

patologie dýchacího systému

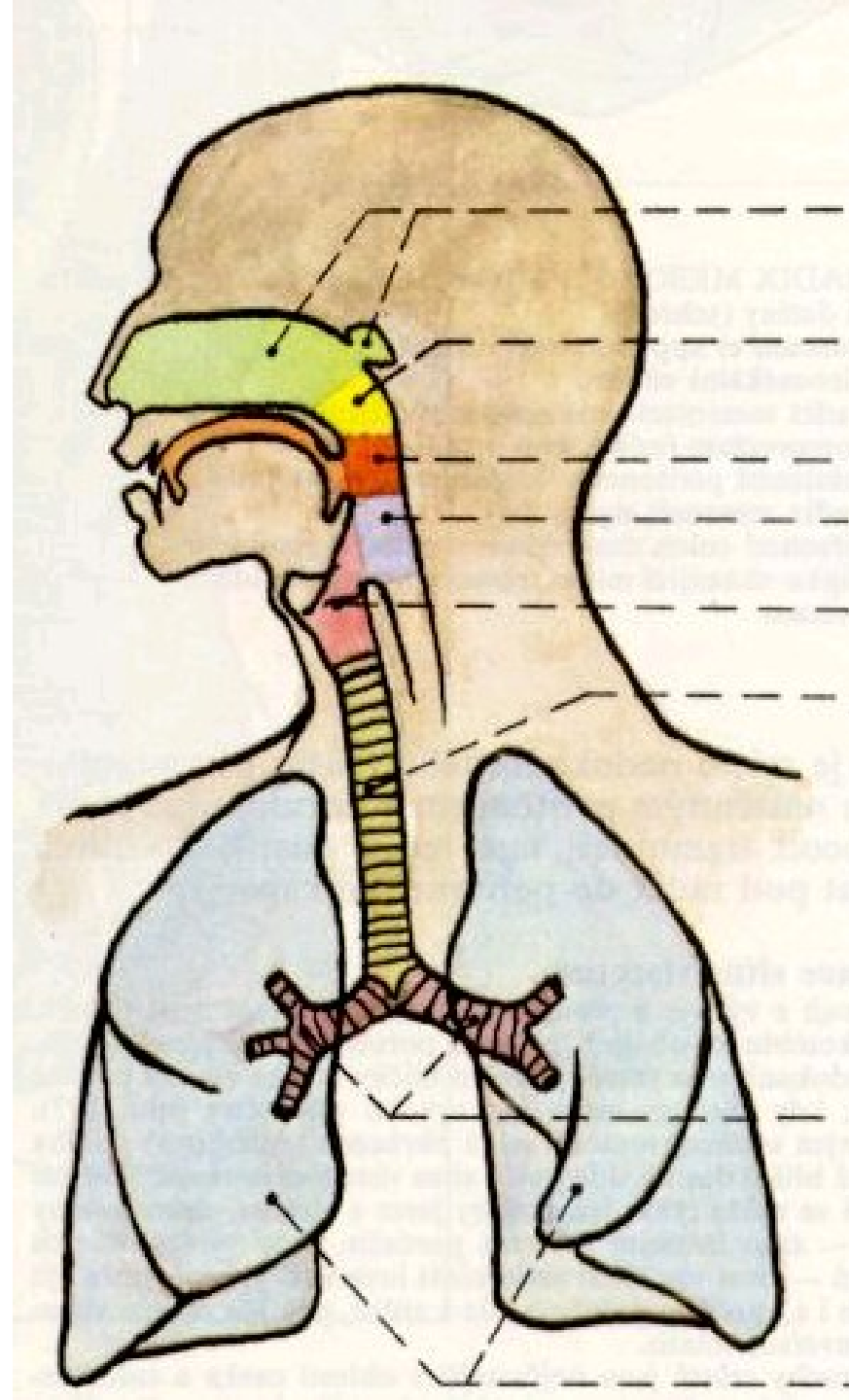
system dýchací

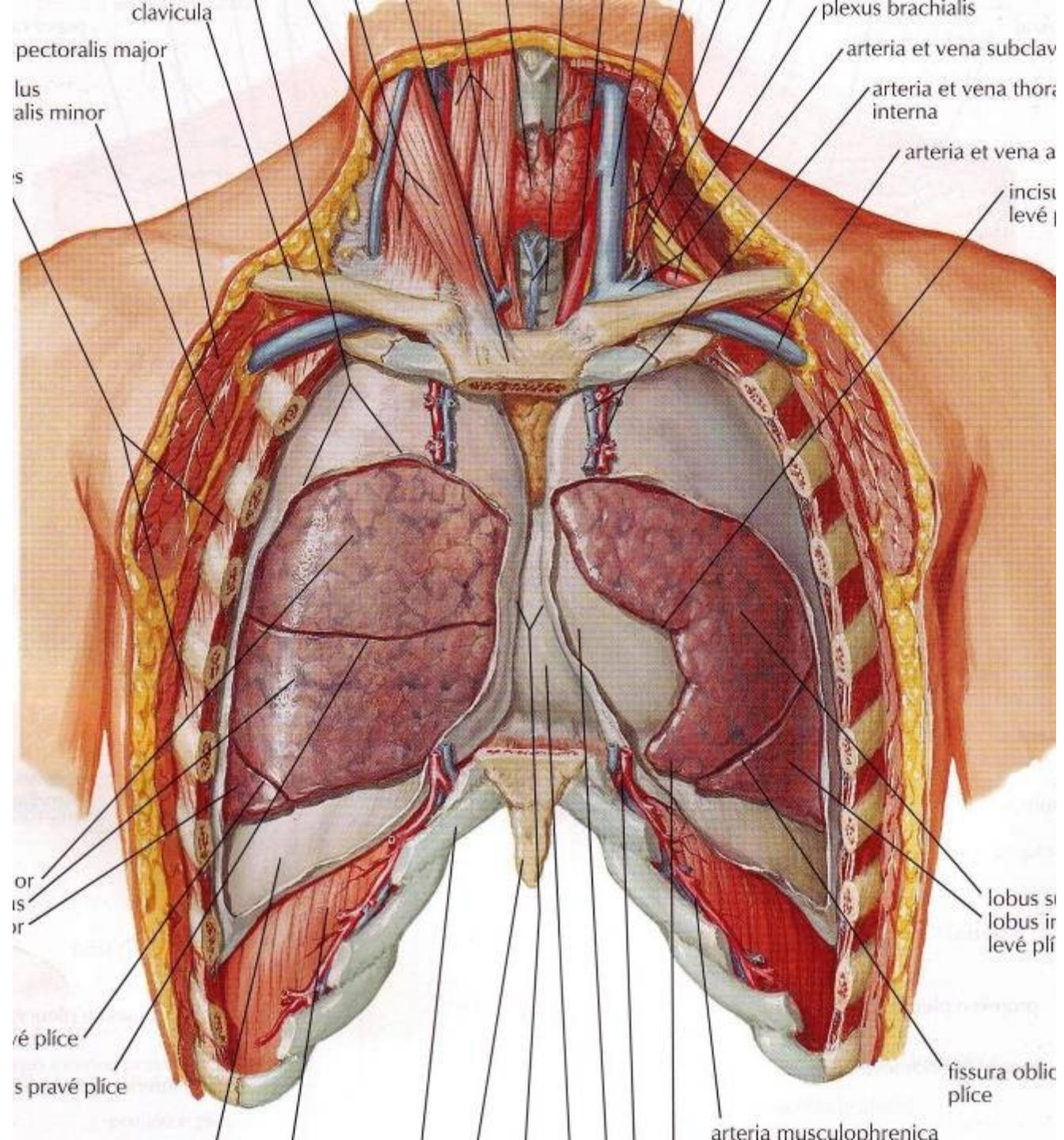
- horní cesty dýchací

dutina nosní (cavitas nasi)
nasopharynx

- dolní cesty dýchací

hrtan (larynx)
průdušnice (trachea)
průdušky (bronchi)
plíce (pulmones)





pectoralis major
pectoralis minor

clavicula

plexus brachialis
arteria et vena subclavia
arteria et vena thoracica interna

arteria et vena a

incisus levissimus

lobus superior
lobus inferior

lobus superior
lobus inferior

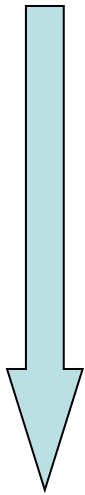
lobus superior
lobus inferior

fissura obliqua

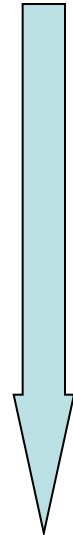
arteria musculophrenica

- hypokapnie x hyperkapnie
- hypoxie
- tachypnoe x bradypnoe
- ortopnoe x dyspnoe
- asfyxie x apnoe
- hypoventilace x hyperventilace
- kolaps plíce x atelektáza
- emfyzém
- bronchiektázie
- asthma bronchiale

acido-bazická rovnováha



ledviny



příce



P
F
l
a
b

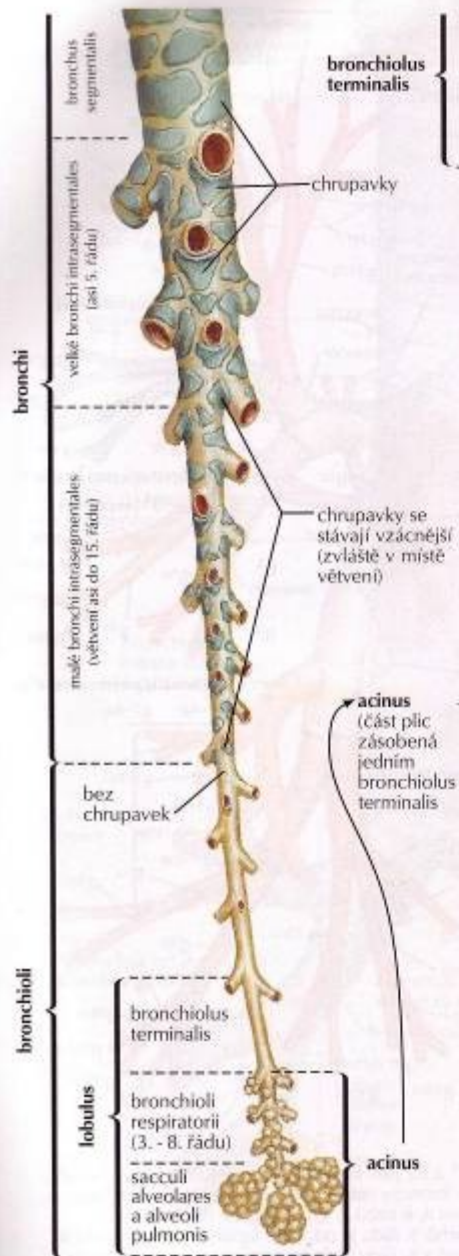
Illustration of the human lungs showing internal branching structures.

