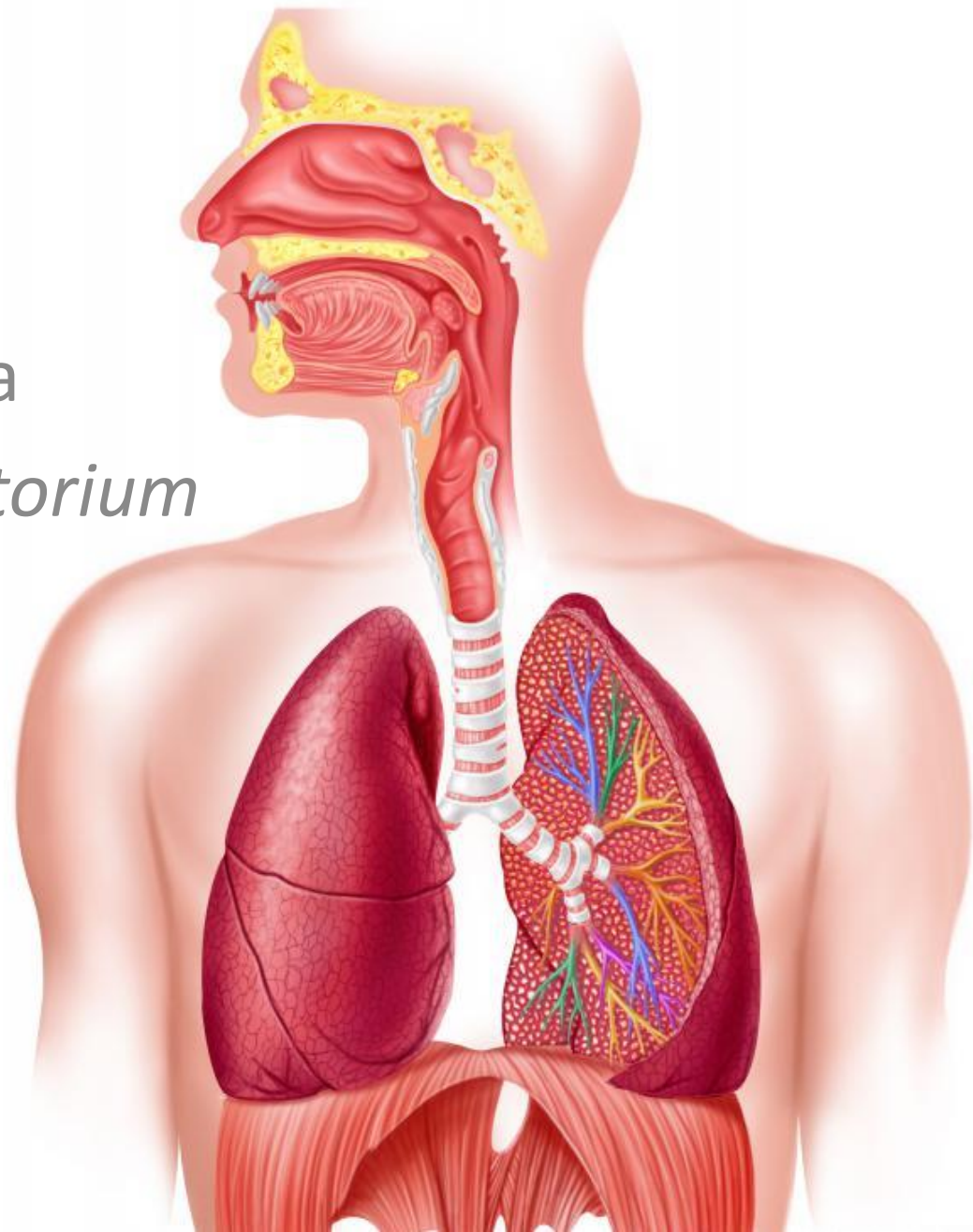
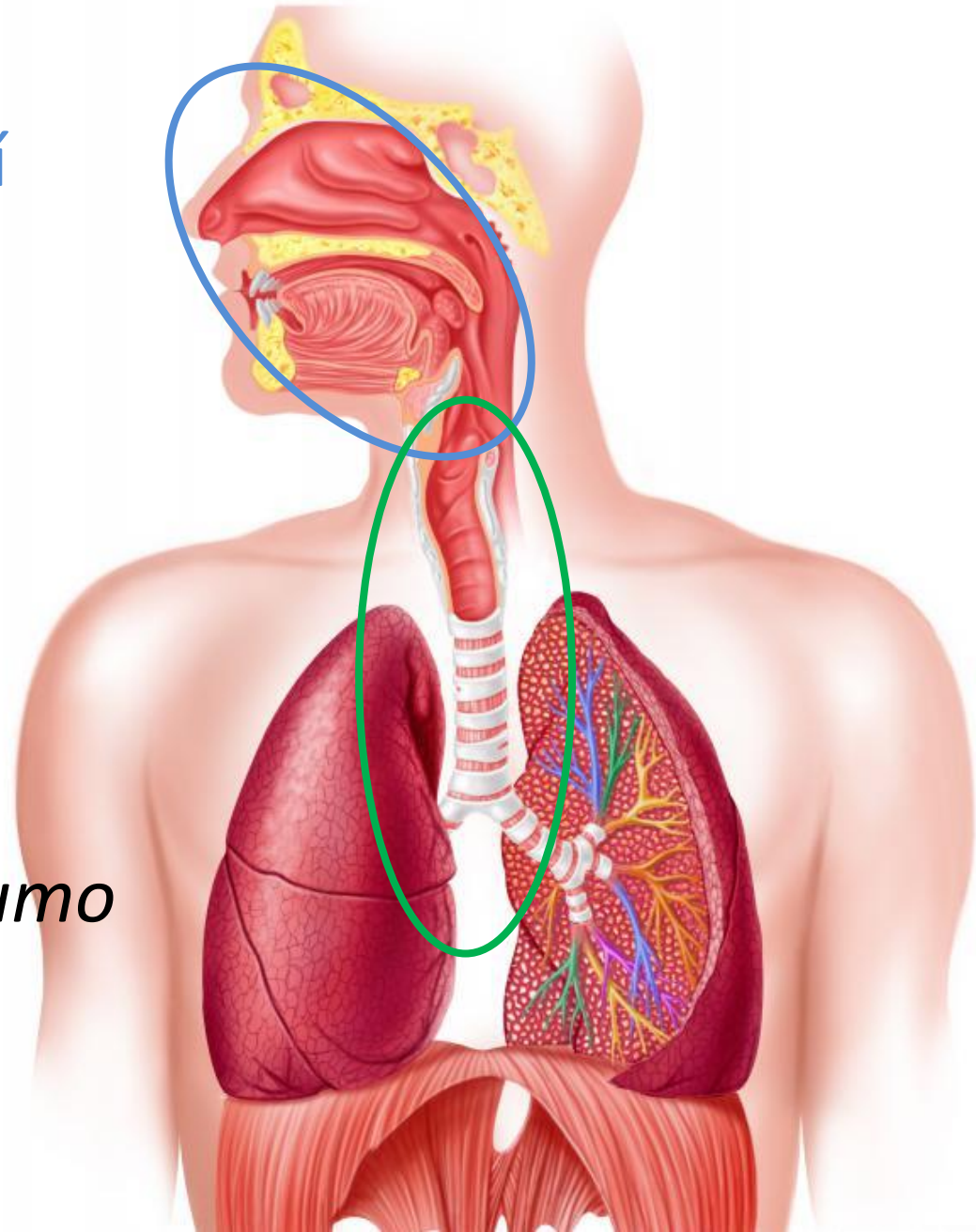


Dýchací soustava
Systema respiratorium



- Horní cesty dýchací
 - *cavitas nasi*
 - *pharynx*
- Dolní cesty dýchací
 - *larynx*
 - *Trachea*
 - *bronchi*
- Plíce – *pulmo, pneumo*

