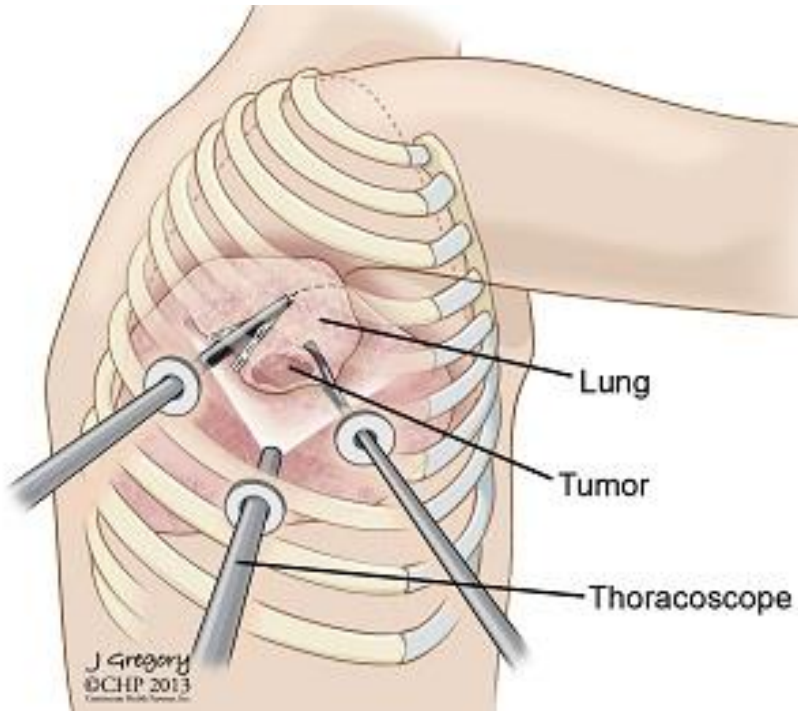


Operační přístupy

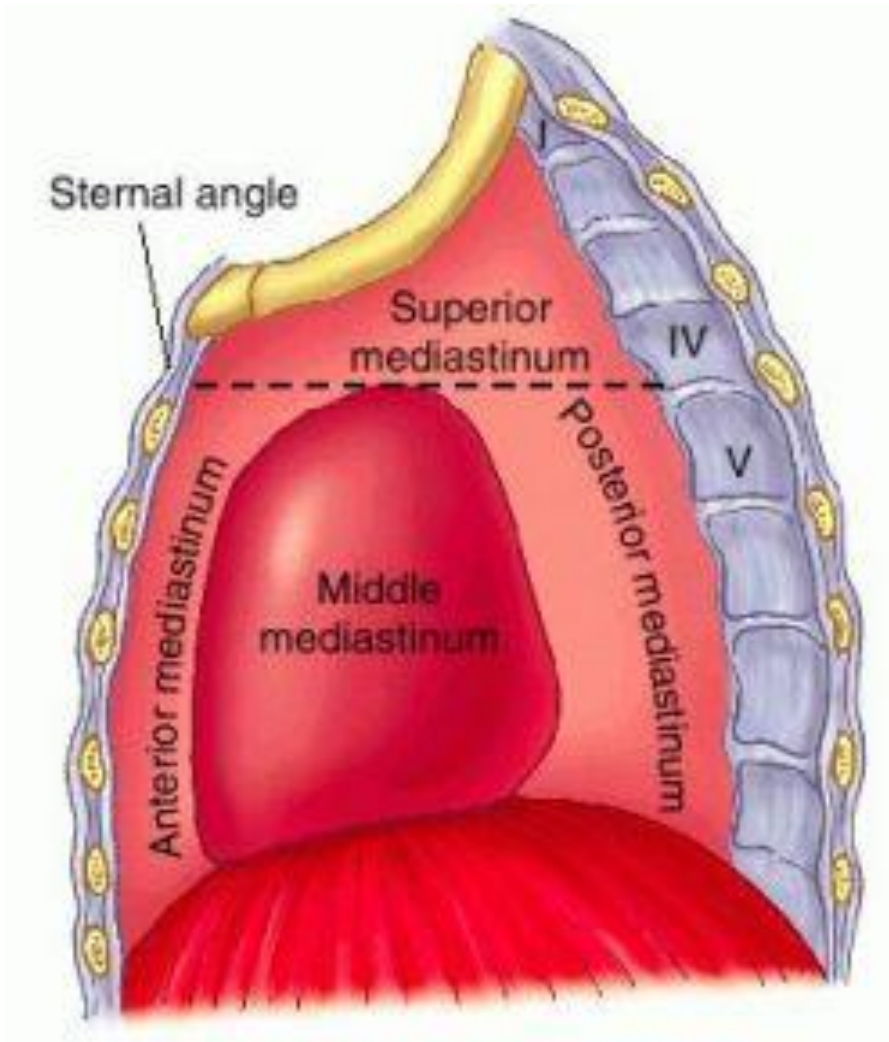


Obr. 129. Operační přístupy do hrudníku. 1 - posterolaterální torakotomie; 2 - přední torakotomie; 3 - axilární torakotomie; 4 - mediální sternotomie

Video-assisted thoracoscopic surgery (VATS)



Mediastinum



Mediastinum superius

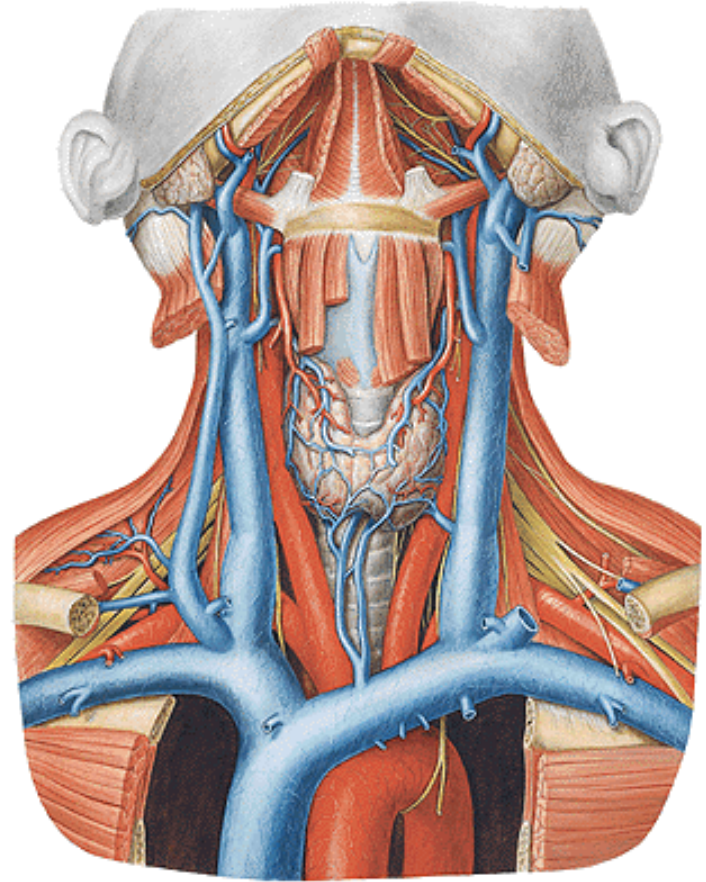
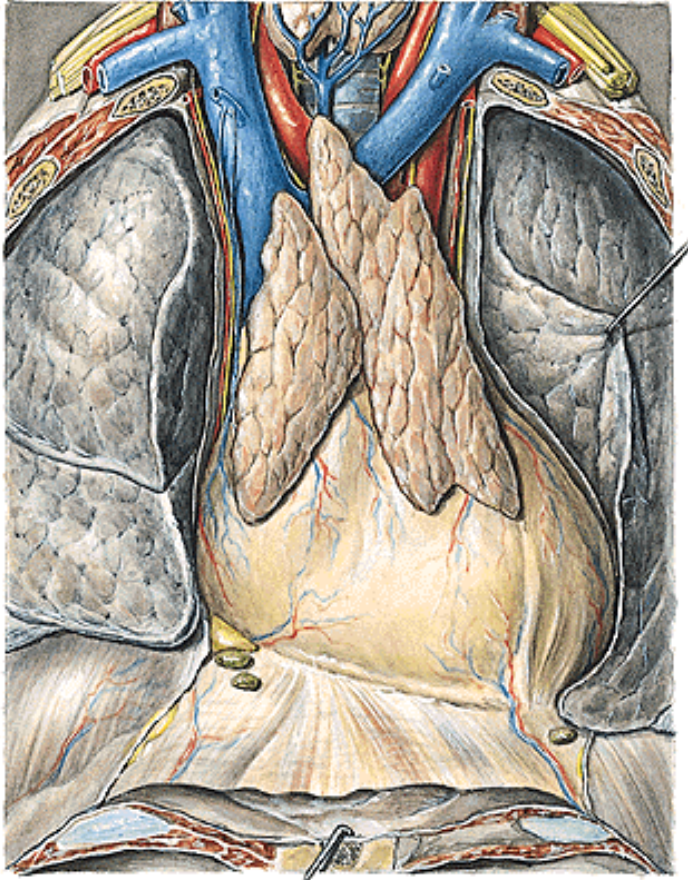
Mediastinum inferius:

anterior

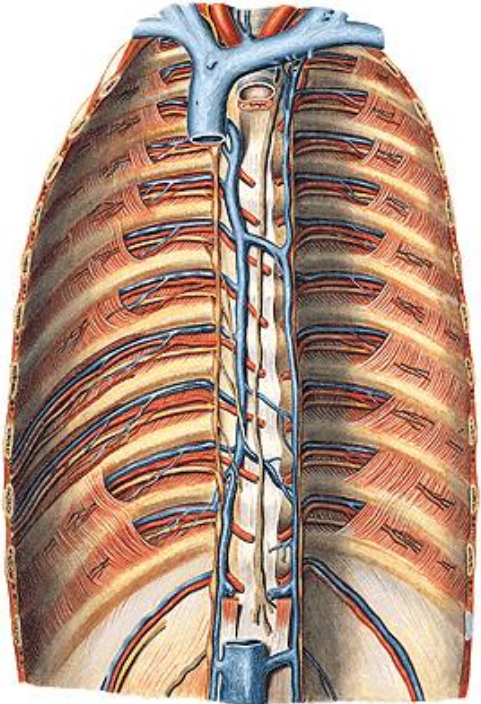
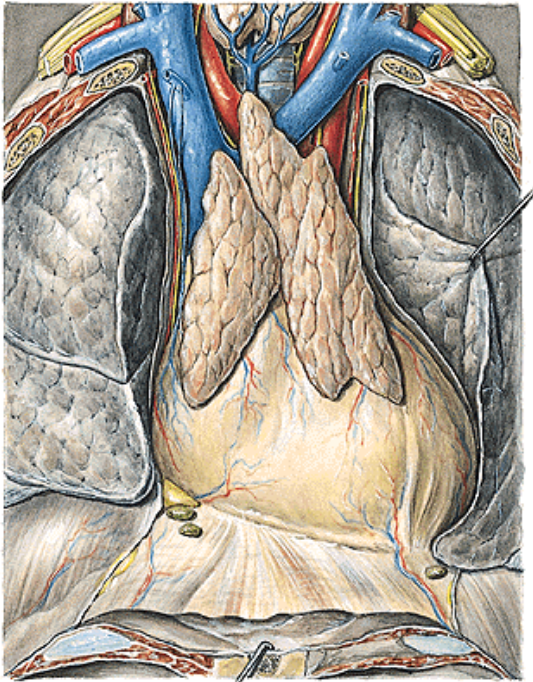
medium