záněty

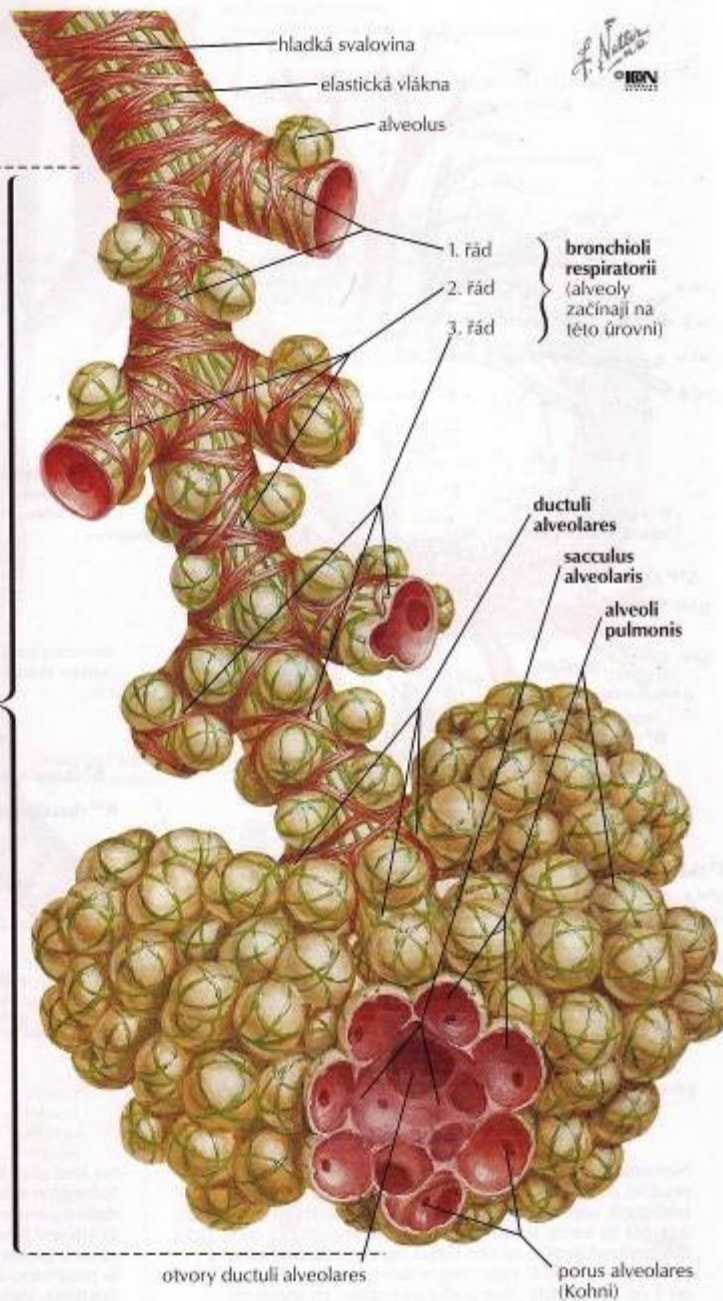
- rhinitis (viry, bakterie, alergie)
- sinusitis
- pharyngitis
- laryngitis
- epiglottitis (Haemophilus influenzae)
- tracheitis
- bronchitis (akutní x chronická)
- bronchopneumonie x pneumonie

- etiologie

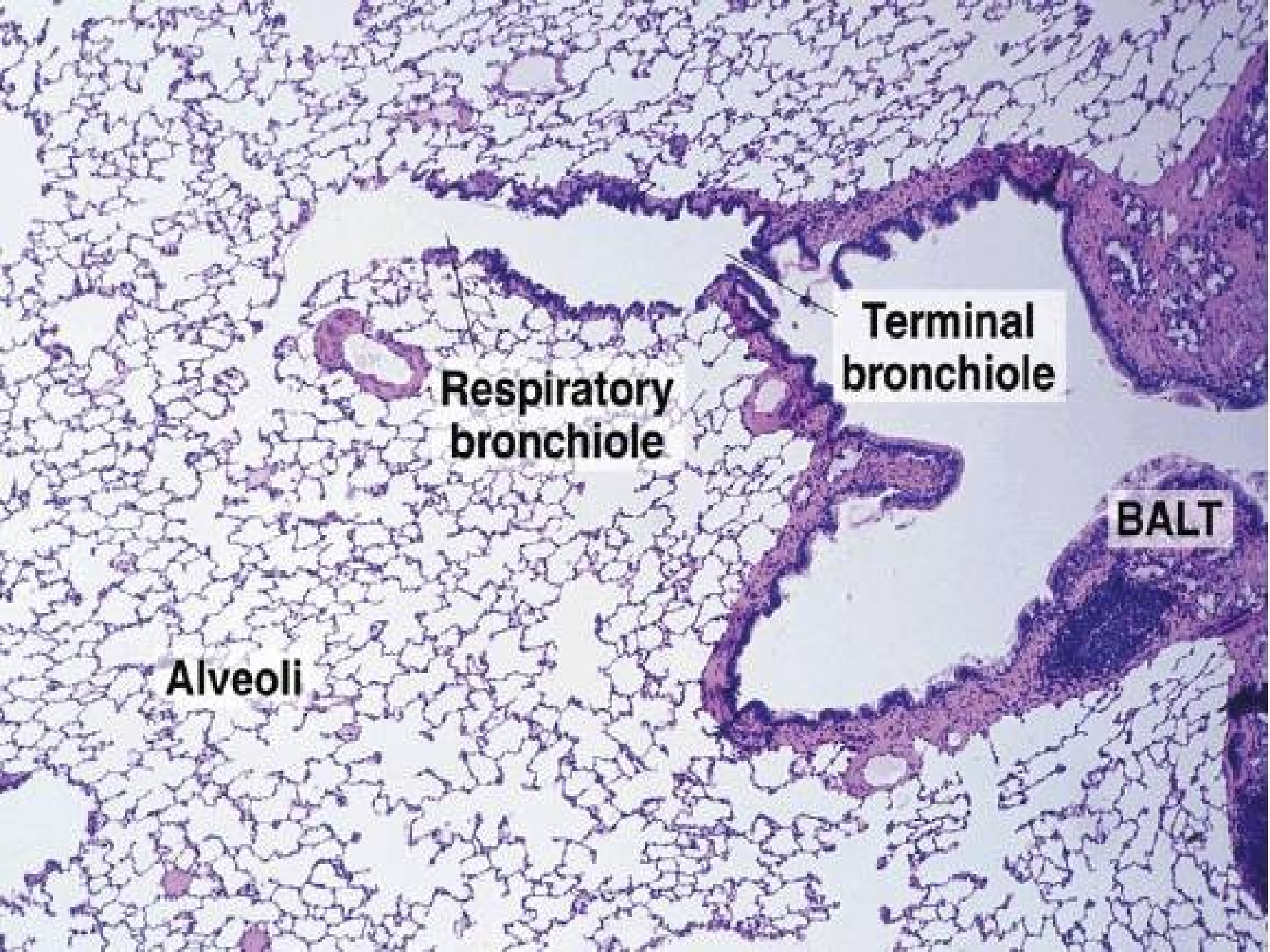
respirační viry, bakterie, plísně, chemické látky, alergeny