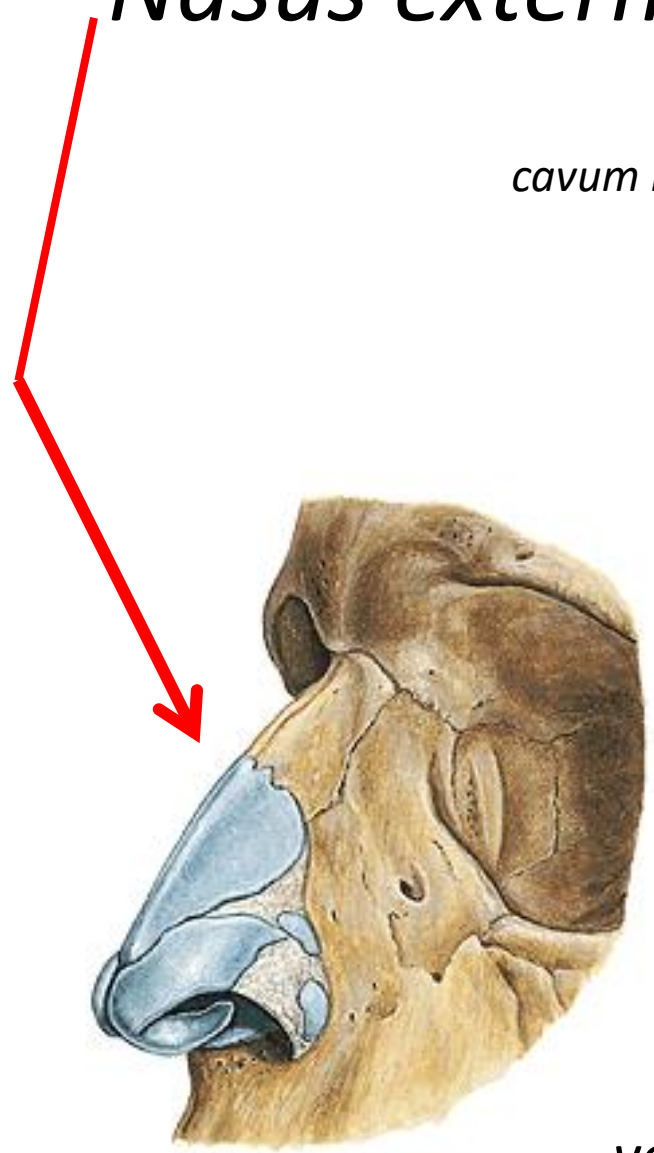


Horní cesty dýchací

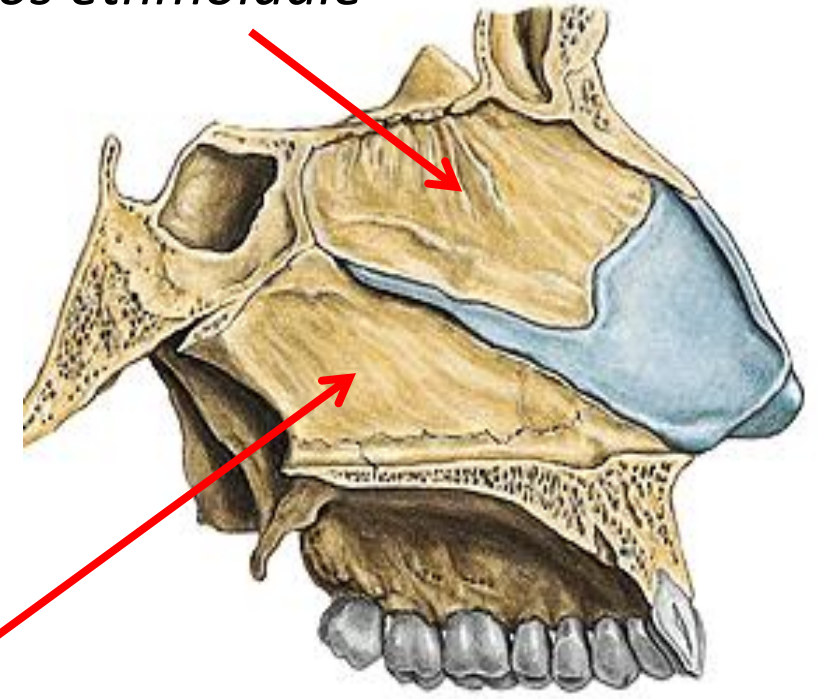
Cavitas nasi, pharynx

Nasus externus

cavum nasi, (regio olfactoria), paranasální sinusy, nasopharynx



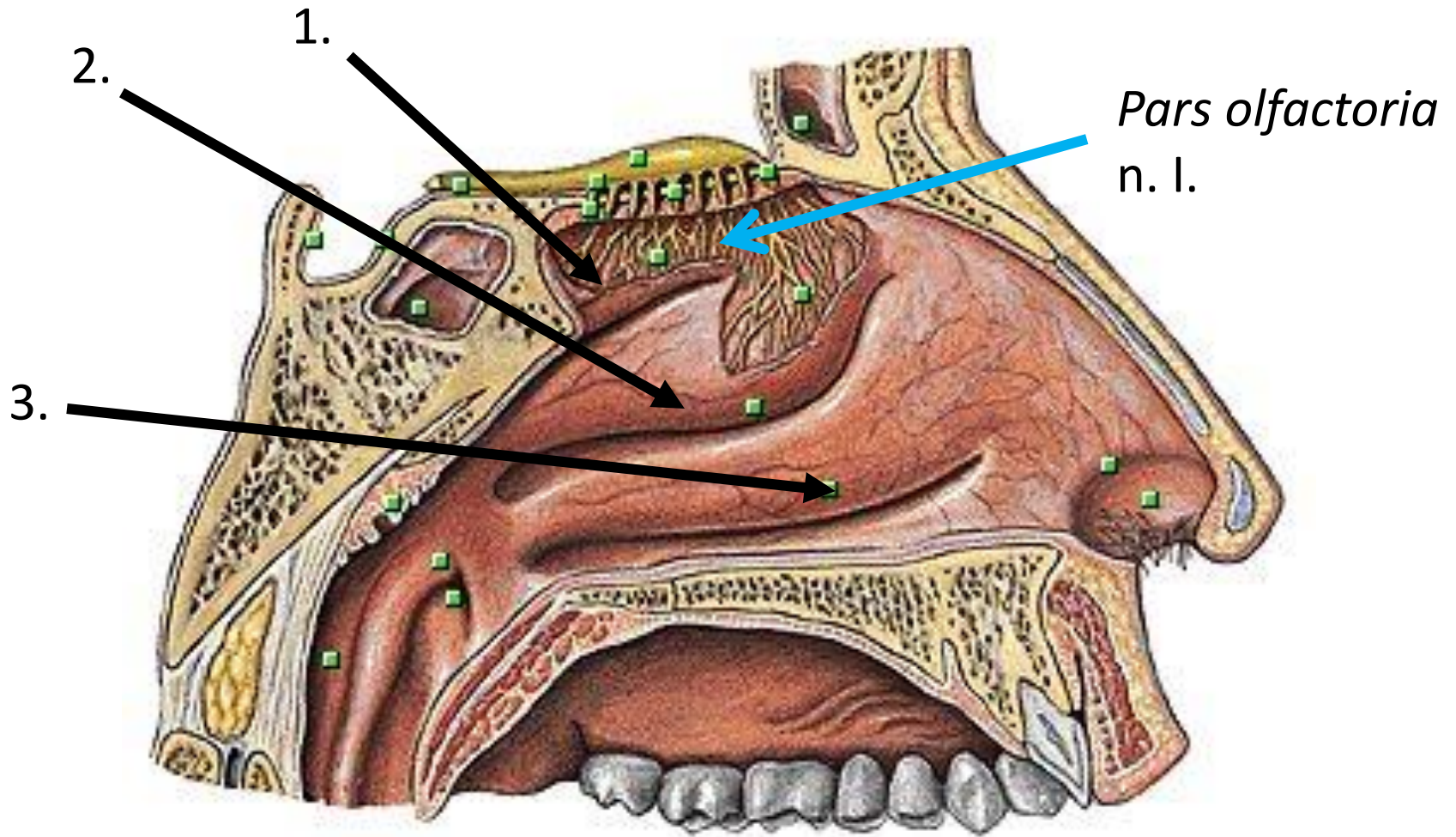
os ethmoidale



vomer

nosní přepážka – septum nasi

Conchae nasales – 1. superior 2. media 2. inferior



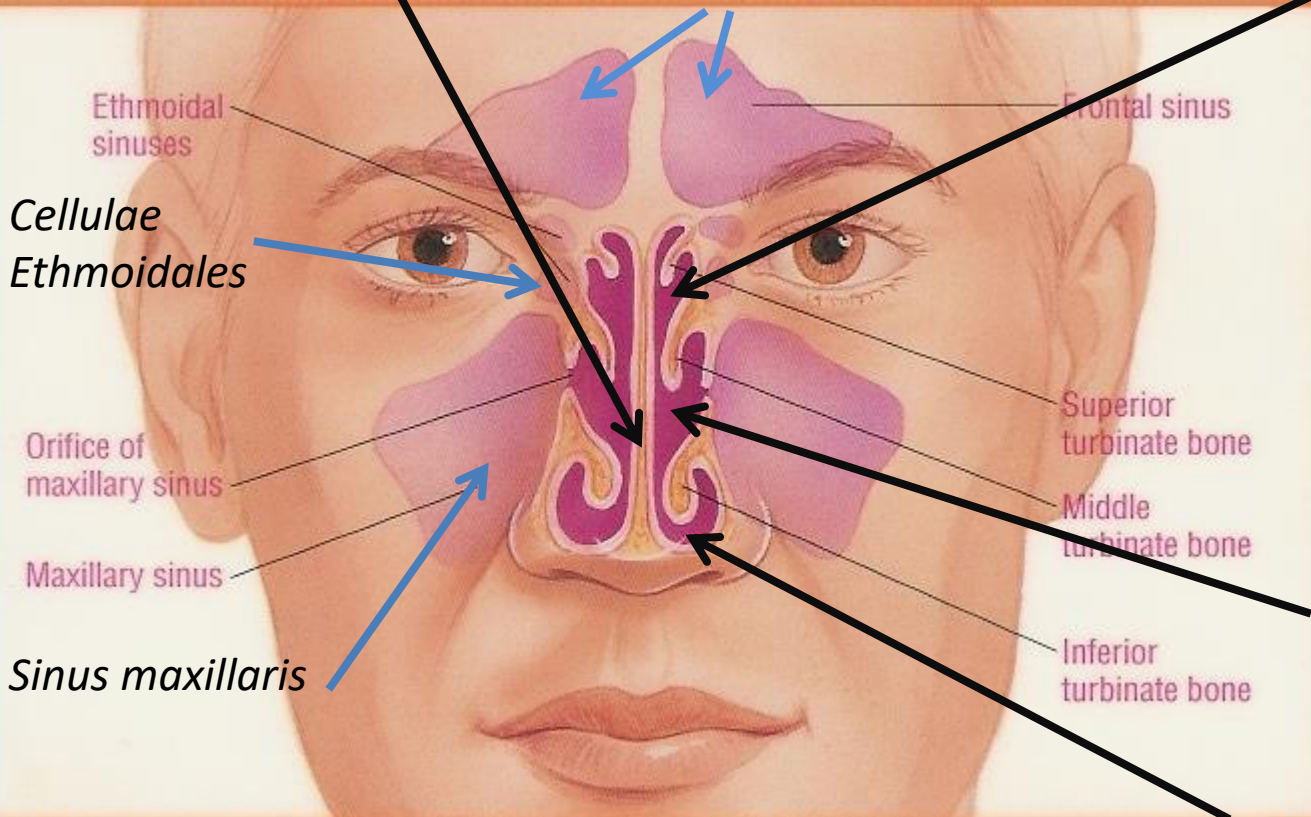
Sagitální řez nosní dutinou

Paranasální dutiny (sinusy) – vedlejší dutiny nosní – světle fialová barva

septum nasi

meatus nasi : superior

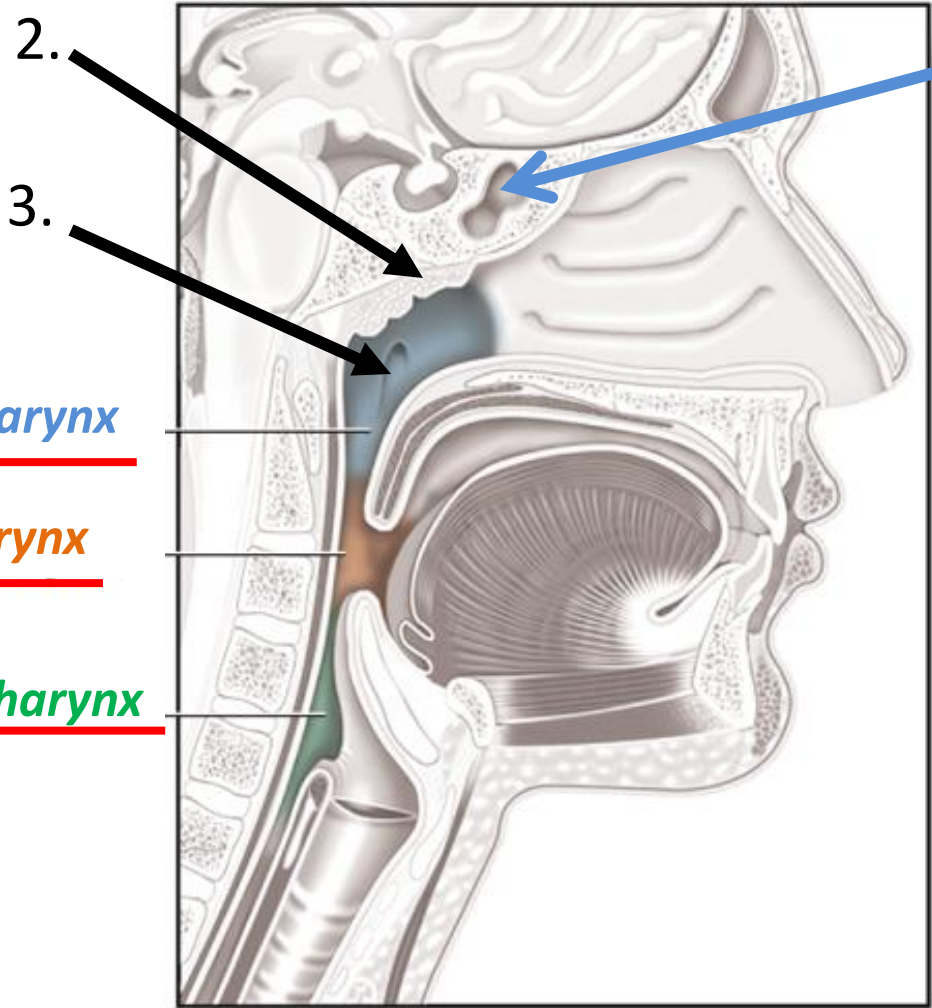
sinus frontales



medius

inferior

Regions of the pharynx



P.