posterior

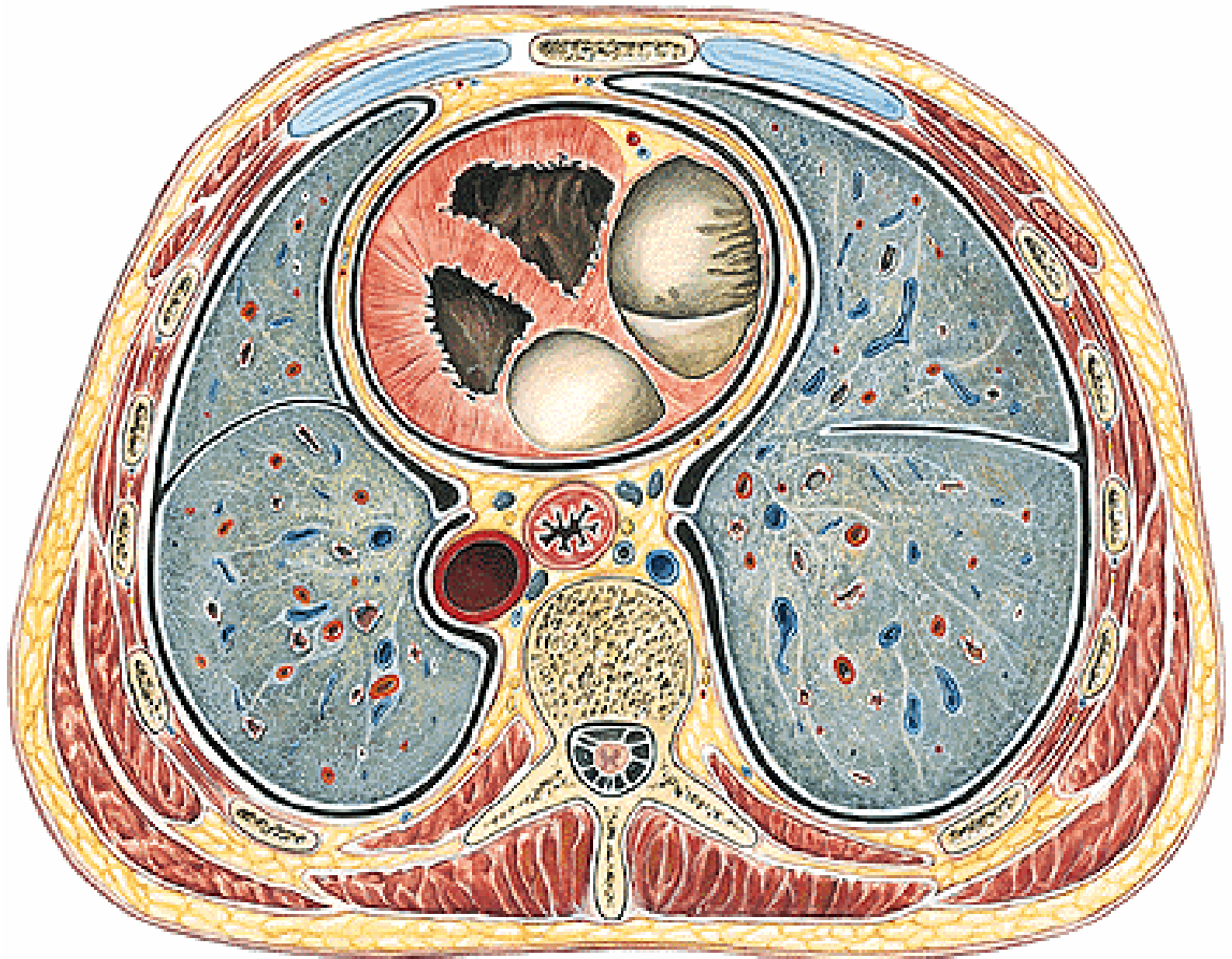
Mediastinum superius



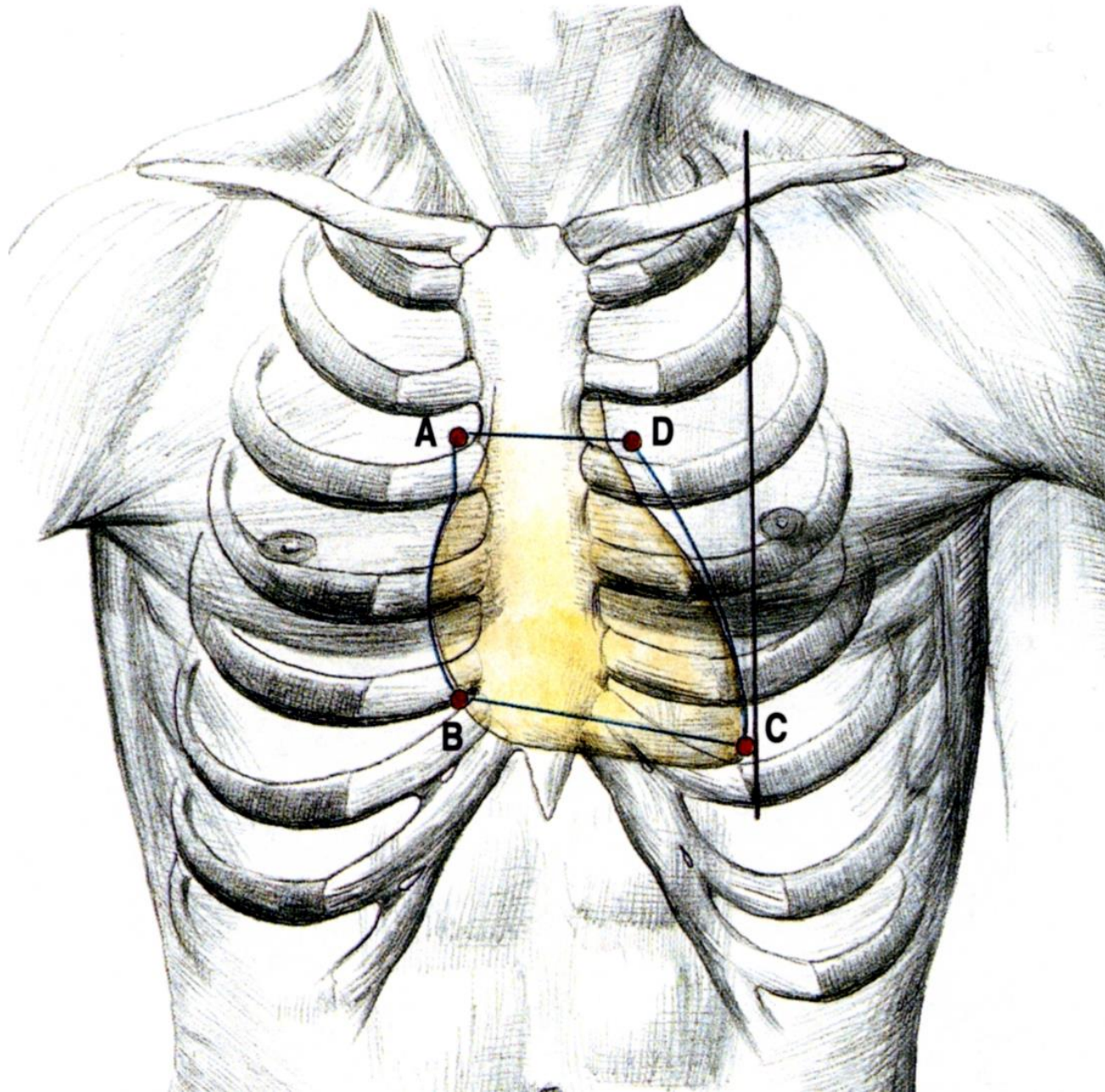
Syndrom vena cava superior