rozdělení intrapulmonárních bronchiolů



struktura intrapulmonárního větvení dýchacích cest



Alveoli

**Respiratory
bronchiole**

**Terminal
bronchiole**

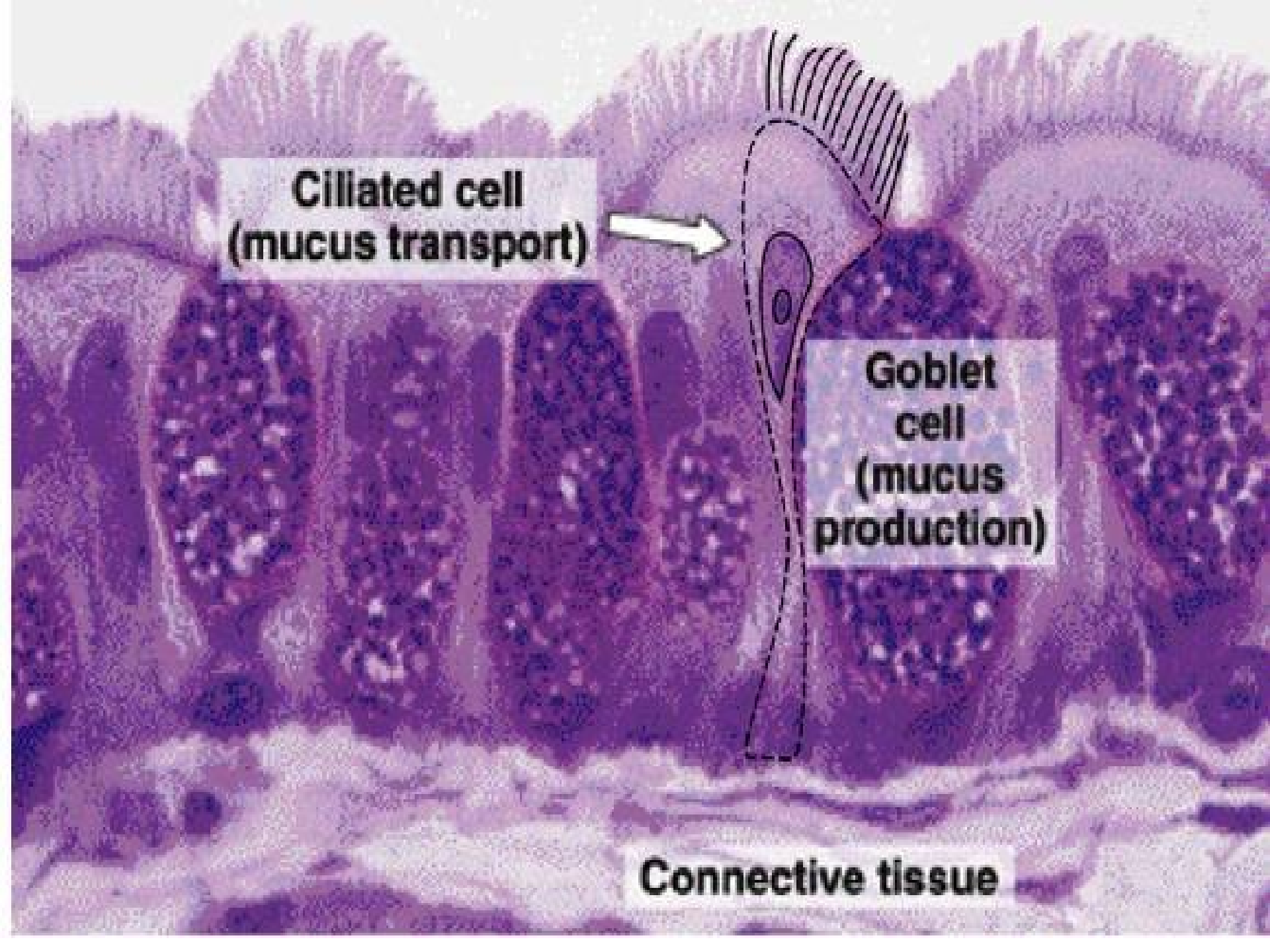
BALT

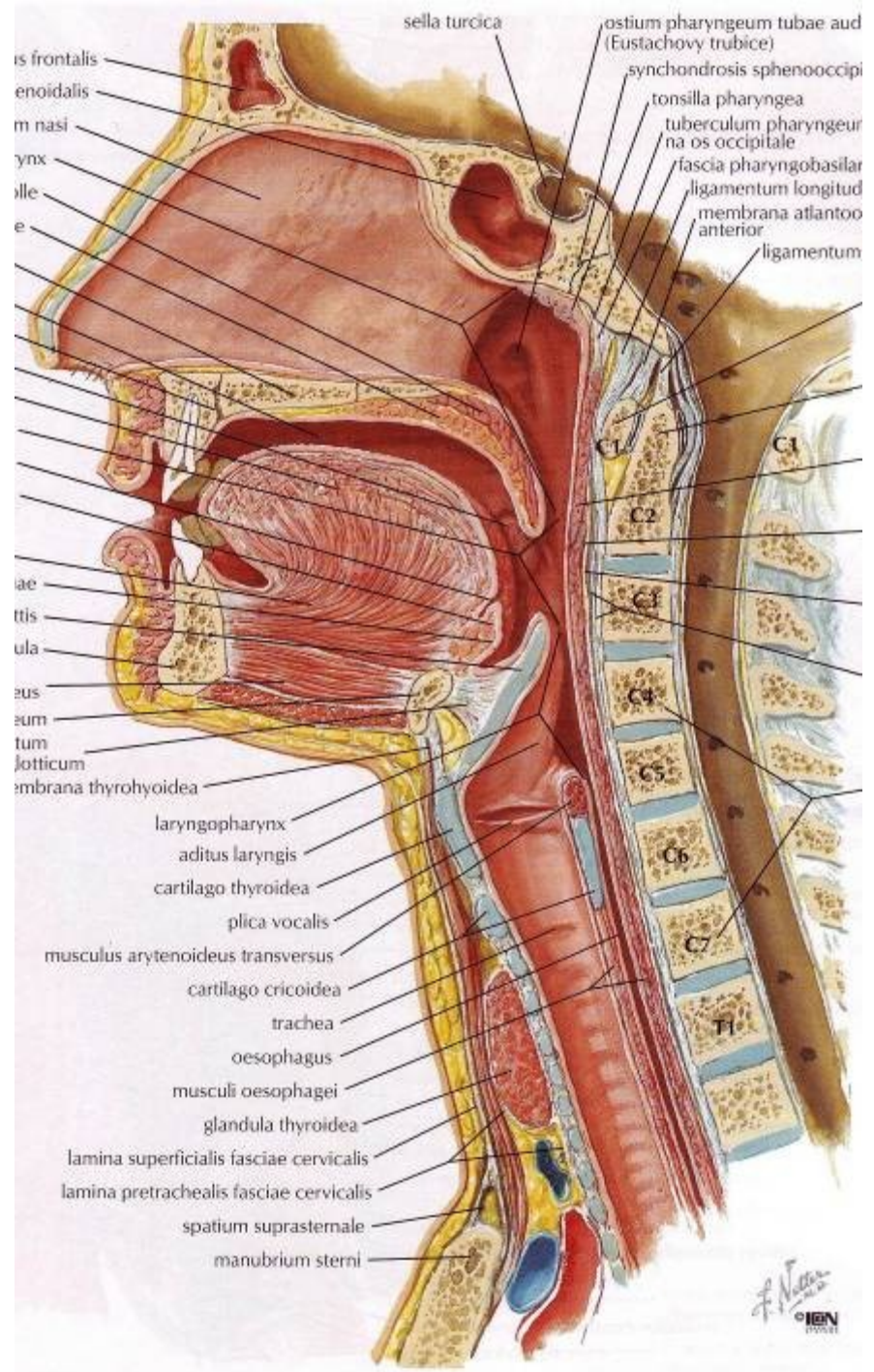
**Ciliated cell
(mucus transport)**

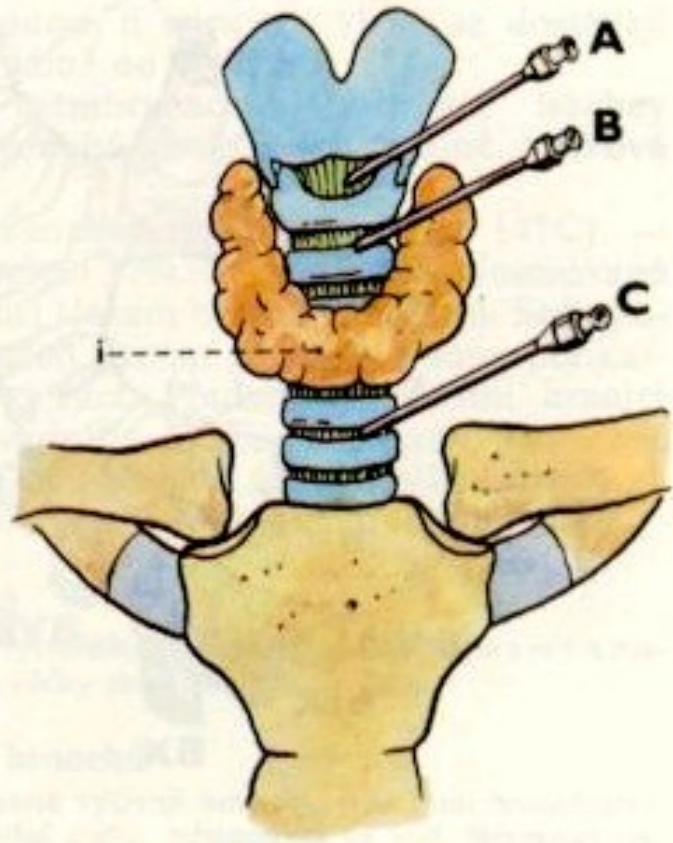
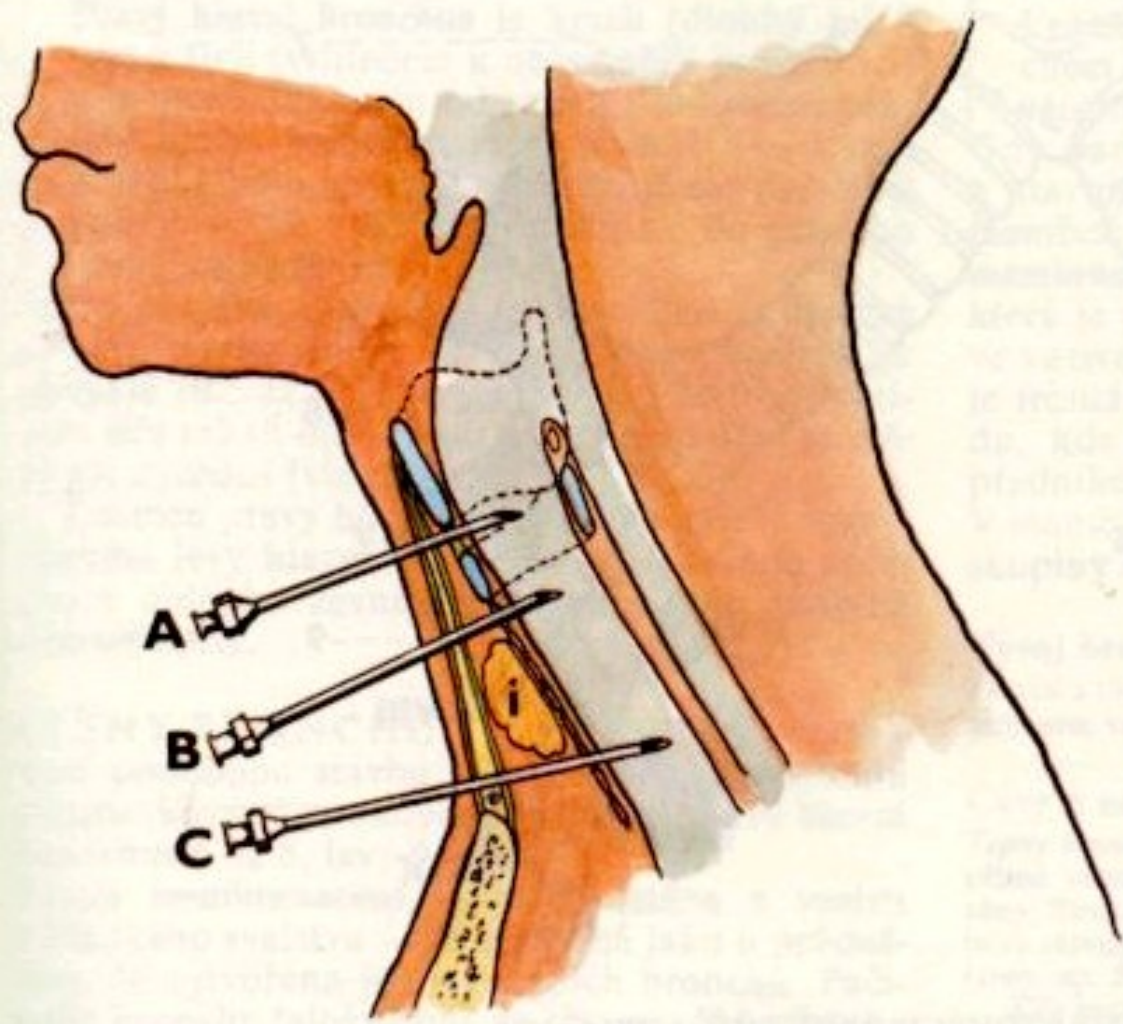