1. *sinus sphenoidalis*

2. *tonsilla pharyngea*

3. *ostium tubae auditivae (Eustachii)*

nasopharynx

oropharynx

laryngopharynx

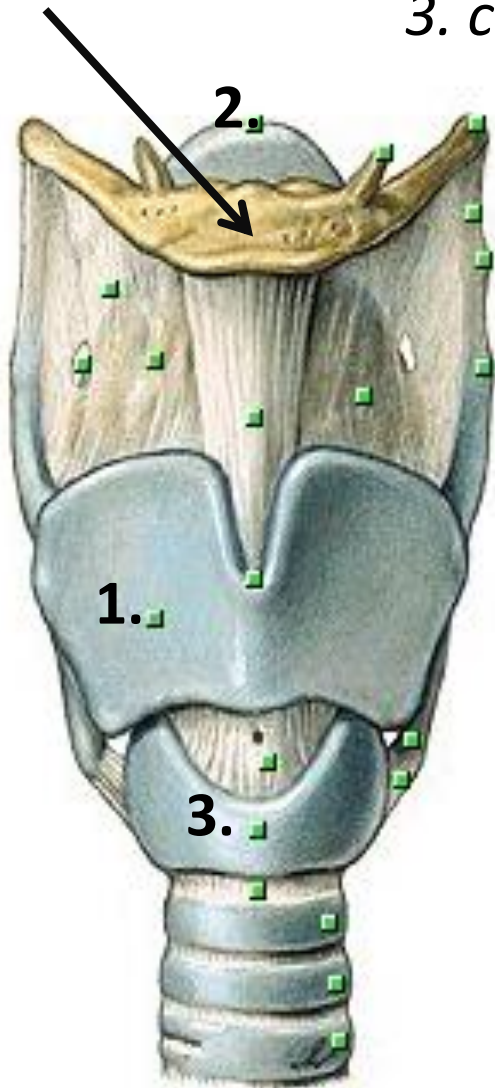
Sagitální řez

Dolní cesty dýchací

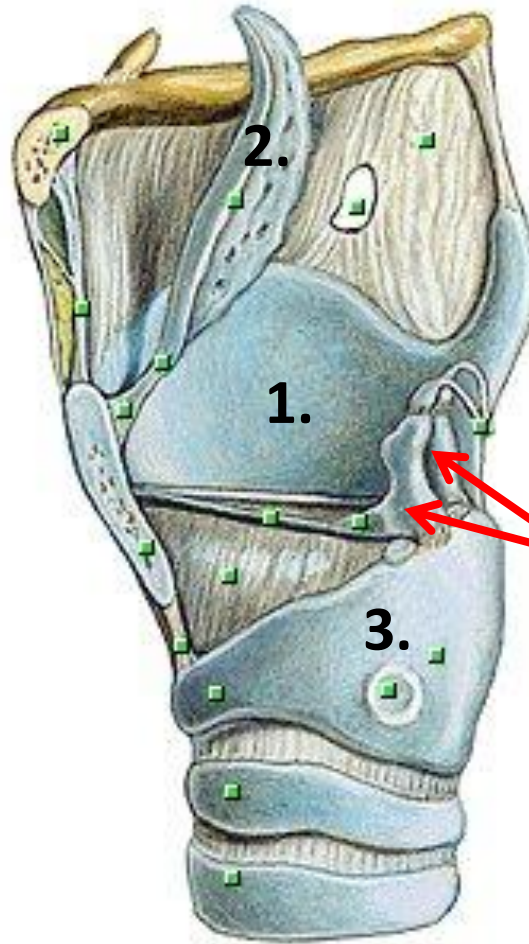
Larynx, trachea, bronchi

Os hyoideum

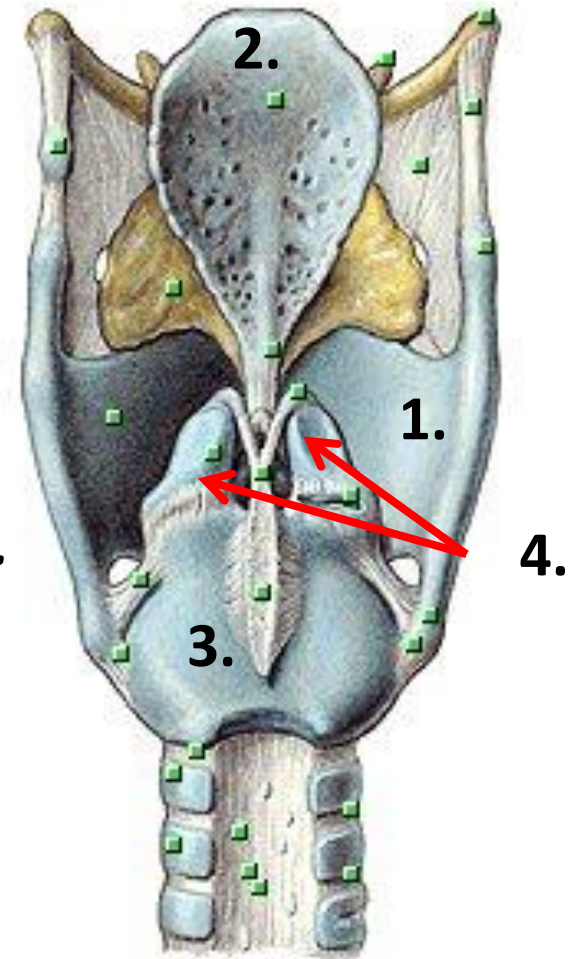
Larynx: 1. cartilago thyroidea 2. epiglottis
3. cartilago cricoidea 4. cartilagine arytenoideae



pohled : zepředu



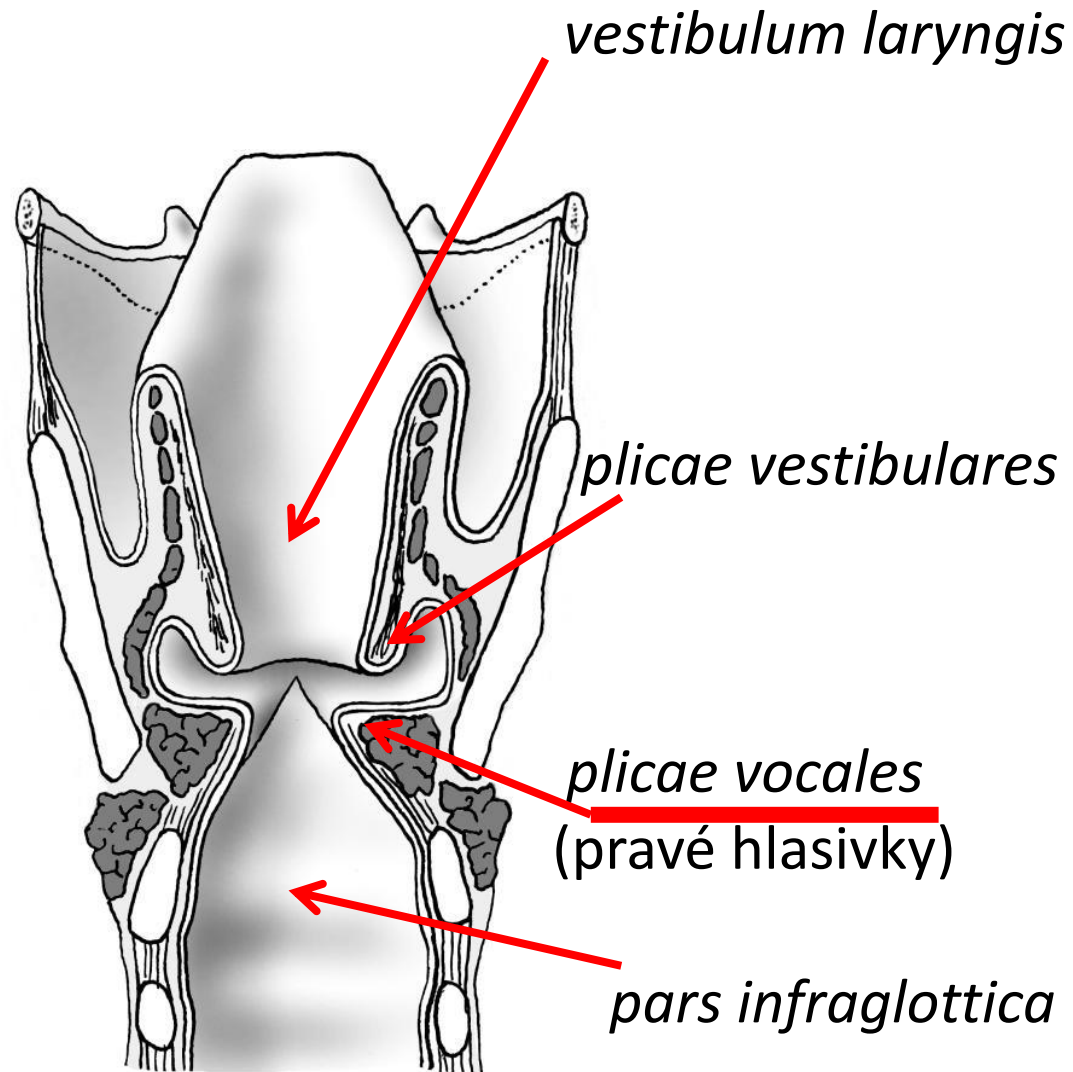
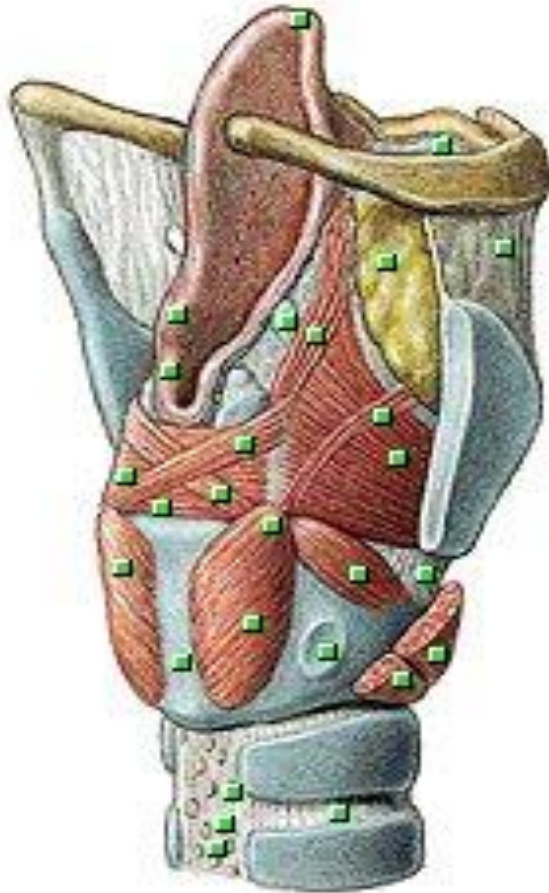
z boku



zezadu

Svaly laryngu – tenze, abdukce, addukce hlasivek

Inervace: *n. vagus = n. X.*



Frontální řez

Laryngoskopie

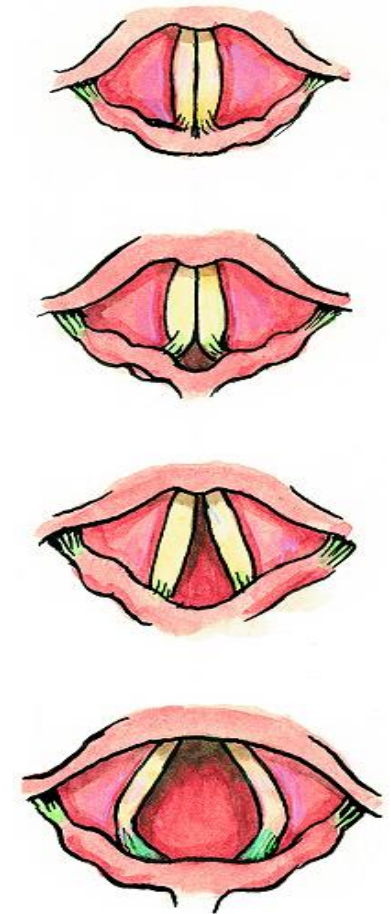
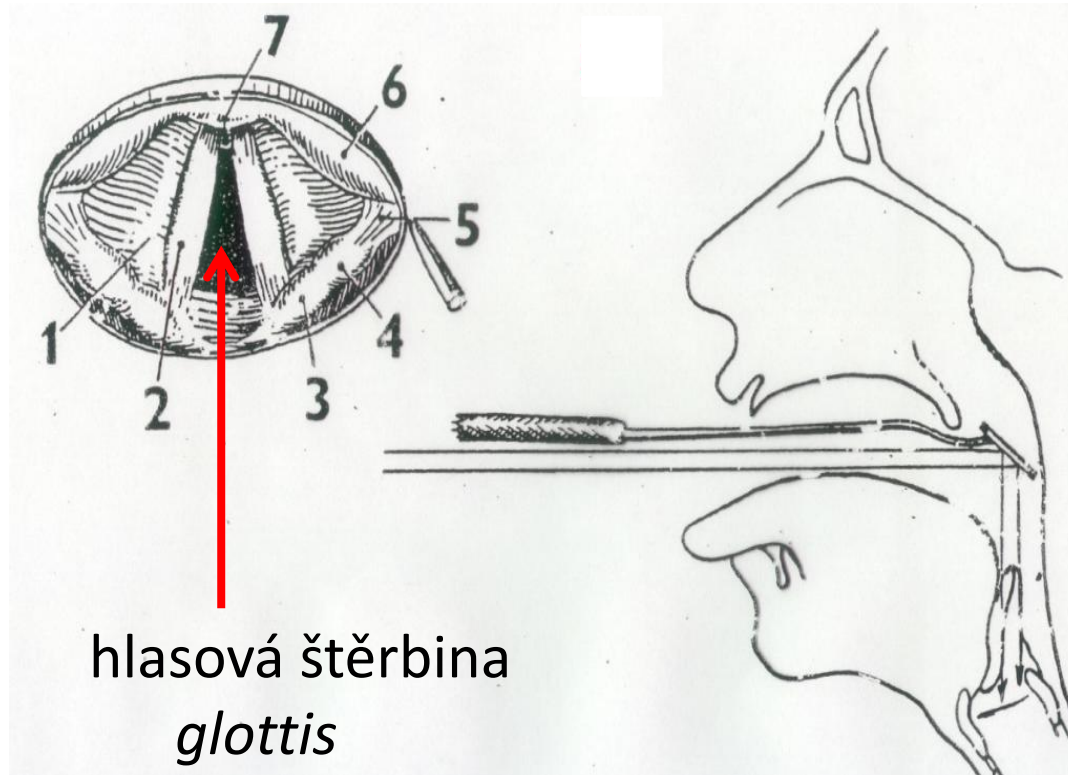
1 – *plicae vestibulares*