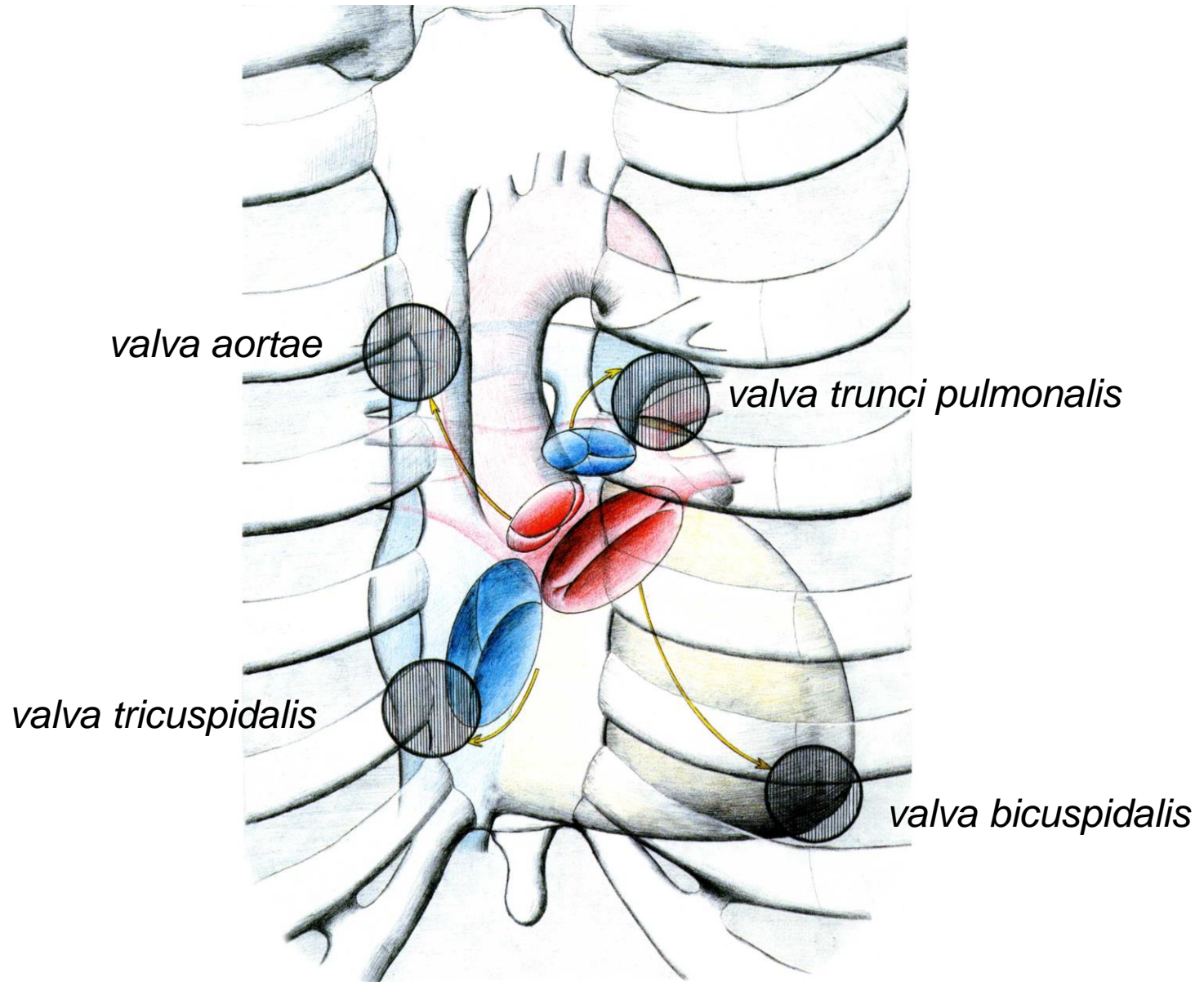
Mediastinum inferius



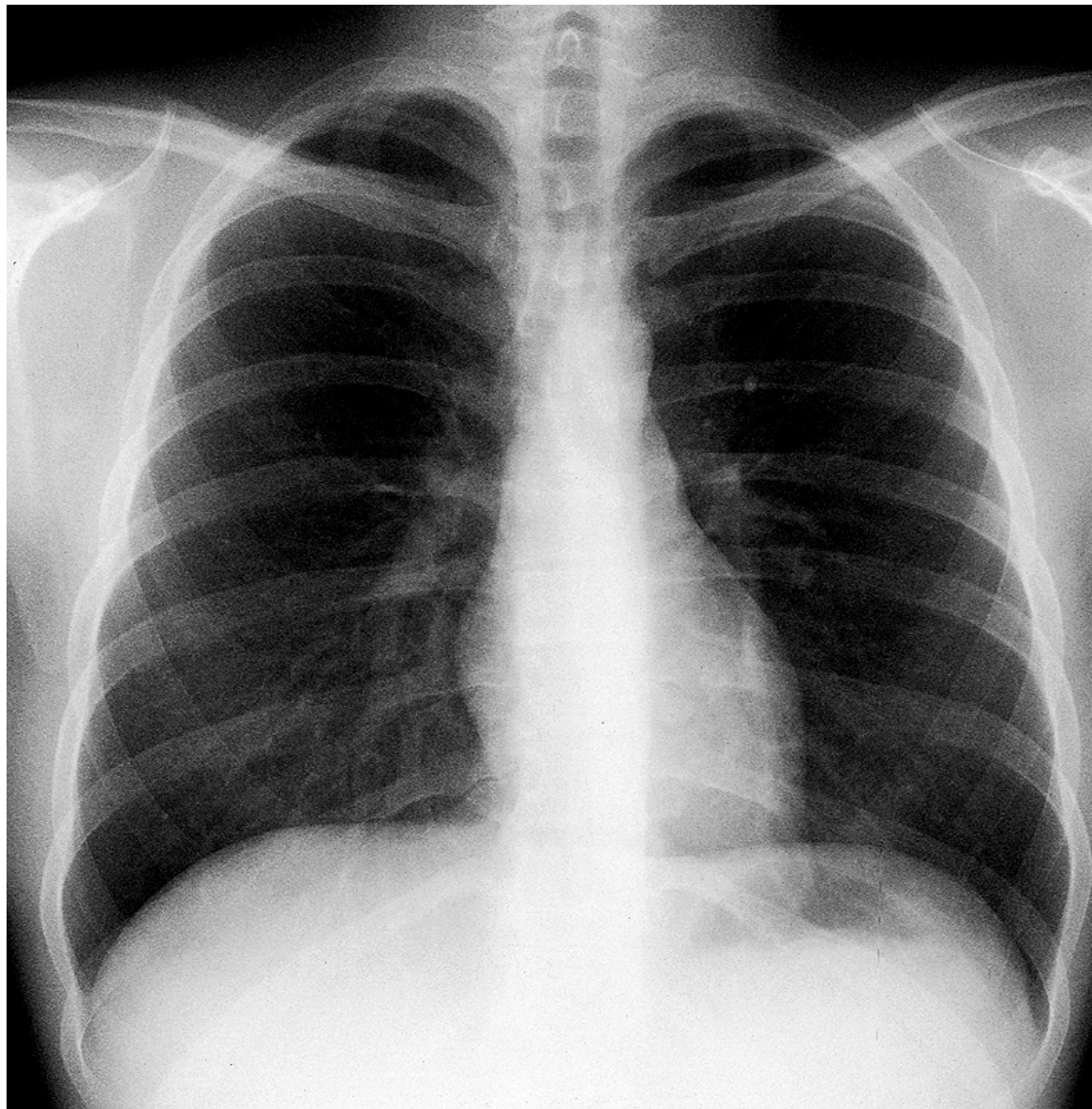
Projekce srdce



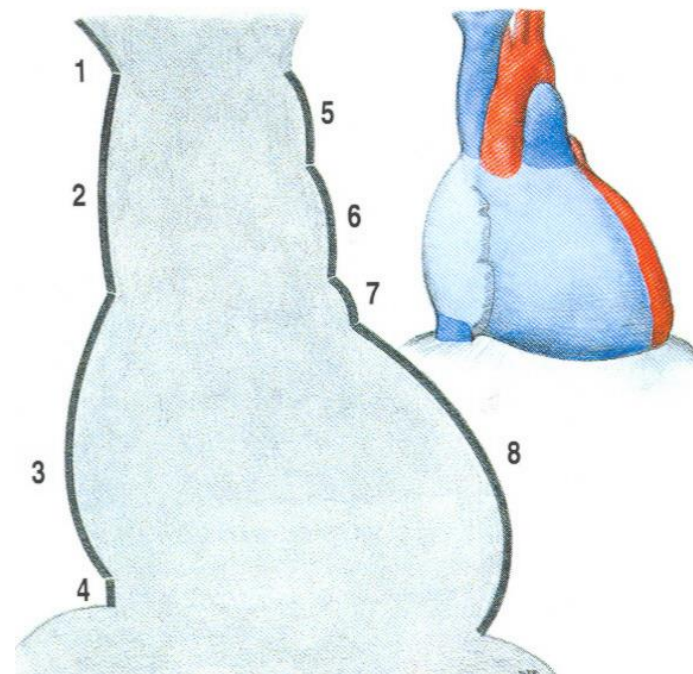