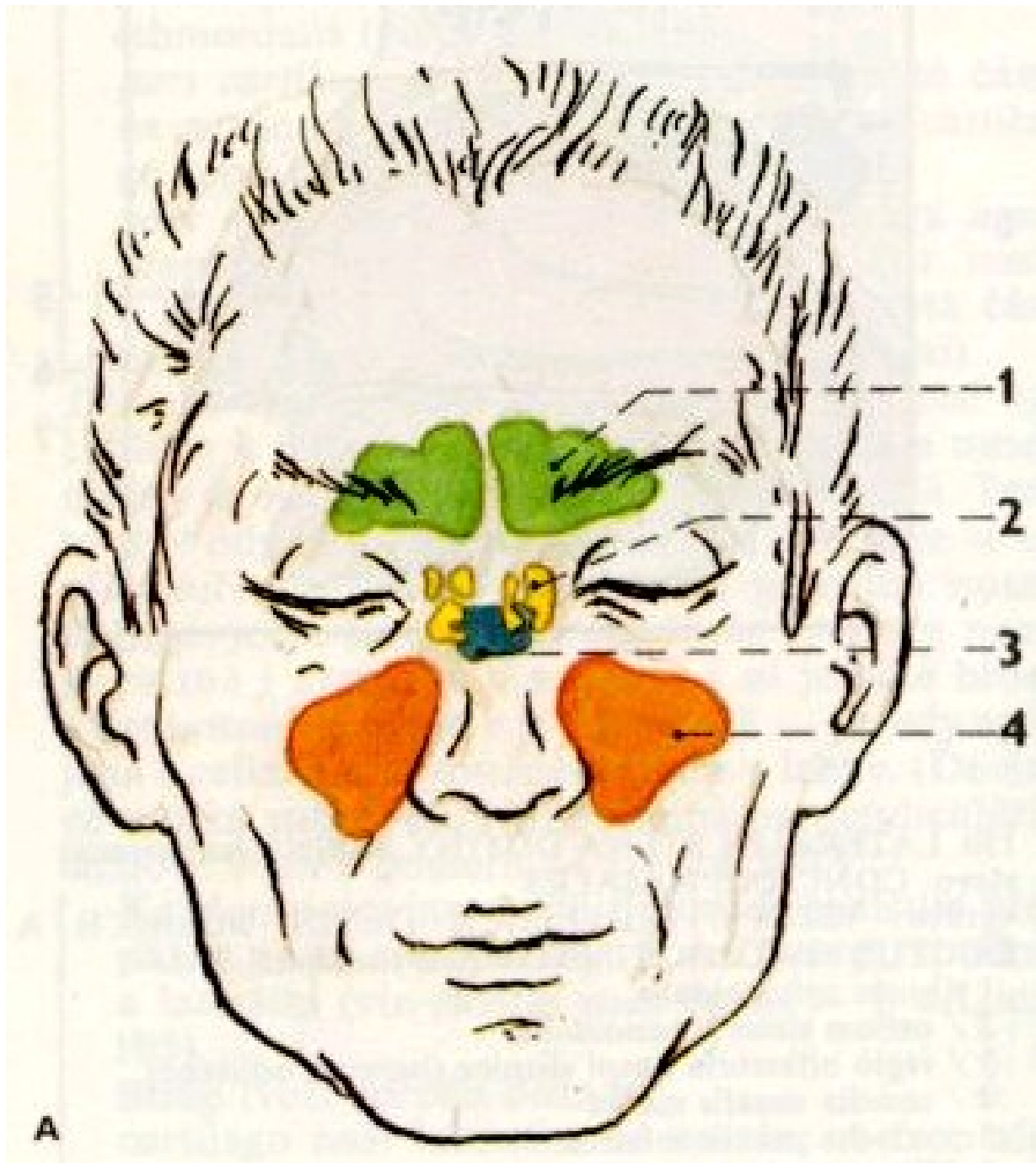
**Goblet
cell
(mucus
production)**

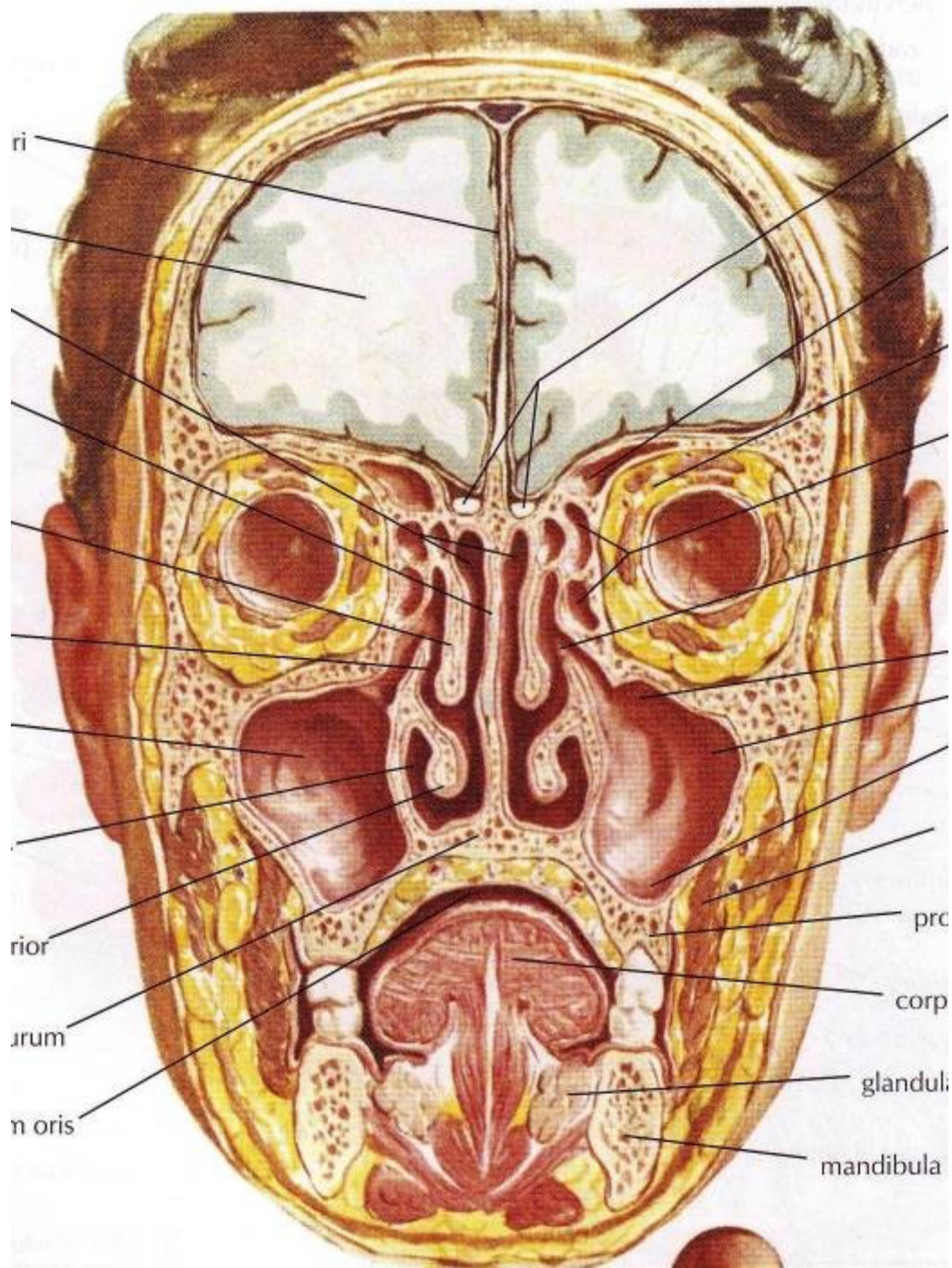
Connective tissue





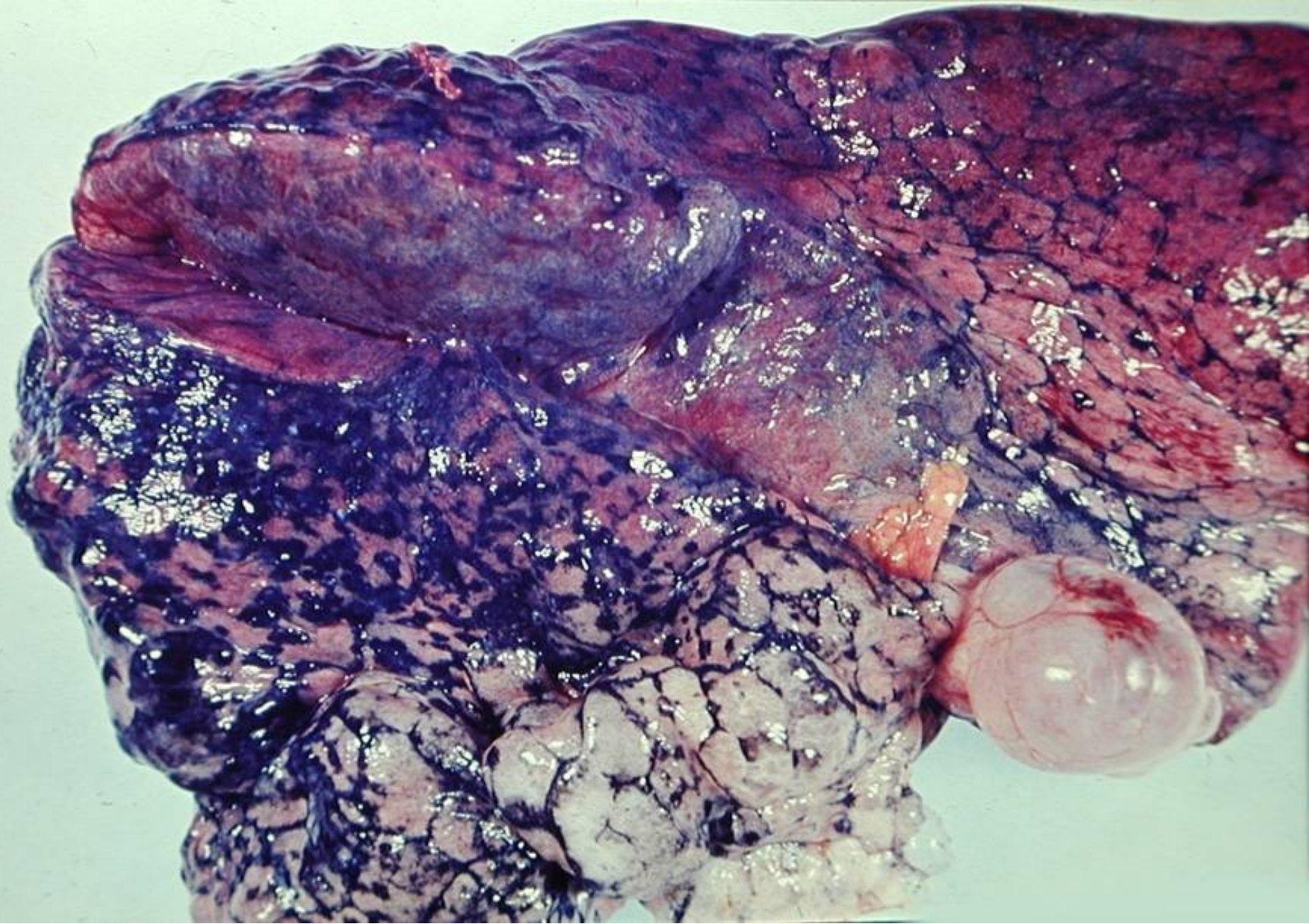


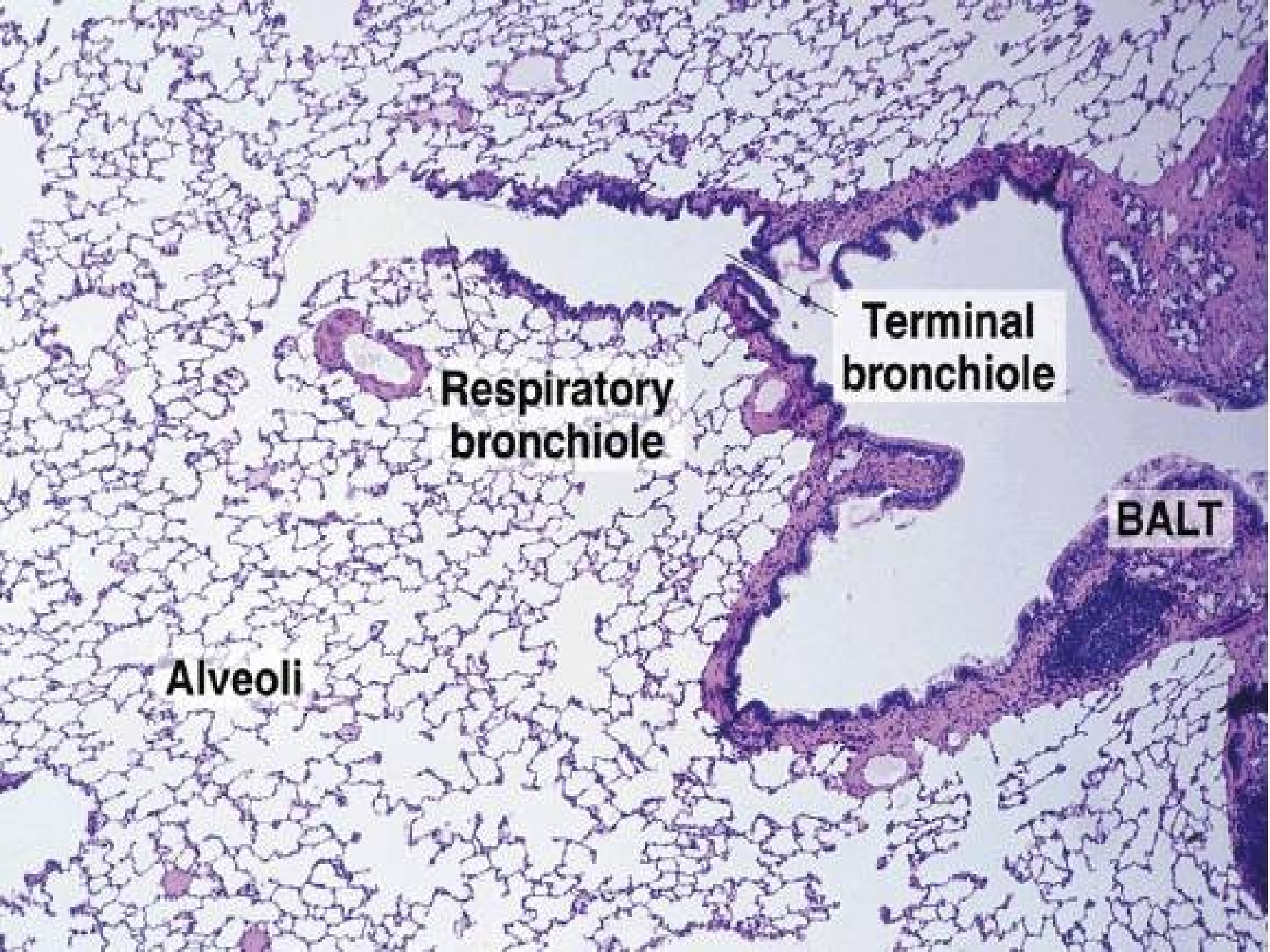




chronická bronchitida

- chronický zánět bronchů spojený s kašlem trvající min. 3 měsíce v roce
- komplikace: emfyzém plic, plicní hypertenze, plicní srdce
- CHOPN