2 – *plicae vocales*

plicae vocales (hlasivky)

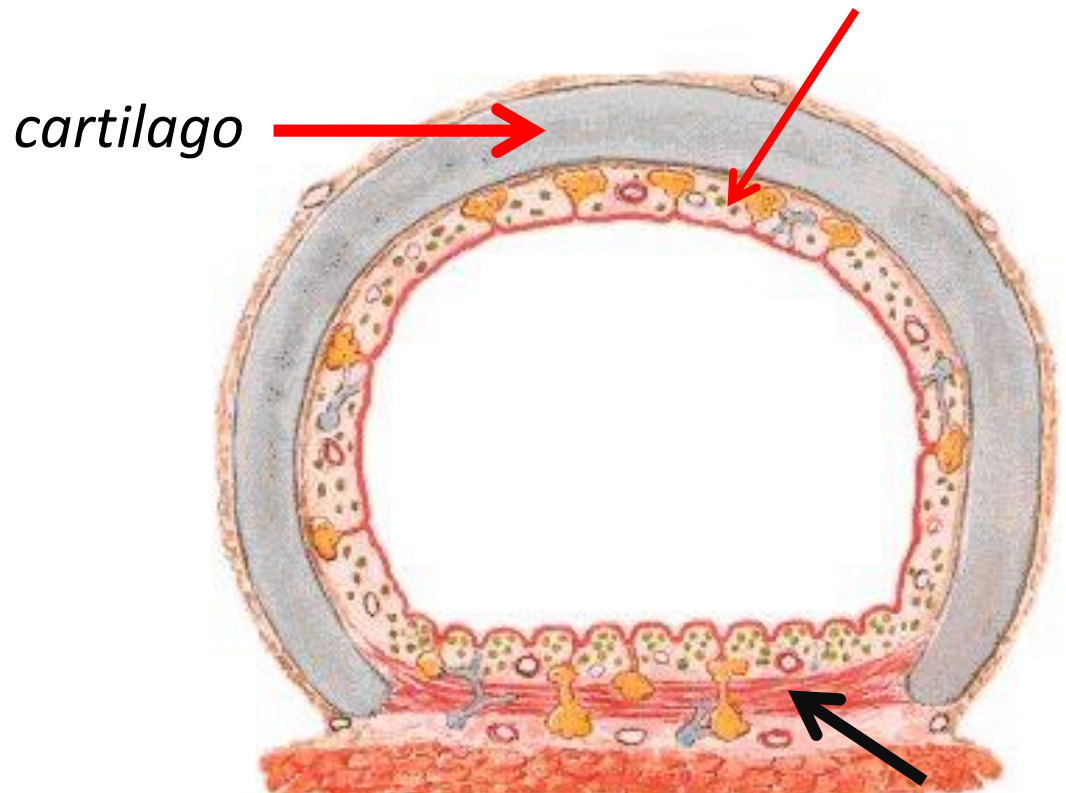
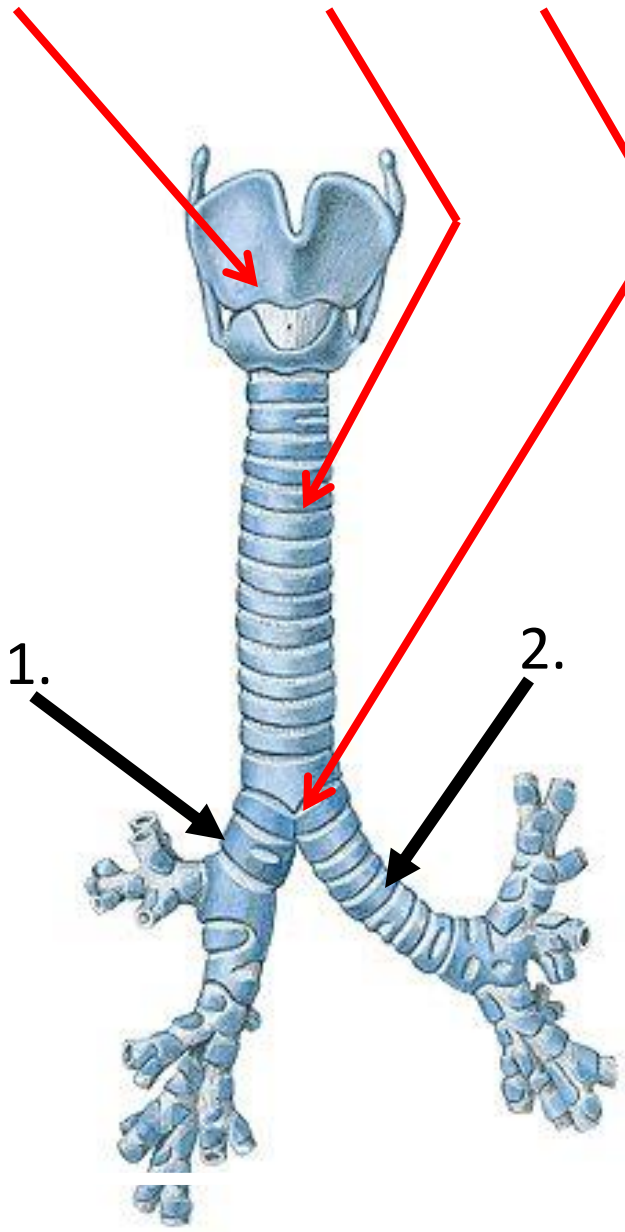
nažloutlé (jiný epitel)

pohyblivé (podkladem sval)



Larynx – trachea + „bifurkace“

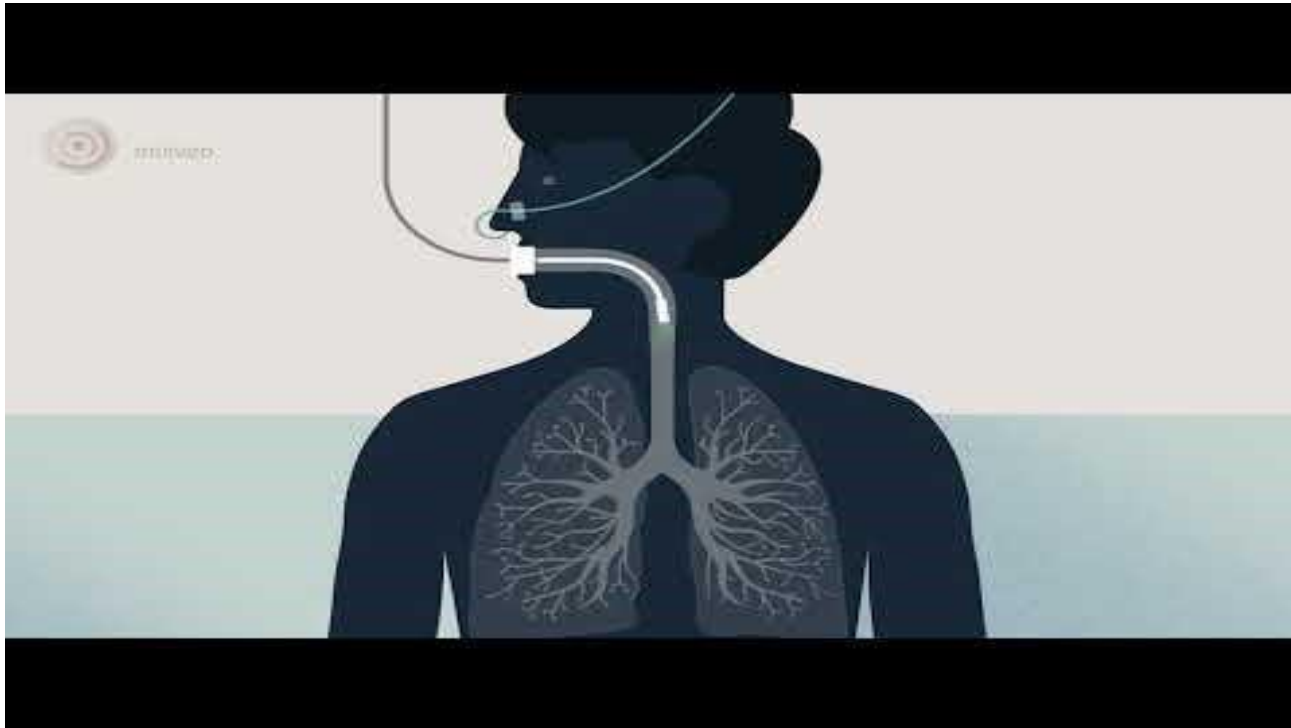
- 1. *bronchus principalis dexter*
širší, kratší, větší úhel odstupu
- 2. *bronchus principalis sinister*
užší, delší, menší úhel odstupu

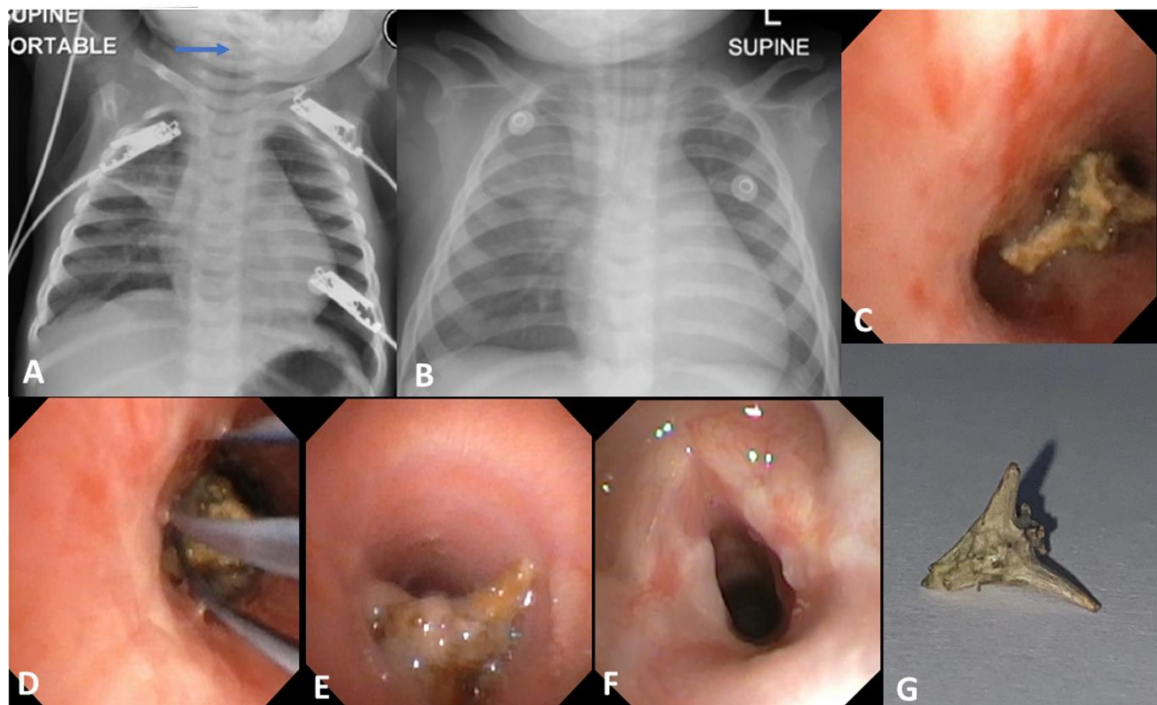
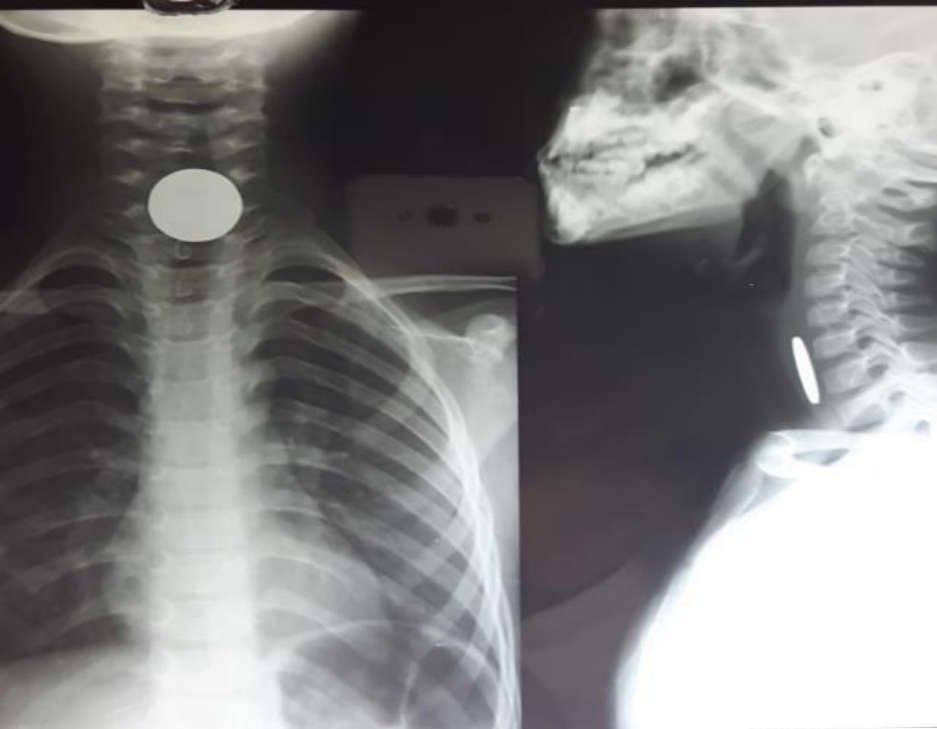