Auskultační body



Nativní snímek hrudníku

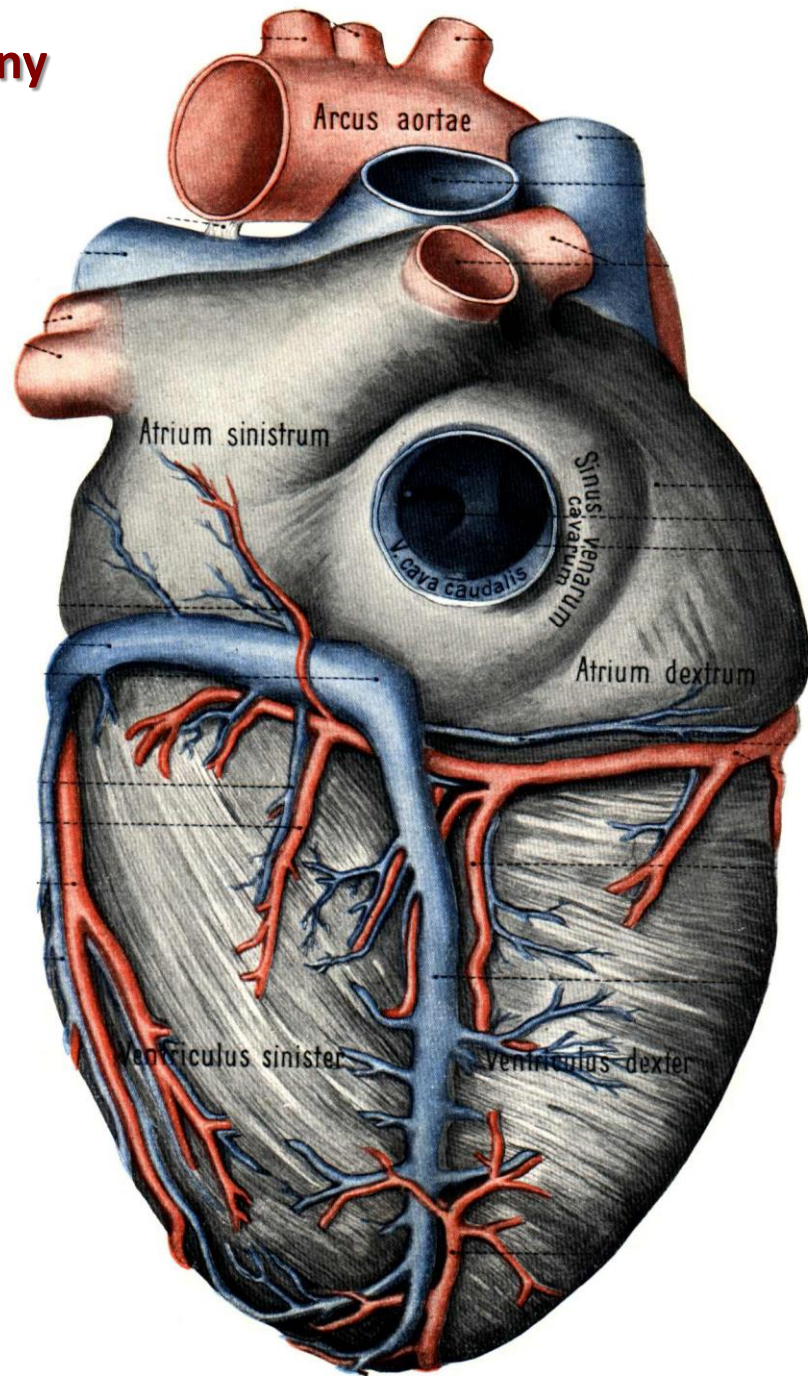
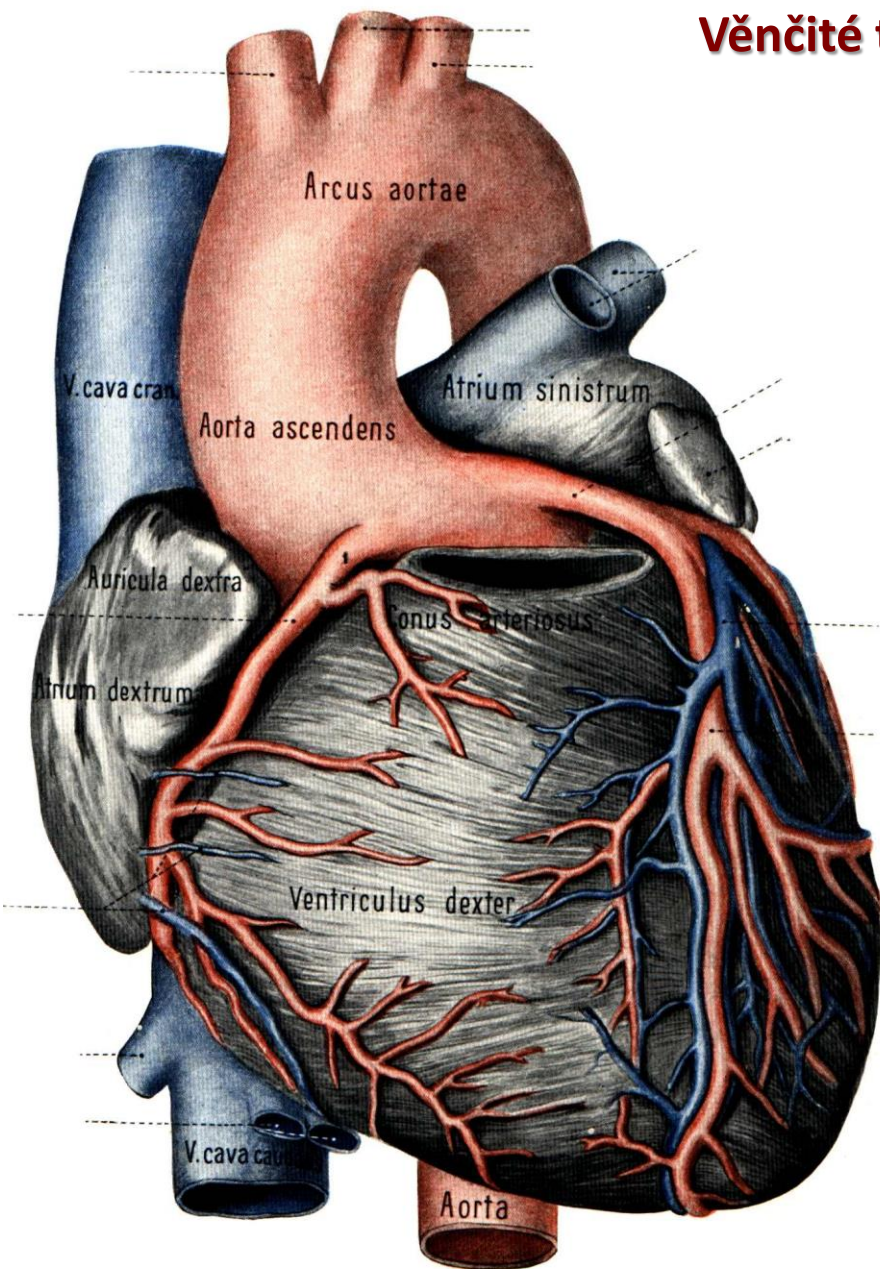