Alveoli

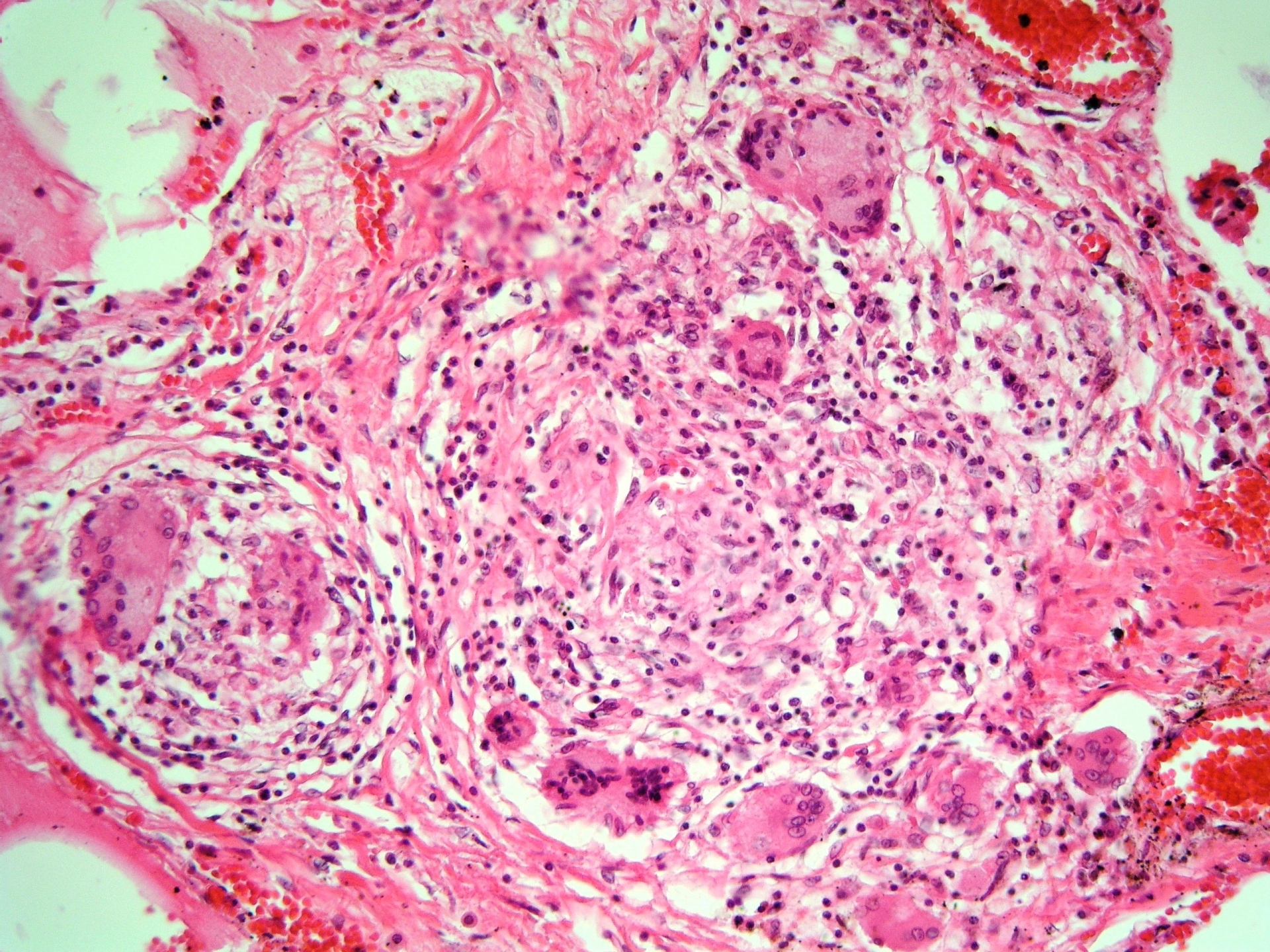
**Respiratory
bronchiole**

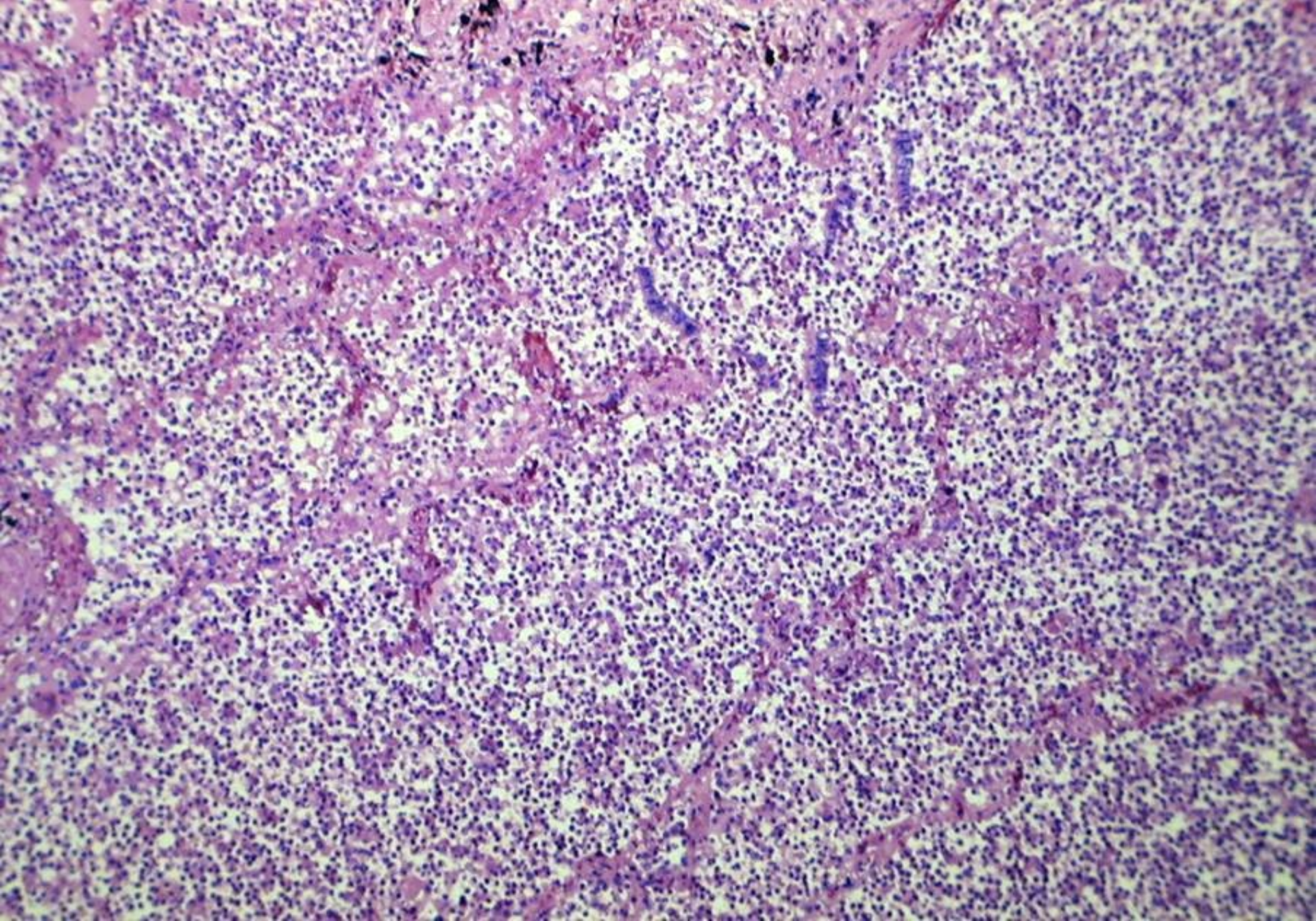
**Terminal
bronchiole**

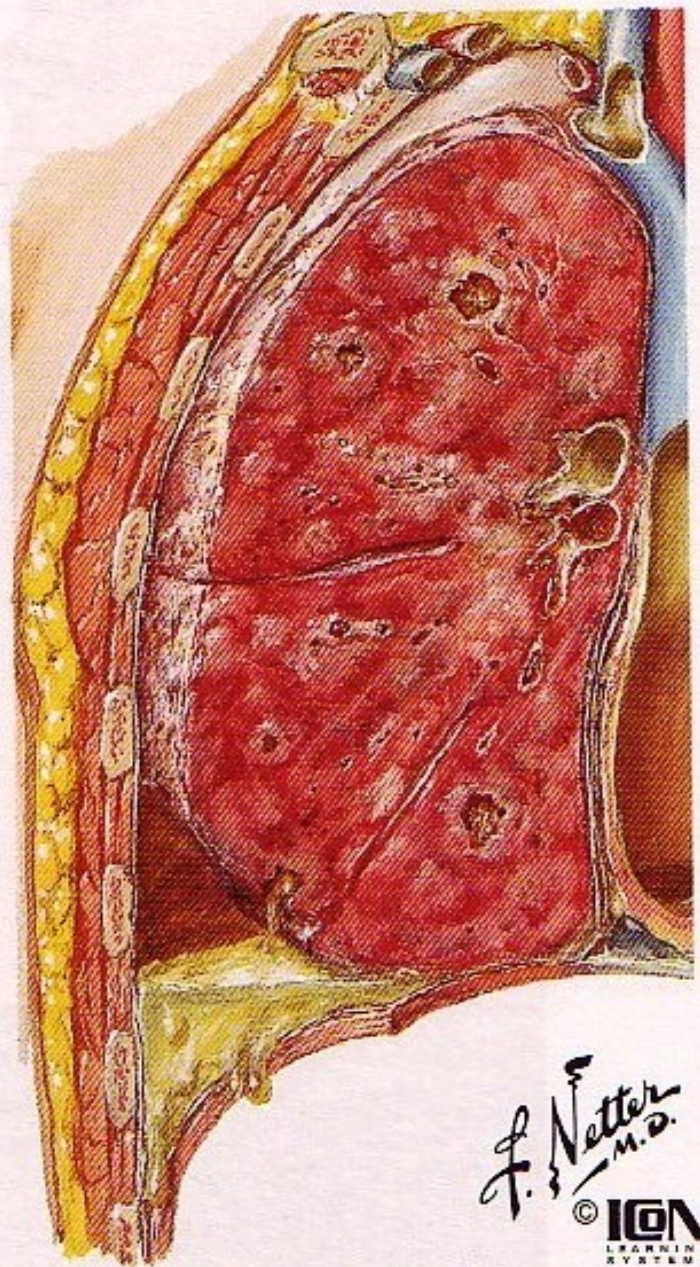
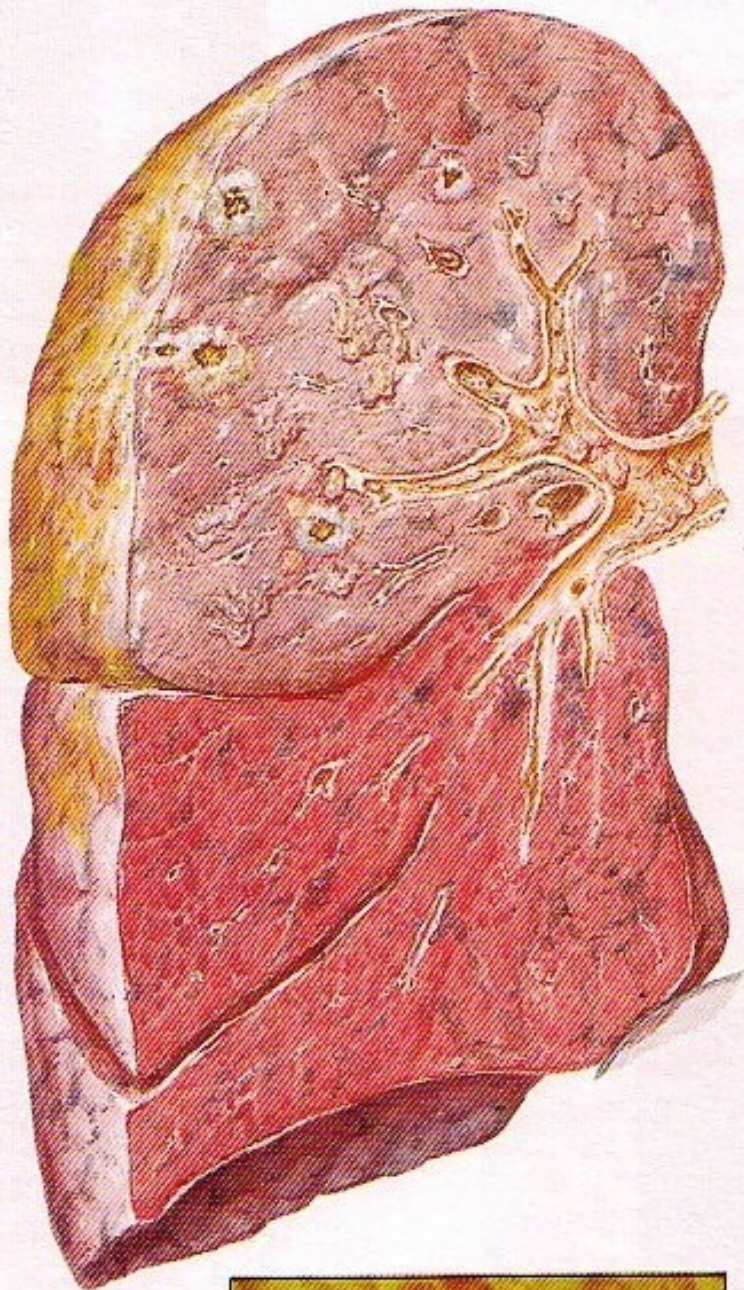
BALT

záněty plic