paries membranaceus – m. trachealis

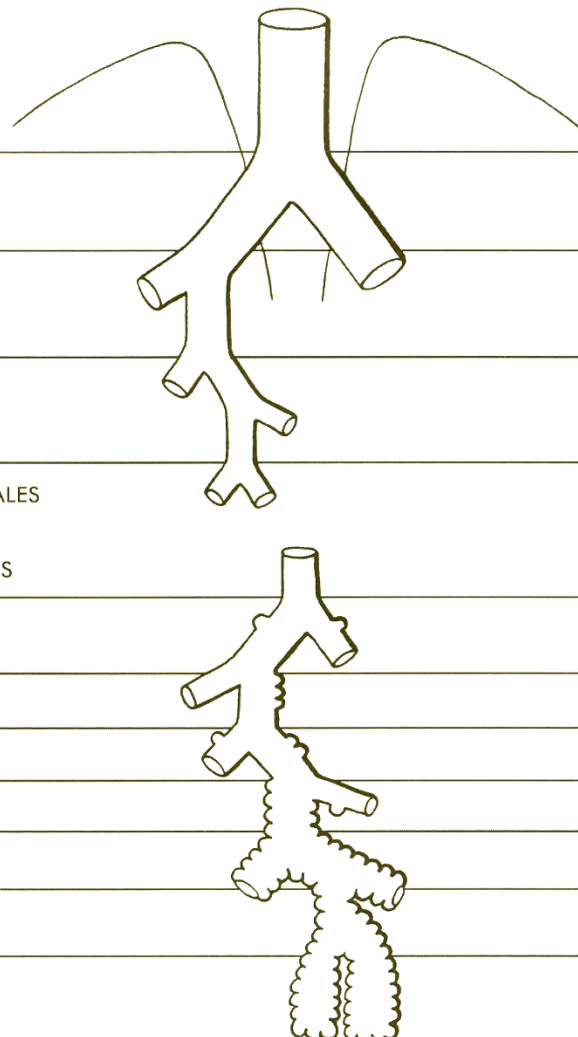
Příčný řez tracheou





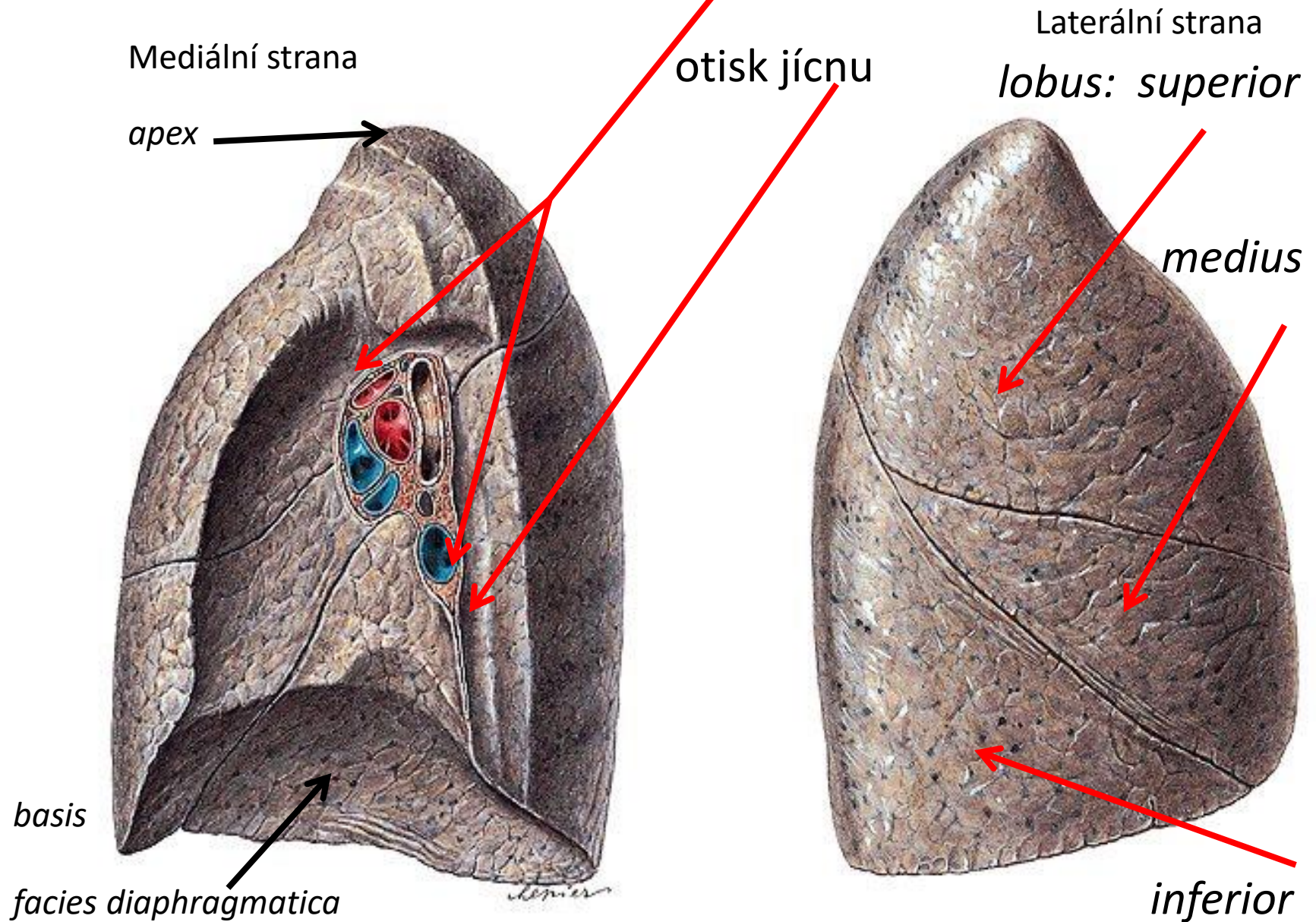


Tzv. bronchiální a alveolární strom

TRACHEA			BIFURKACE		
ARBOR BRONCHIALIS			<u>BRONCHI PRINCIPALES</u>	1	
			<u>BRONCHI LOBARES</u>	2	
			<u>BRONCHI SEGMENTALES</u>	3	
				4	
			BRONCHI SUBSEGMENTALES BRONCHIOLI BRONCHIOLI TERMINALES	5 16	
ARBOR ALVEOLARIS			BRONCHIOLI RESPIRATORII		17
					18
					19
			DUCTULI ALVEOLARES		20
					21
					22
			SACCULI ALVEOLARES		23
			<u>ALVEOLI PULMONIS</u>		