1. V. brachiocephalica dx.
2. V. cava sup.
3. Atrium dx.
4. V. cava inf.

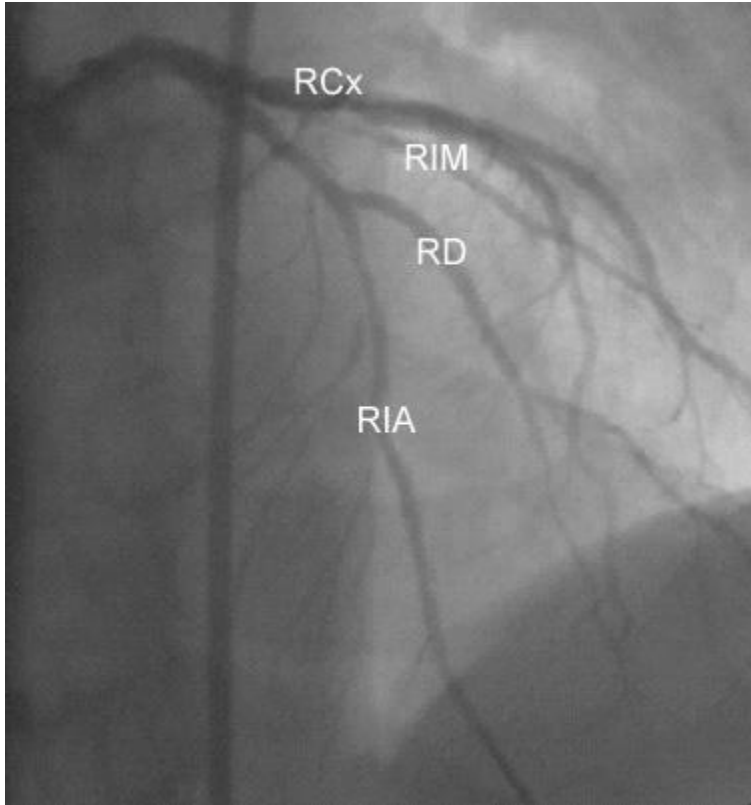


5. Arcus aortae
6. Truncus pulmonalis
7. Auricula sin.
8. Ventriculus sin.

Věčité tepny



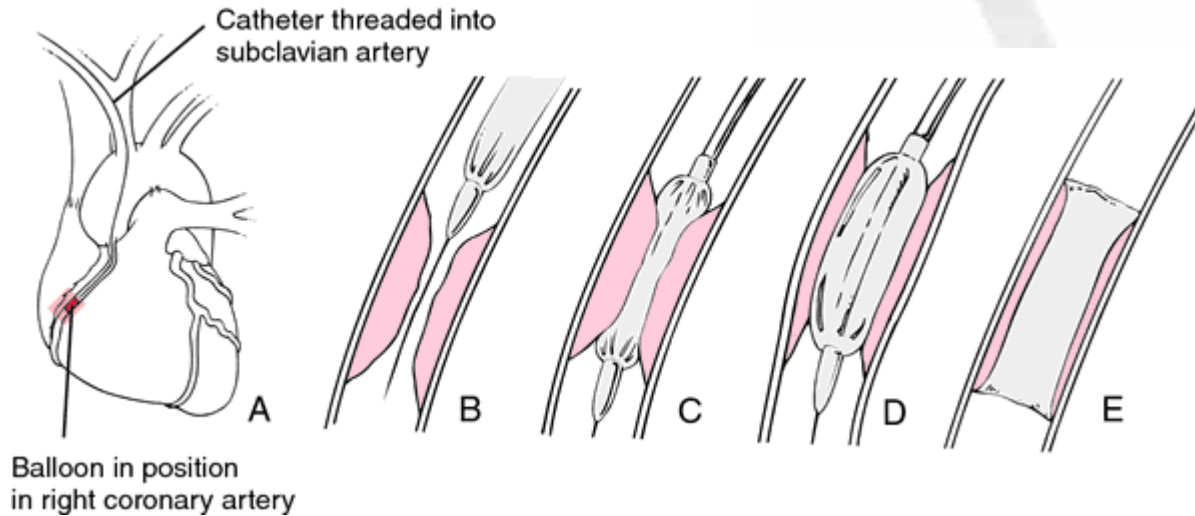
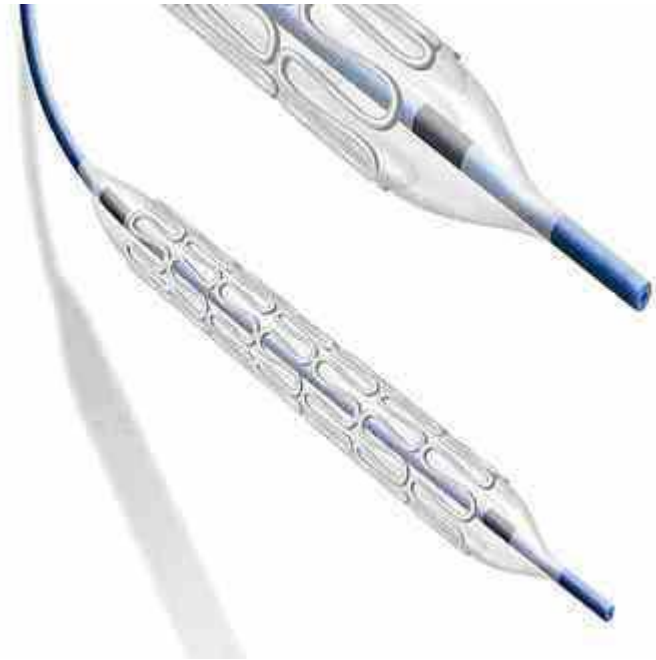
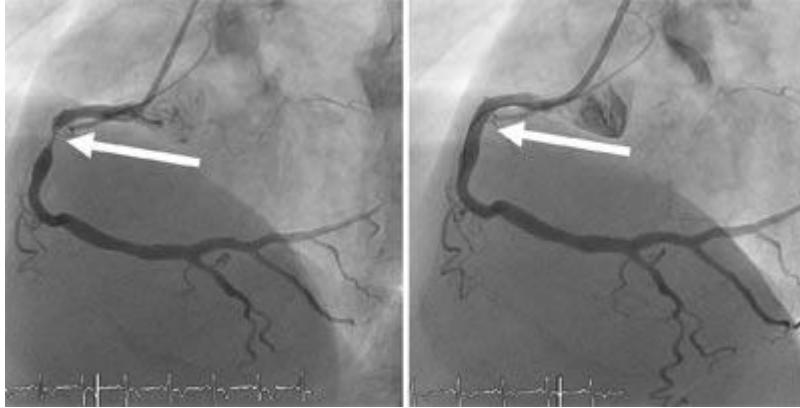
Coronarography



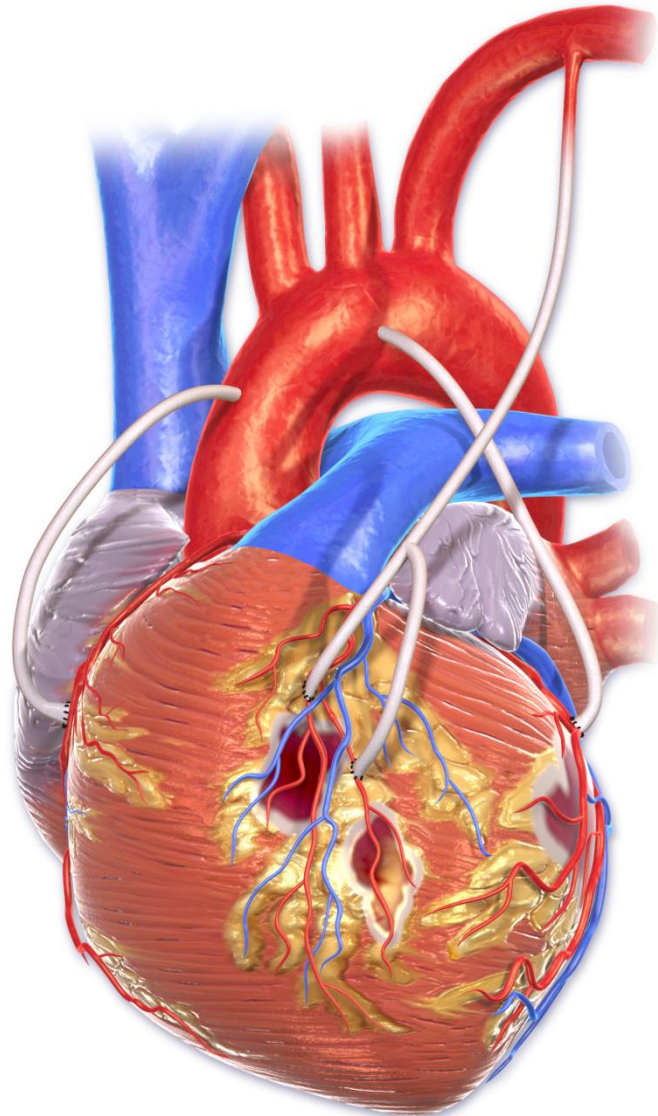
RCx – ramus circumflexus
RIM – ramus intermedius
RIA – ramus interventricularis anterior
RD – ramus diagonalis