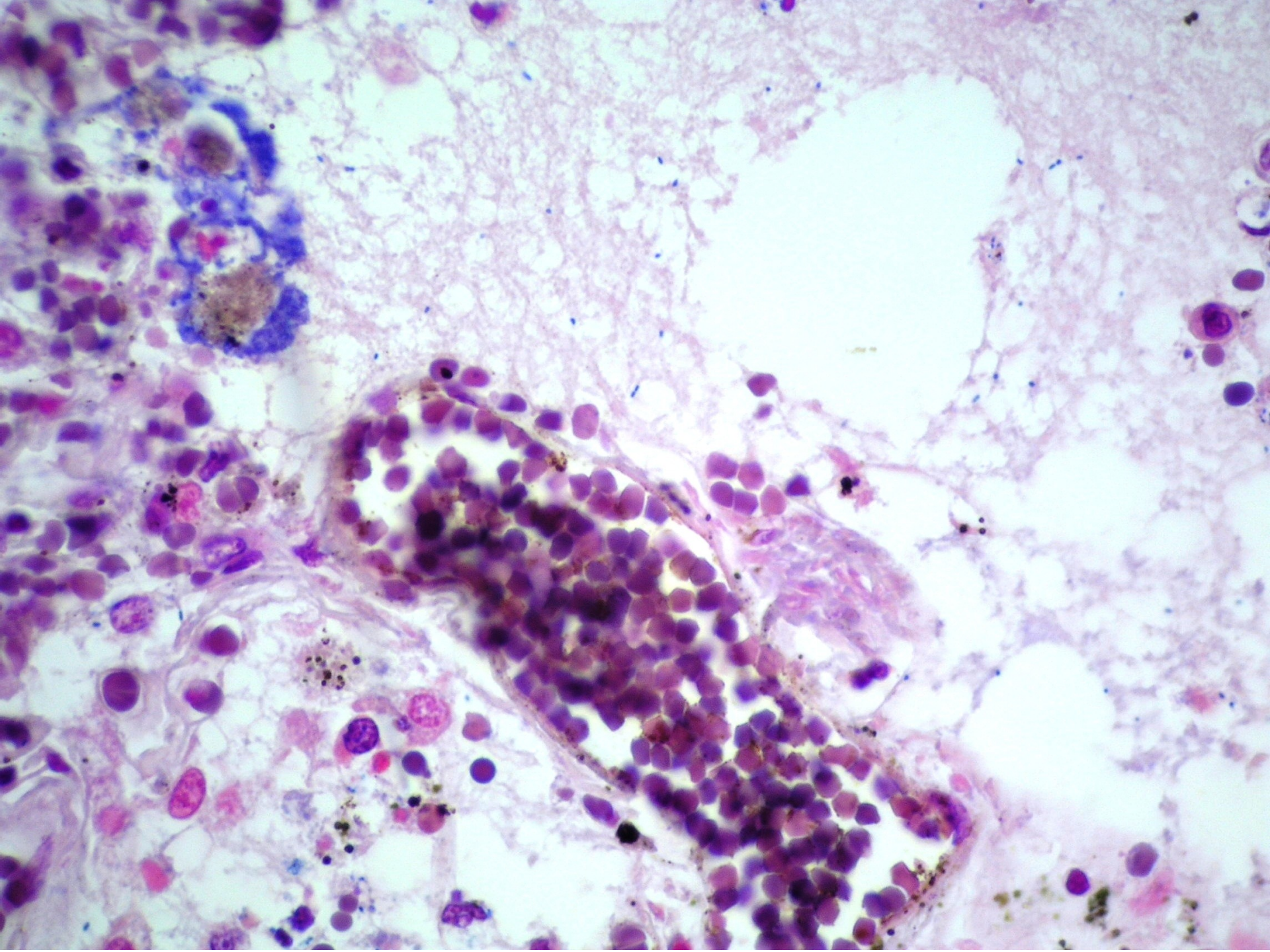
- dle rozsahu: lobární x alární
- dle etiologie: virové, bakteriální...
- specifické a nespecifické záněty
- povrchové a hluboké (intersticiální)
- atypická pneumonie, hypostatická pneumonie