výměna „dýchacích“ plynů - v alveolech

Pravá plíce – 3 laloky, větší hilus tvaru lichoběžníku



Levá plíce – 2 laloky, menší hilus ve tvaru trojúhelníku

otisk aorty a srdce

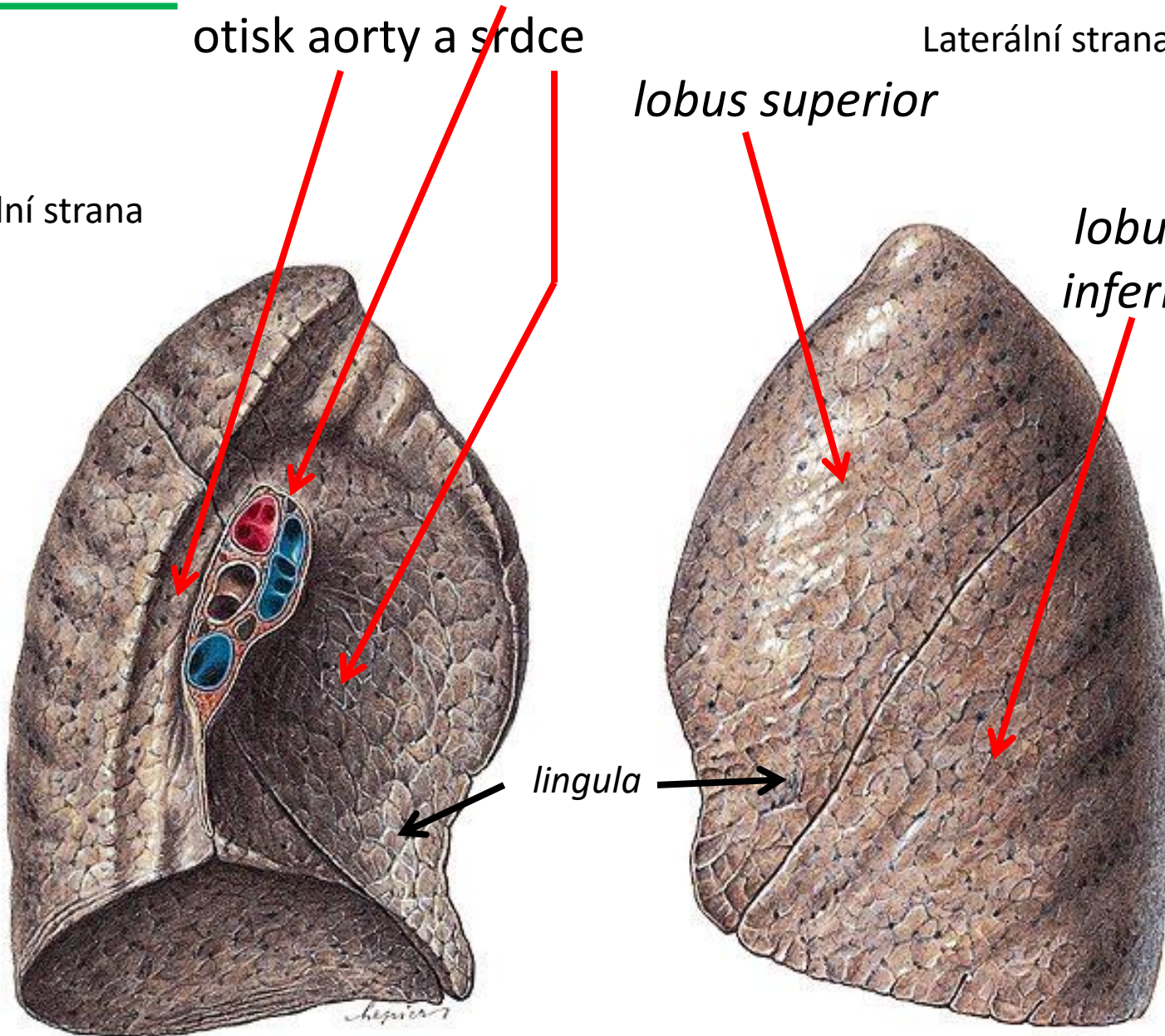
Laterální strana

Mediální strana

lobus superior

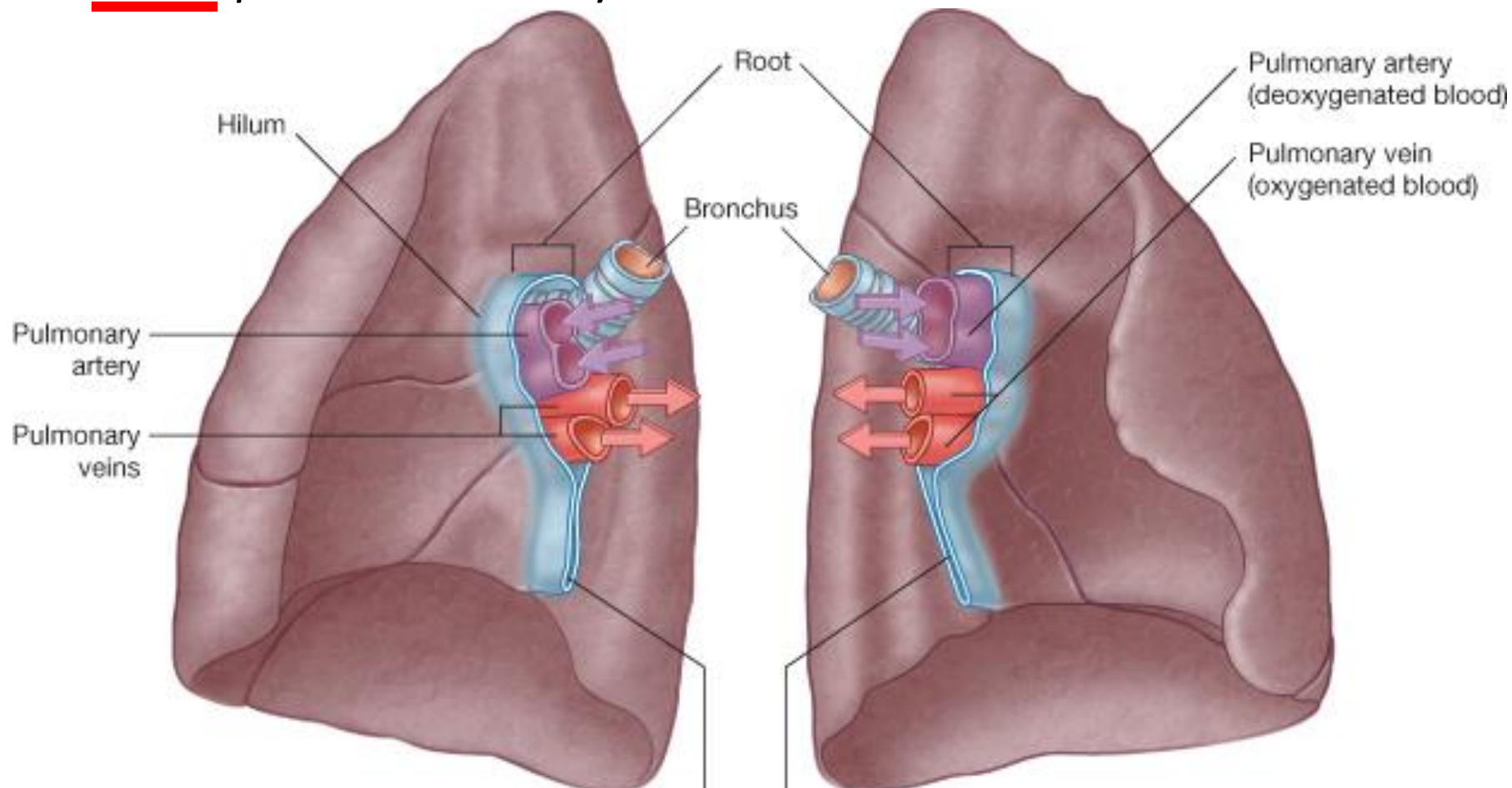
lobus inferior

lingula



Hilus pravé a levé plíce – *bronchi, arteriae et venae*
arteriae pulmonales – odkysličená krev – fialově
venae pulmonales – okysličená krev - červeně

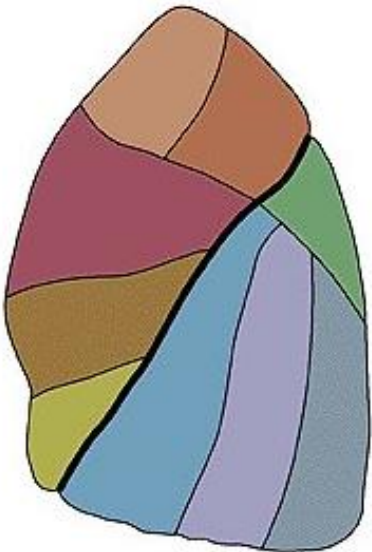
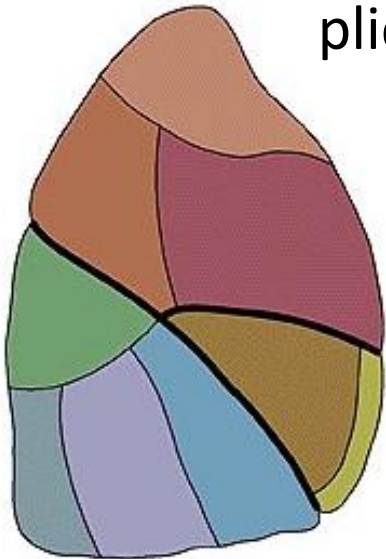
Malý
oběh



pulmo dexter

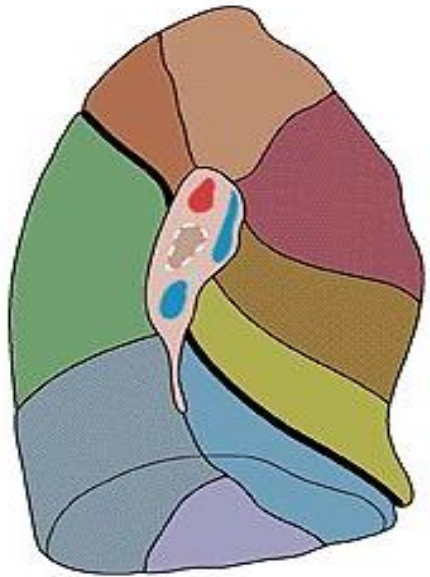
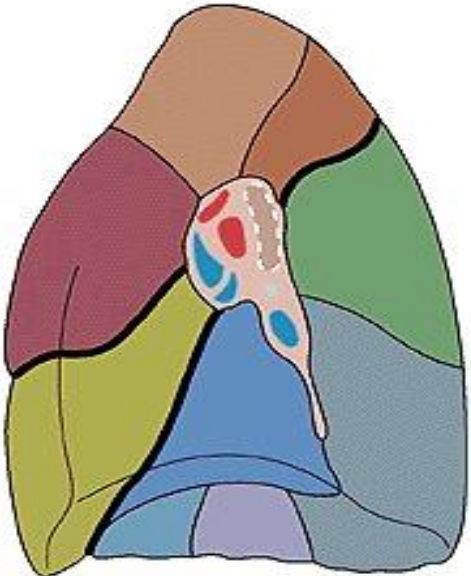
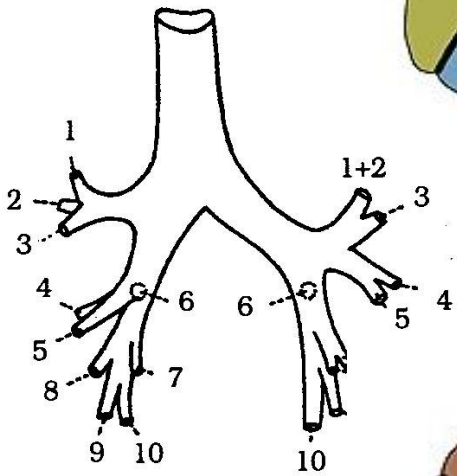
pulmo sinister

plicní segmenty



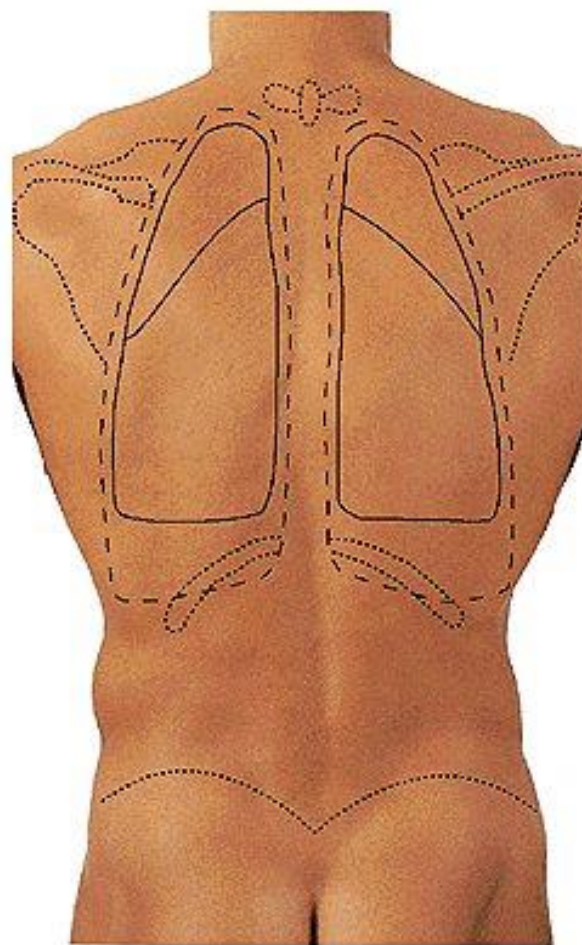
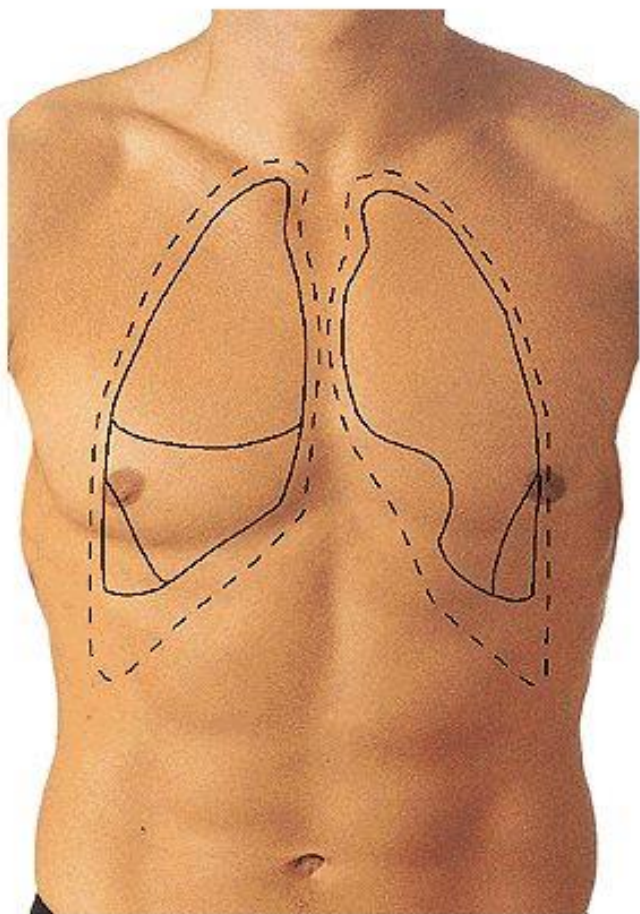
pravá
plíce