RCA – right coronary artery
RIVP – ramus interventricularis posterior
RPLD – ramus posterolateris dexter

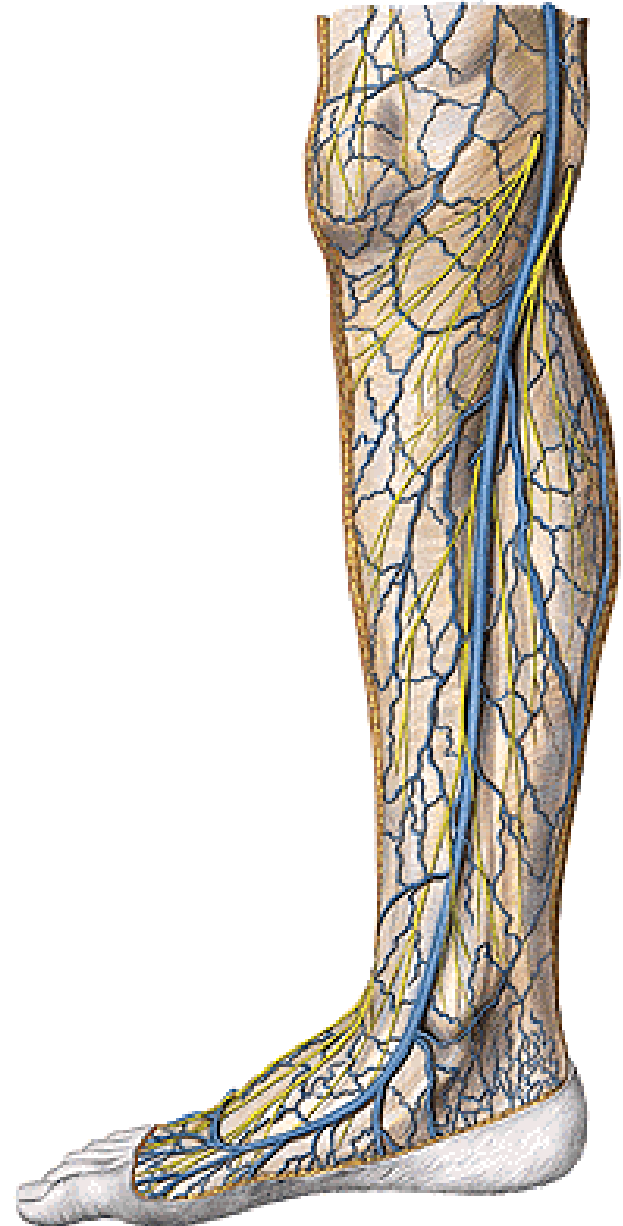
Percutaneous transluminal coronary angioplasty (PTCA)



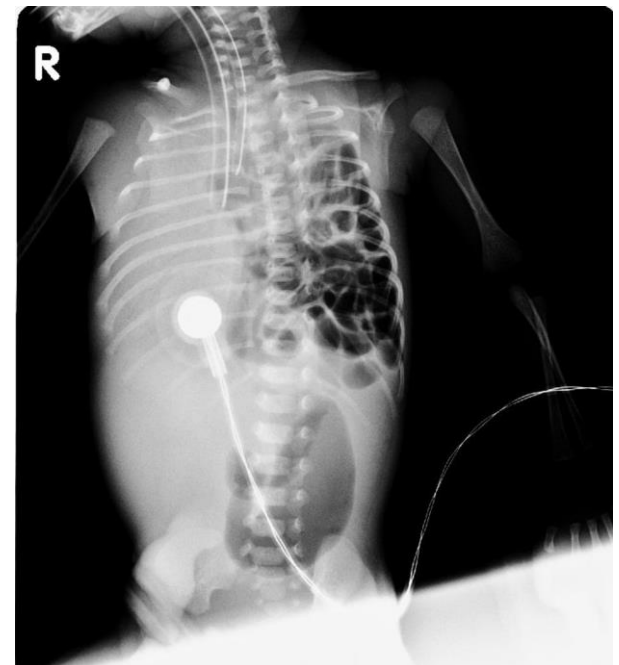
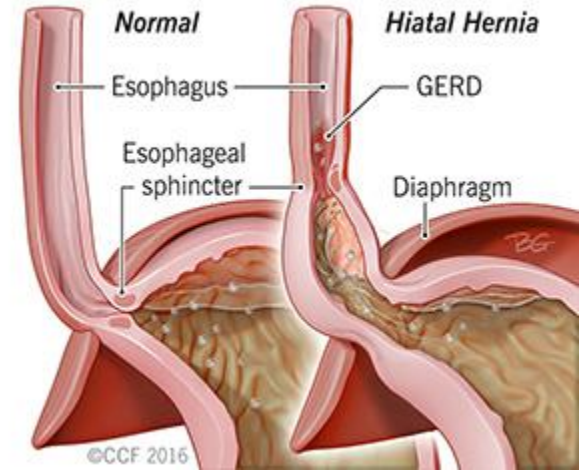
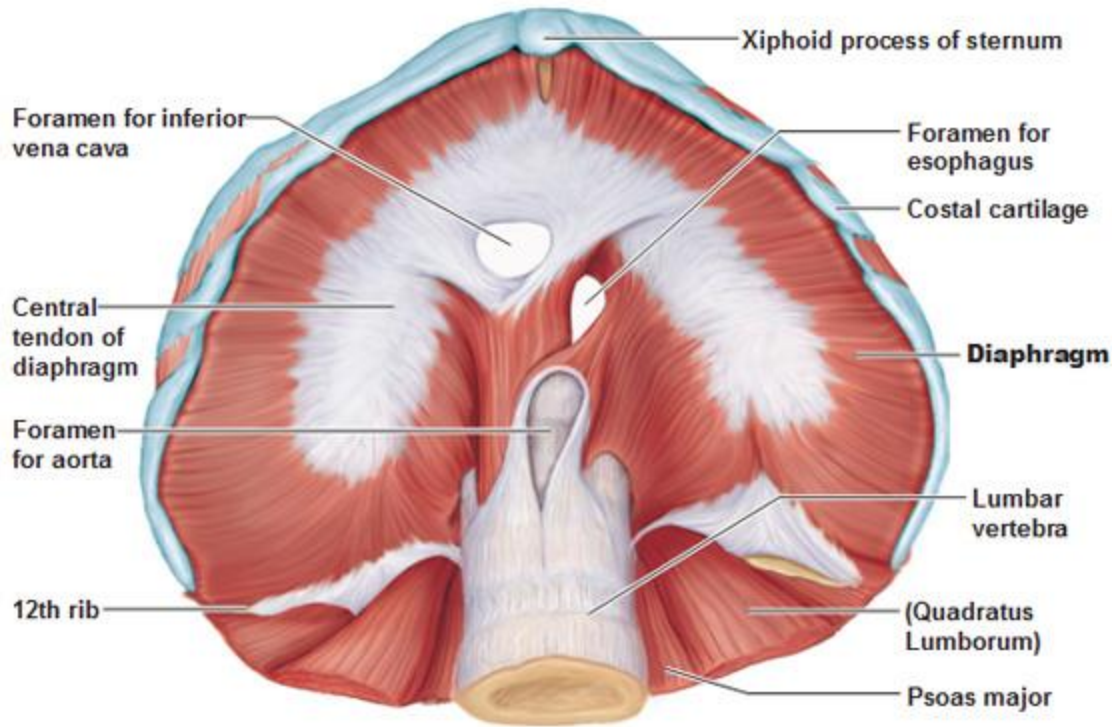
Coronary artery bypass surgery