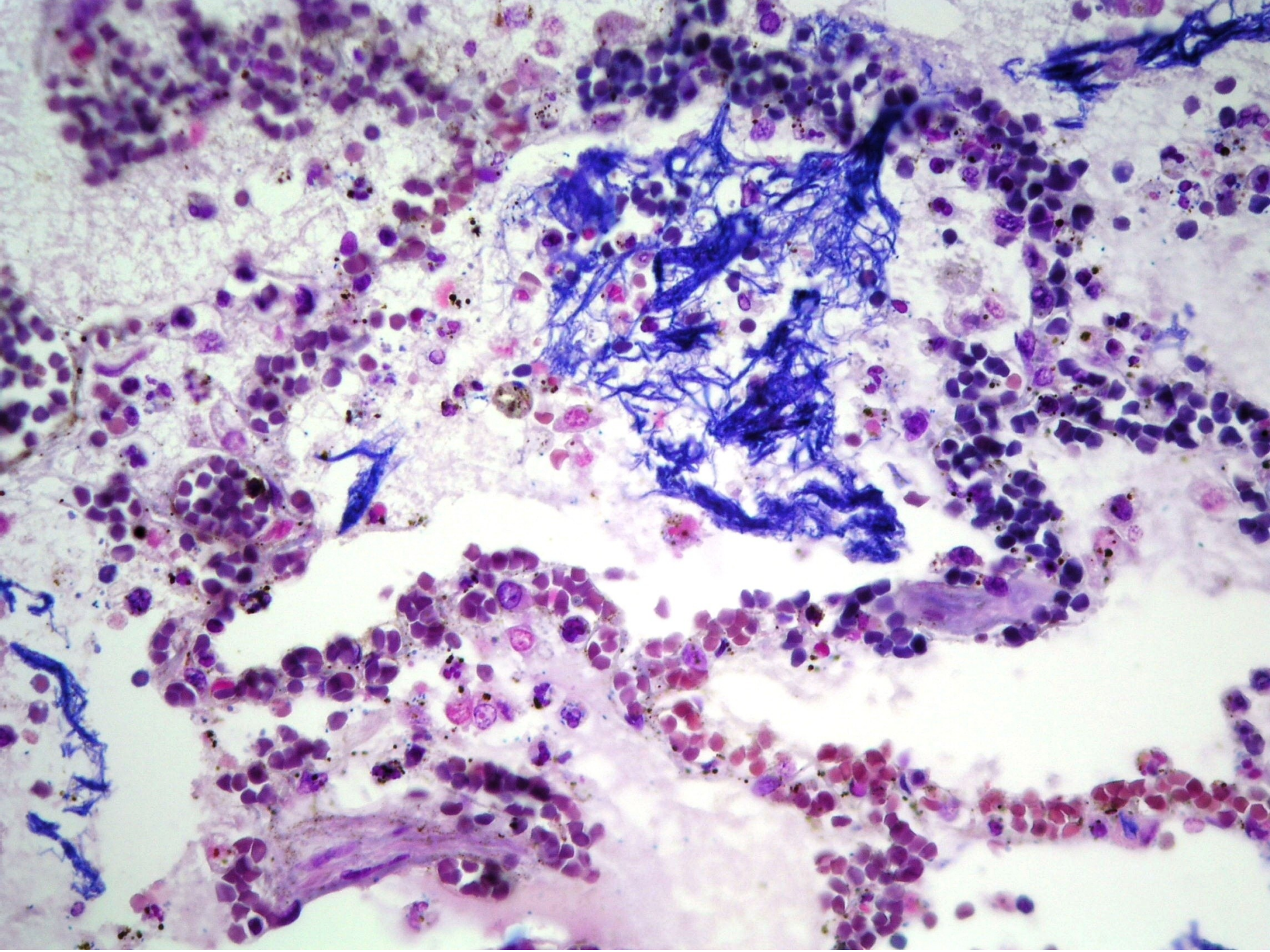






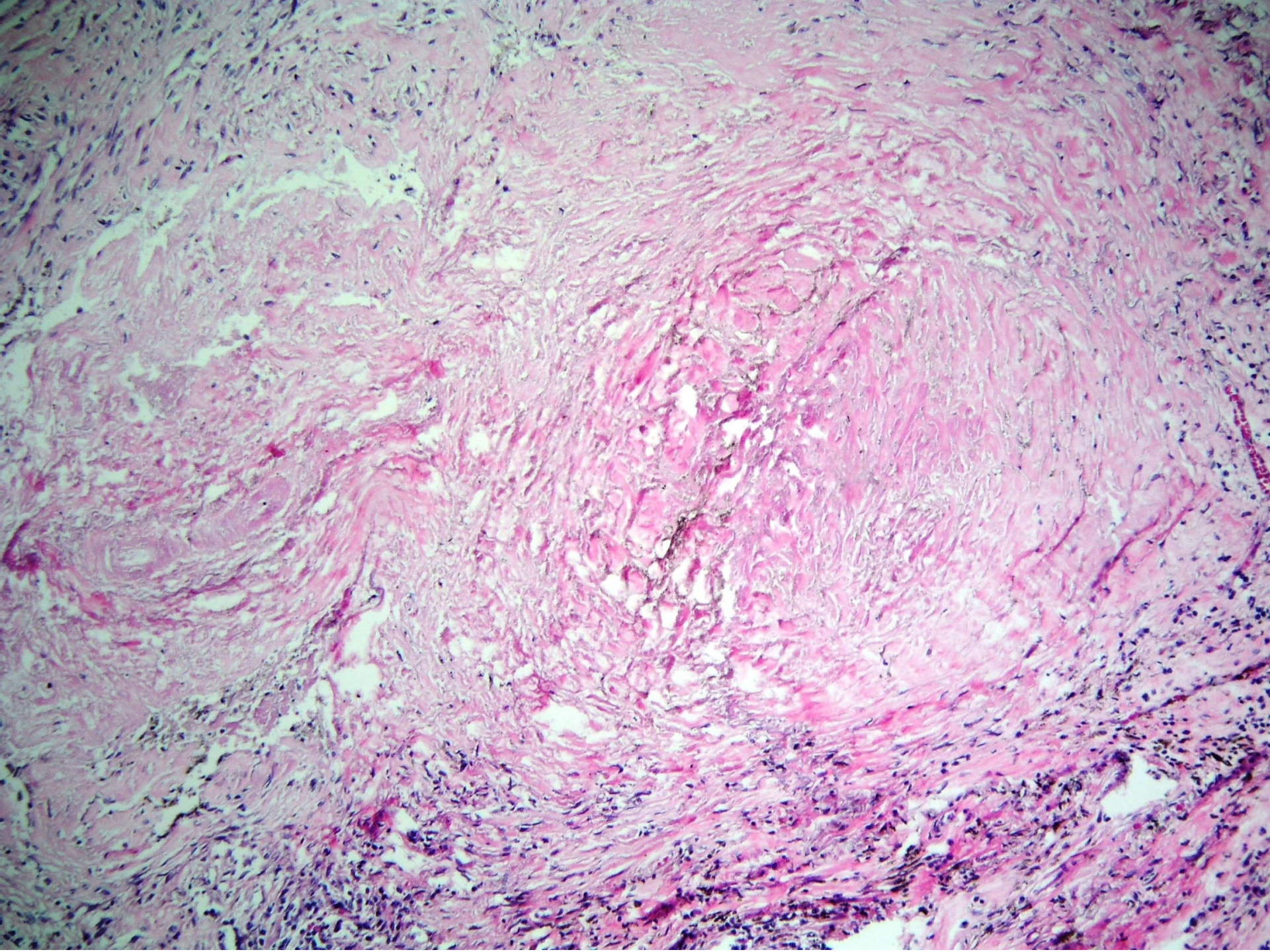
F. Netter
M.D.
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LEARNING
SYSTEMS





pneumokoniózy

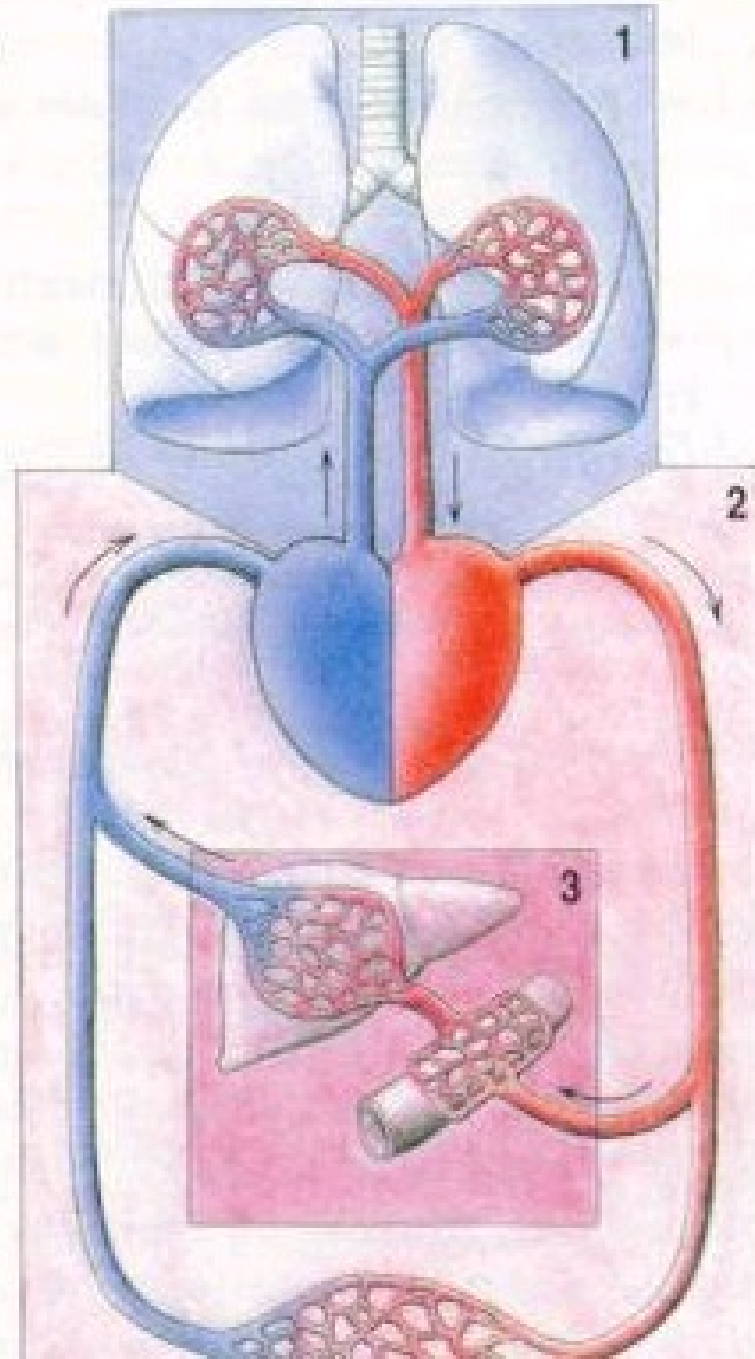
- nemoci plic způsobené inhalací fibrogenních anorganických prachů
- azbest, křemenný prach, méně železo, barium
- uhlokopská pneumokonióza (antrakosilikóza)
- azbestóza
- silikóza