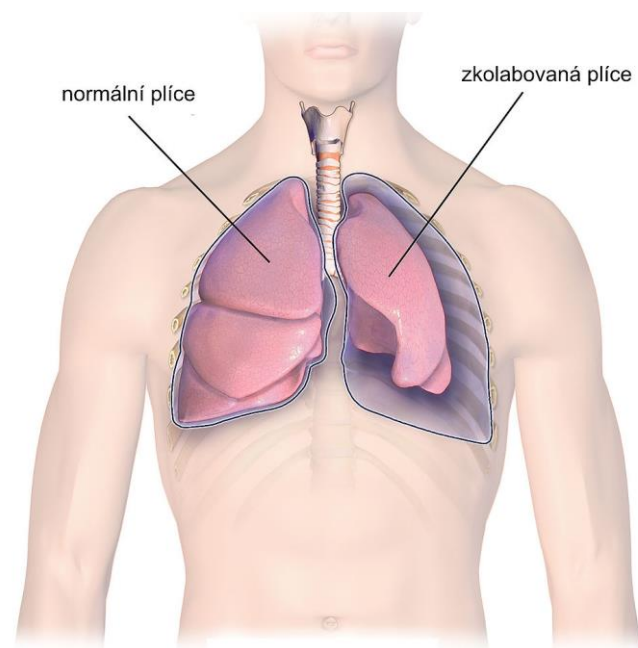
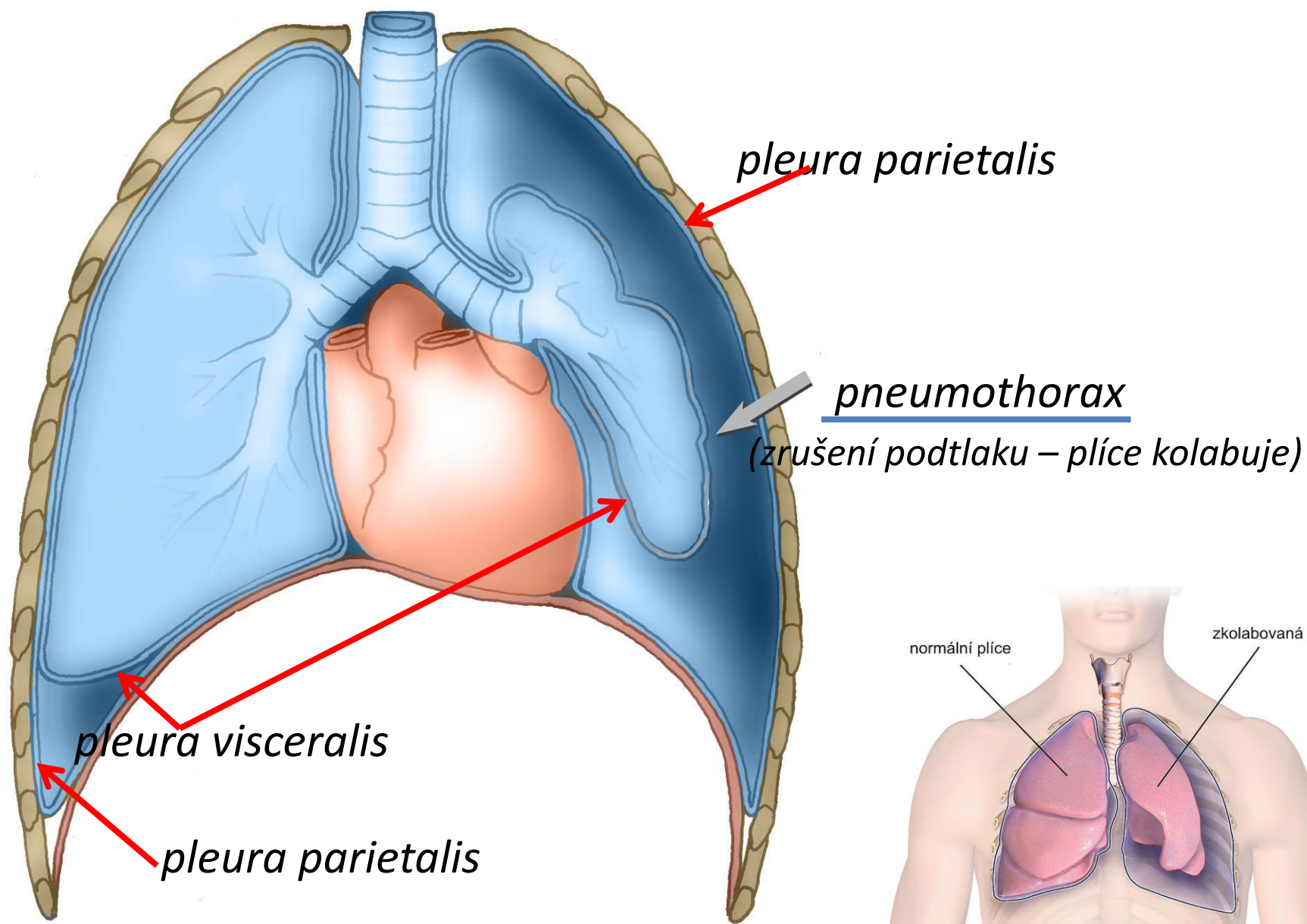
levá
plíce

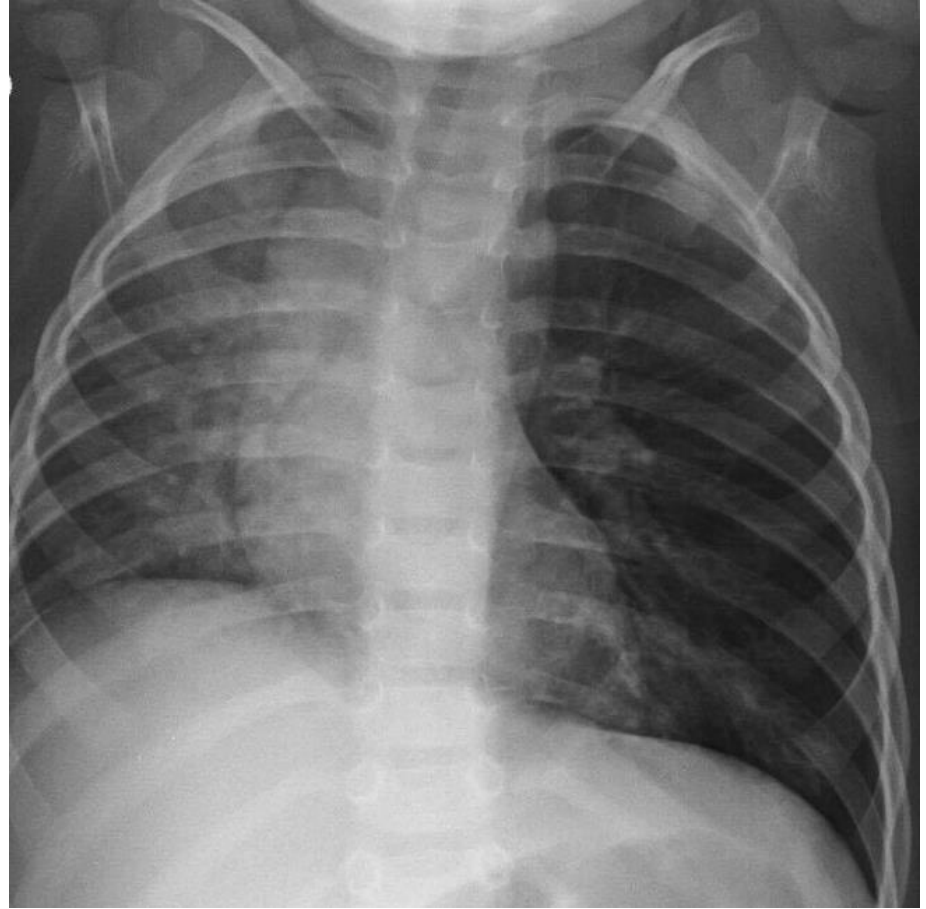


Hranice plic a pleury

plíce – k ní přirostlá poplicnice = *pleura visceralis* – plná čára
pohrudnice = *pleura parietalis* – čárkovaně