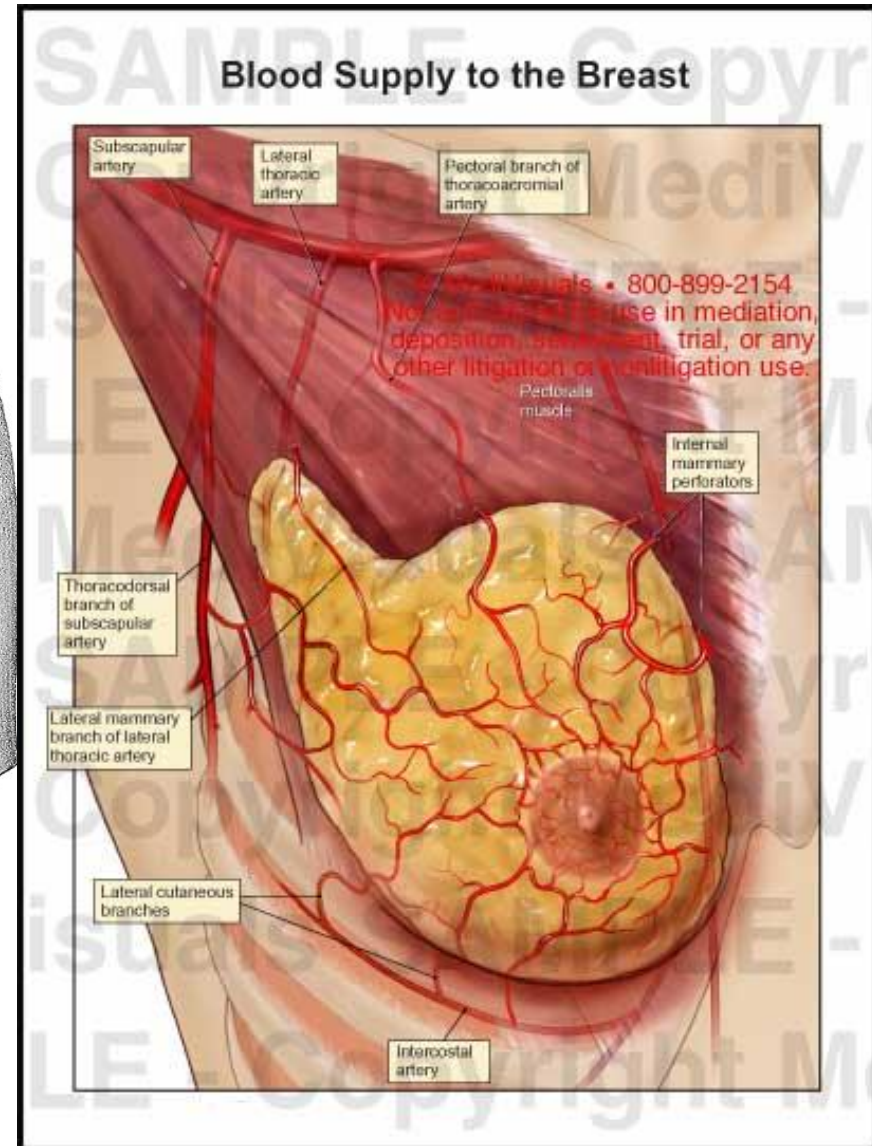
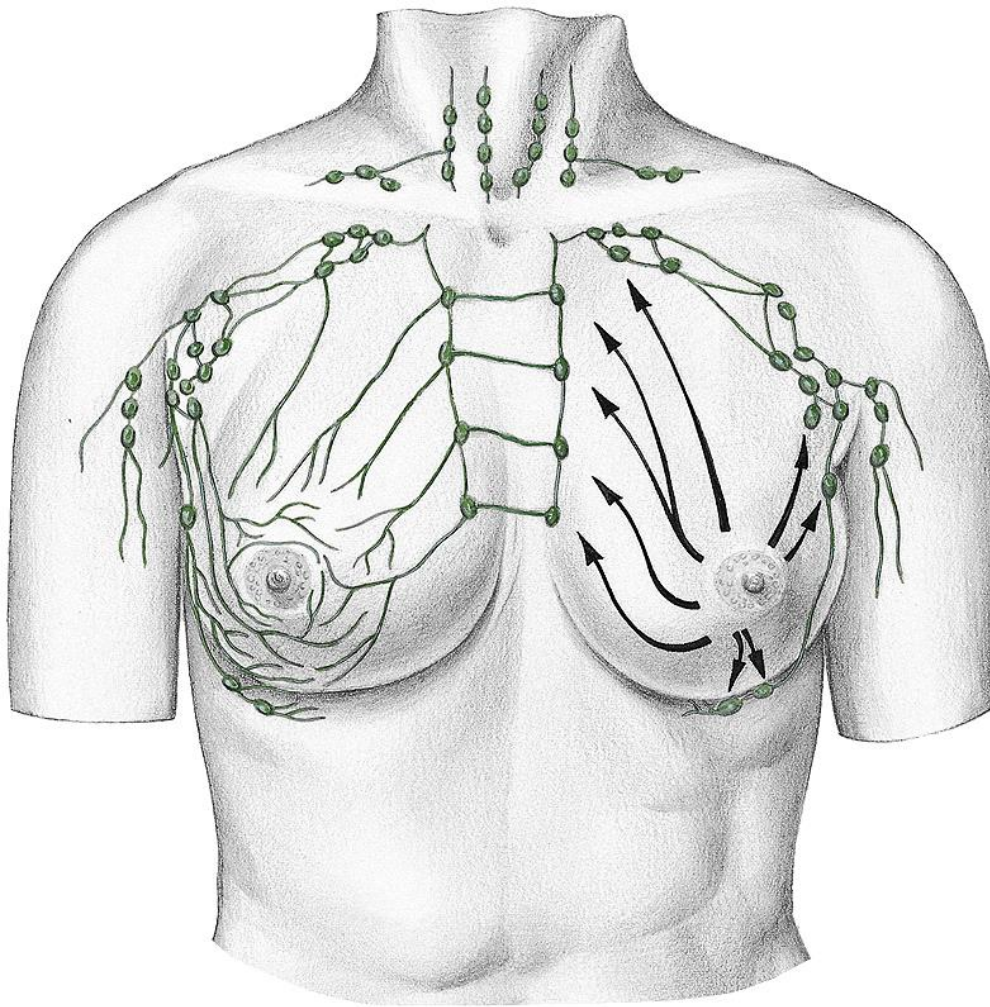
Coronary Artery Bypass Graft (CABG)
Quadruple Bypass



Hernia diaphragmatica



Cévní zásobení a lymfatická drenáž prsu



Exhibit# 601065-01X