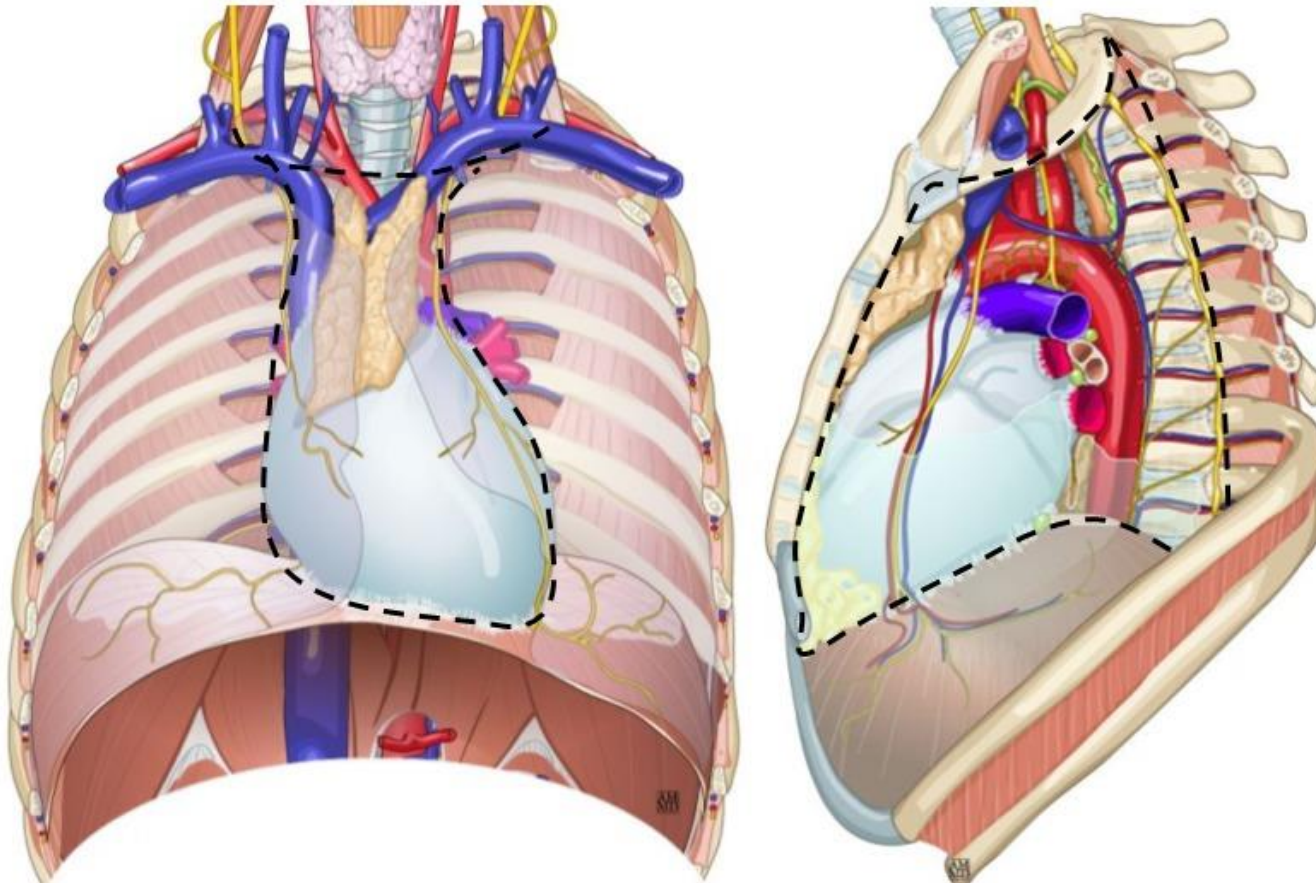






Mediastinum

mezihrudí



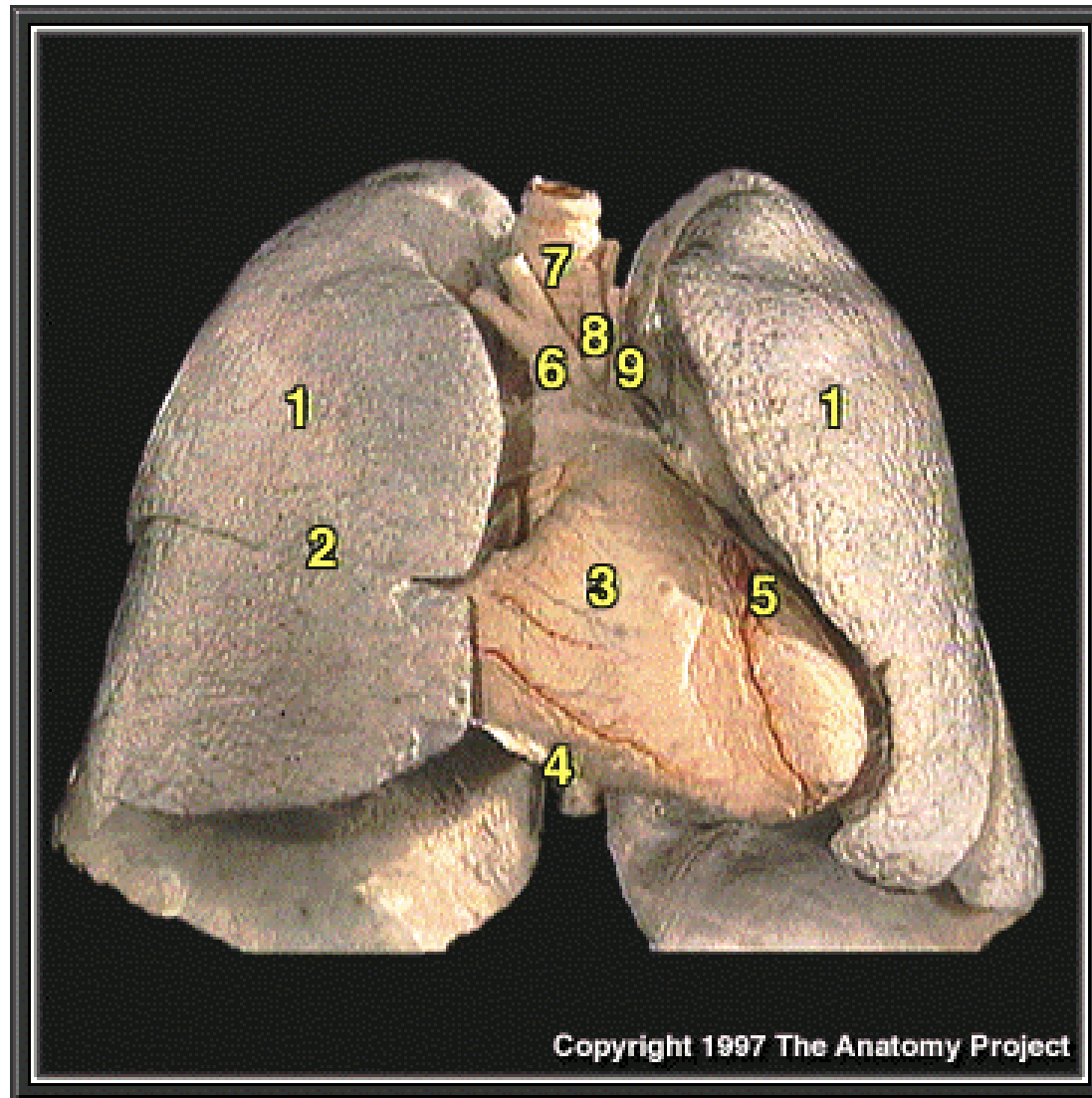
Orgány hrudníku – zepředu

1,2 - plíce

3 - srdce

7 - *trachea*

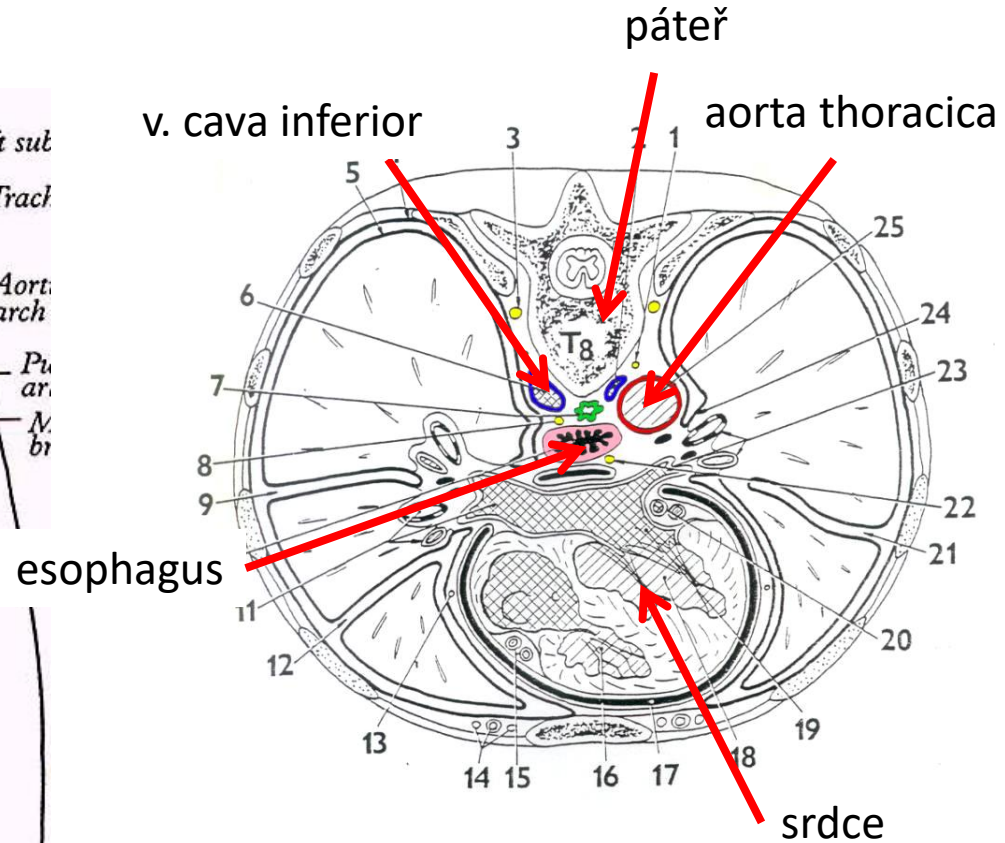
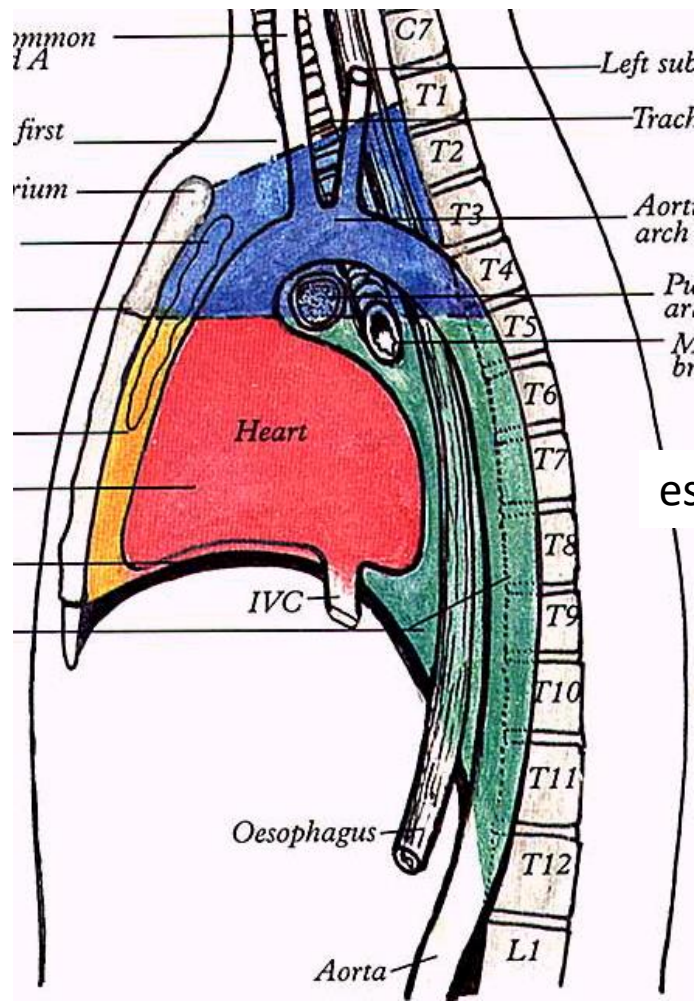
6,9 - velké cévy



Mediastinum – mezihrudí

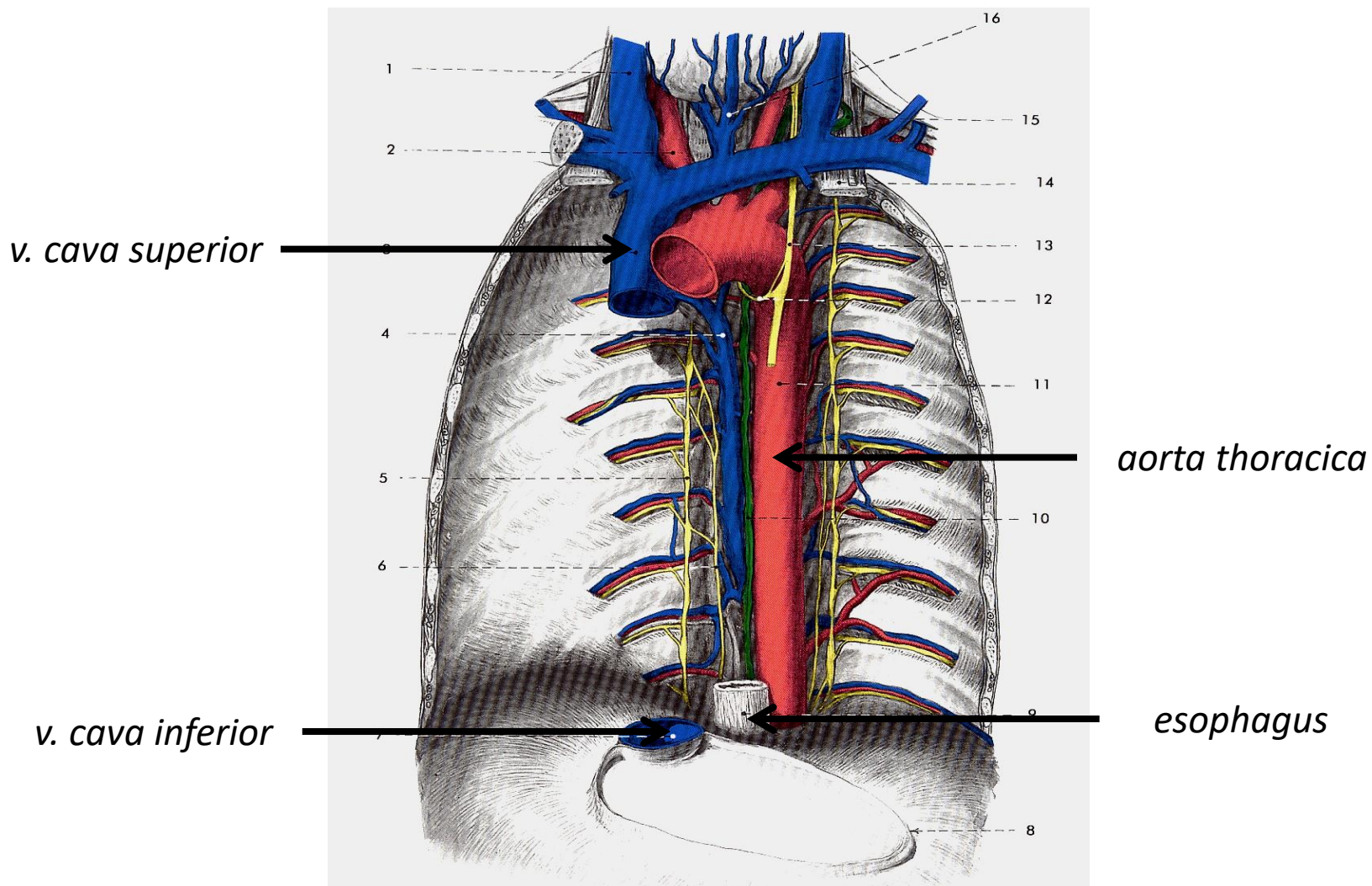
horní – modrá, přední – žlutá, střední – červená, zadní – zelená

Sagitální řez
schéma



Příčný řez hrudníkem

Útvary v zadním mediastinu



Obr. 15.1.14. Zadní mediastinum při pohledu zepředu po odstranění perikardu. 1 – v. jugularis interna, 2 – truncus brachiocephalicus, 3 – v. cava superior, 4 – v. azygos, 5 – truncus sympathicus, 6 – n. splanchnicus major, 7 – v. cava inferior, 8 – úpon perikardu na bránici, 9 – jícen, 10 – ductus thoracicus, 11 – aorta thoracica, 12 – n. laryngeus recurrens sinister, 13 – n. vagus sinister, 14 – m. scalenus anterior et n. phrenicus, 15 – vústění ductus thoracicus do angulus venosus sinister, 16 – plexus thyroideus impar