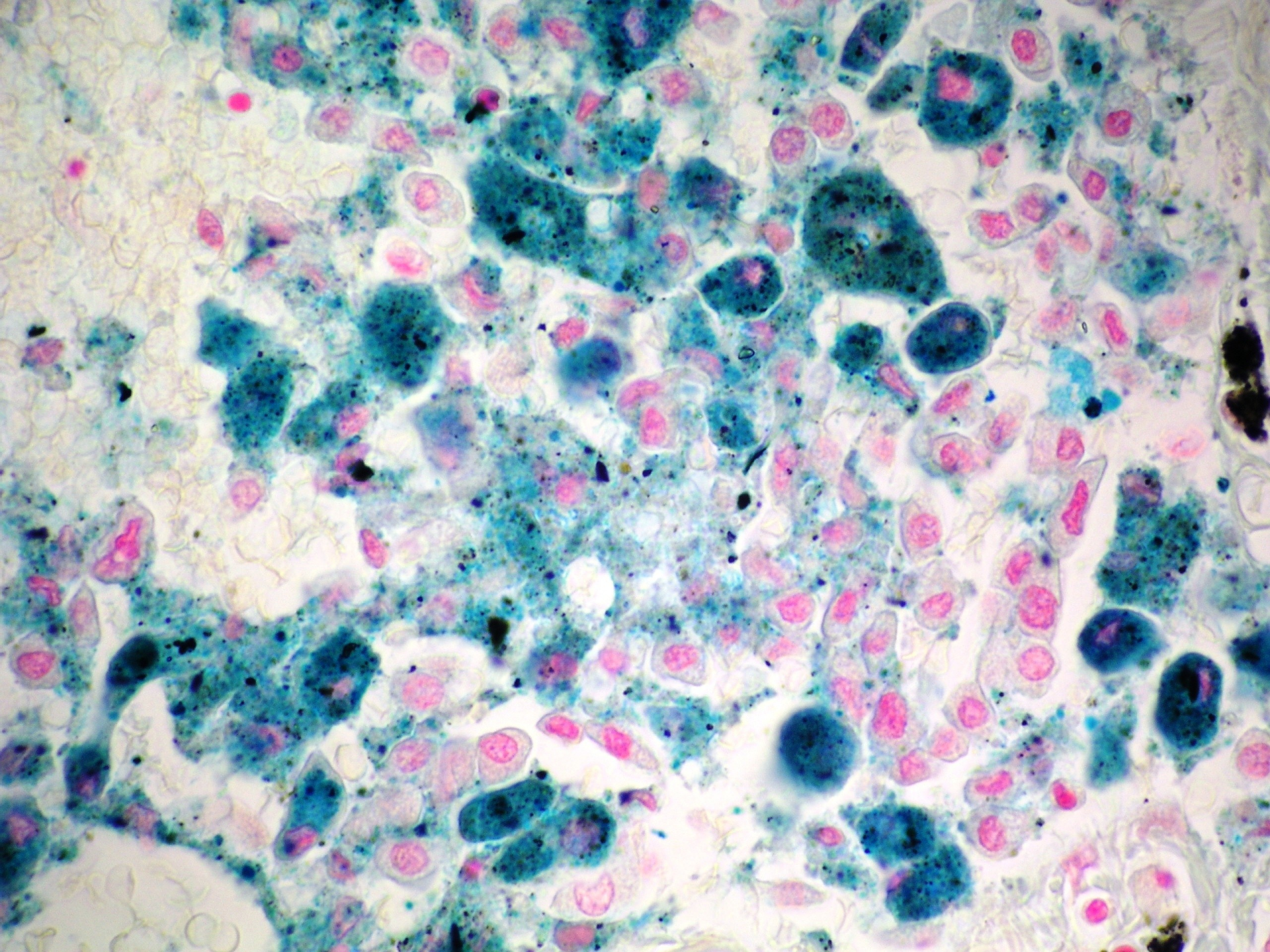


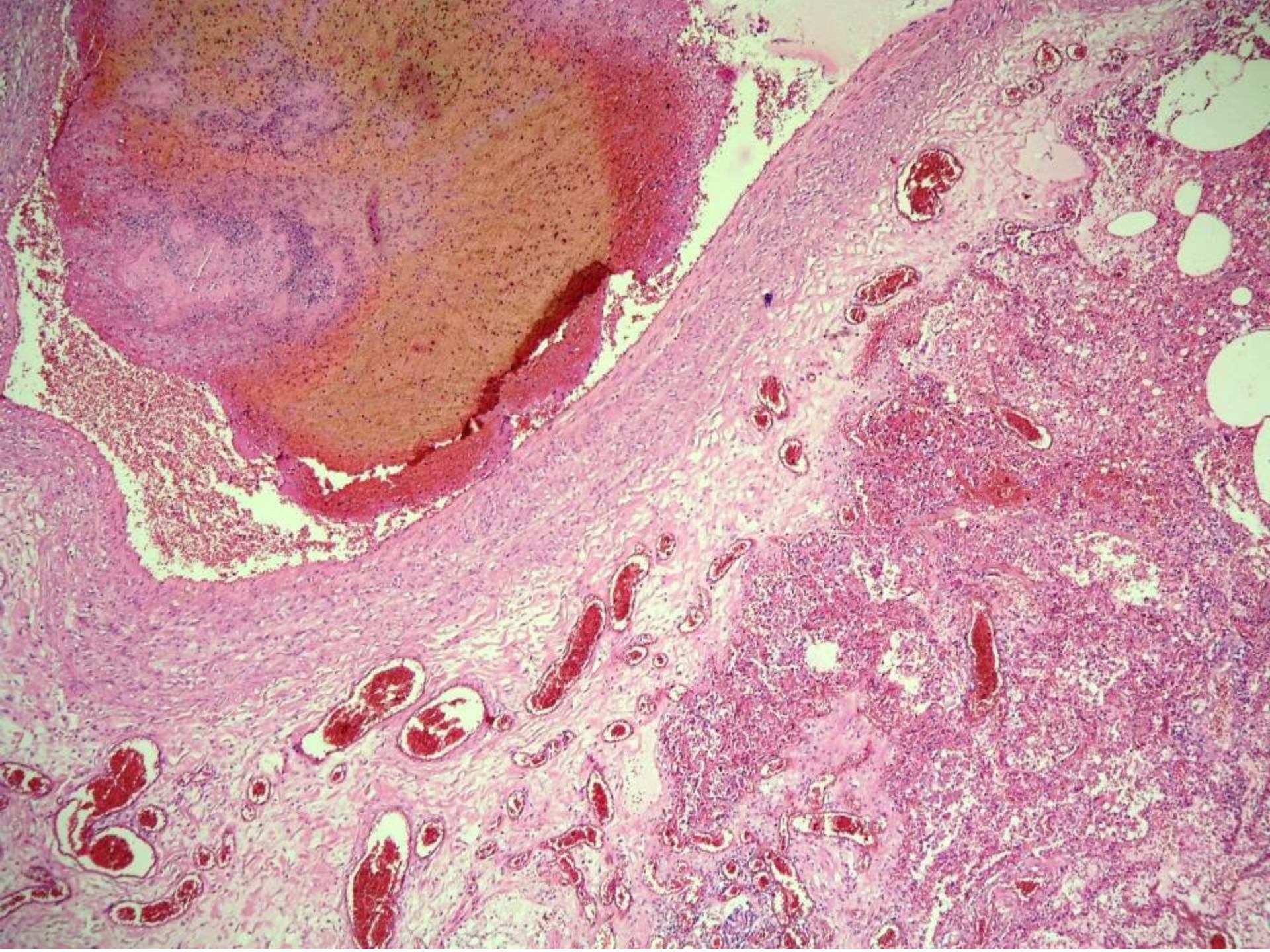
poruchy cirkulace v plících

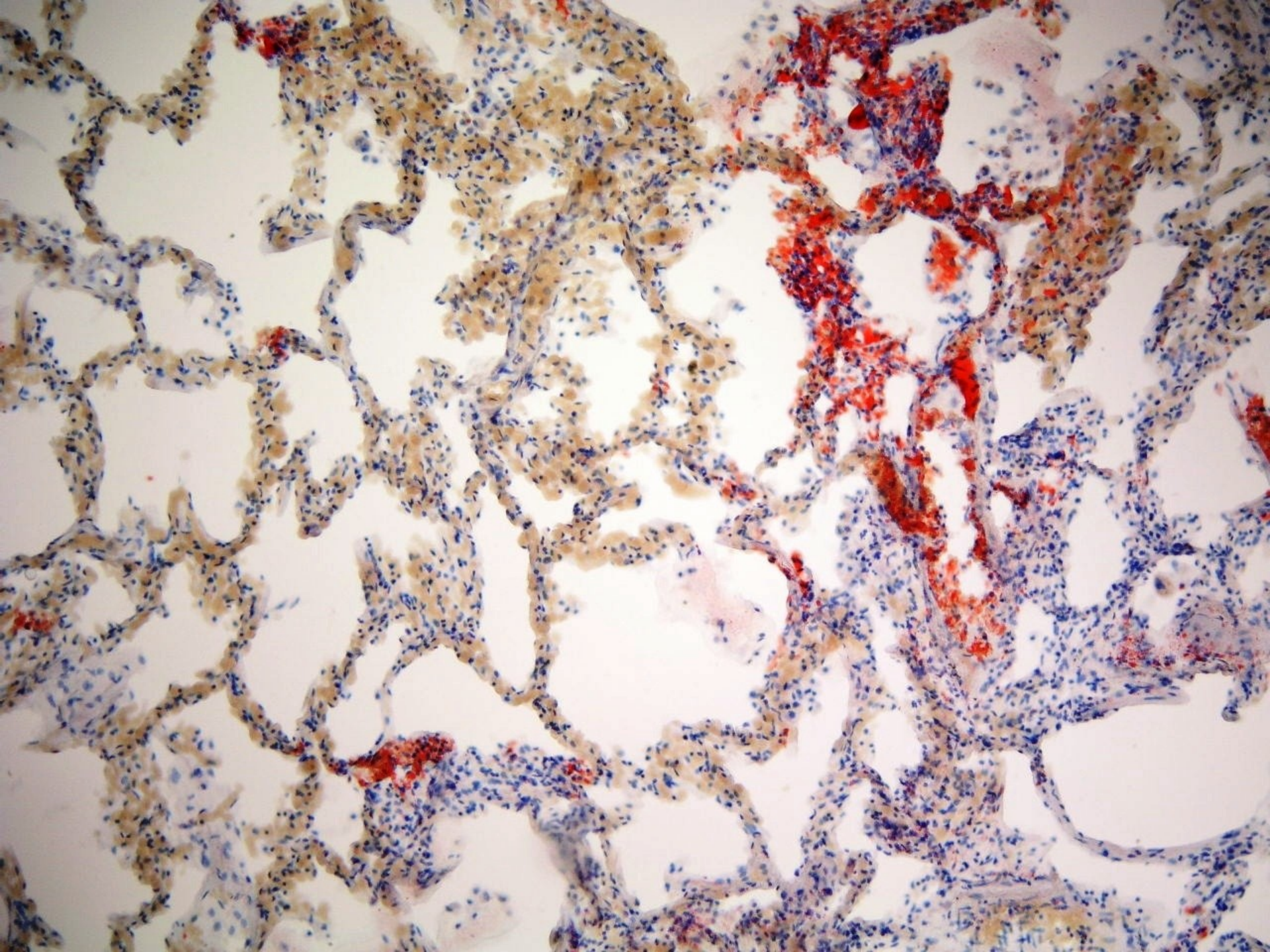
- trombembolie
- tuková embolie
- infarkt plic
- primární a sekundární plícní hypertenze
- otok plic
- hnědá indurace plic

B



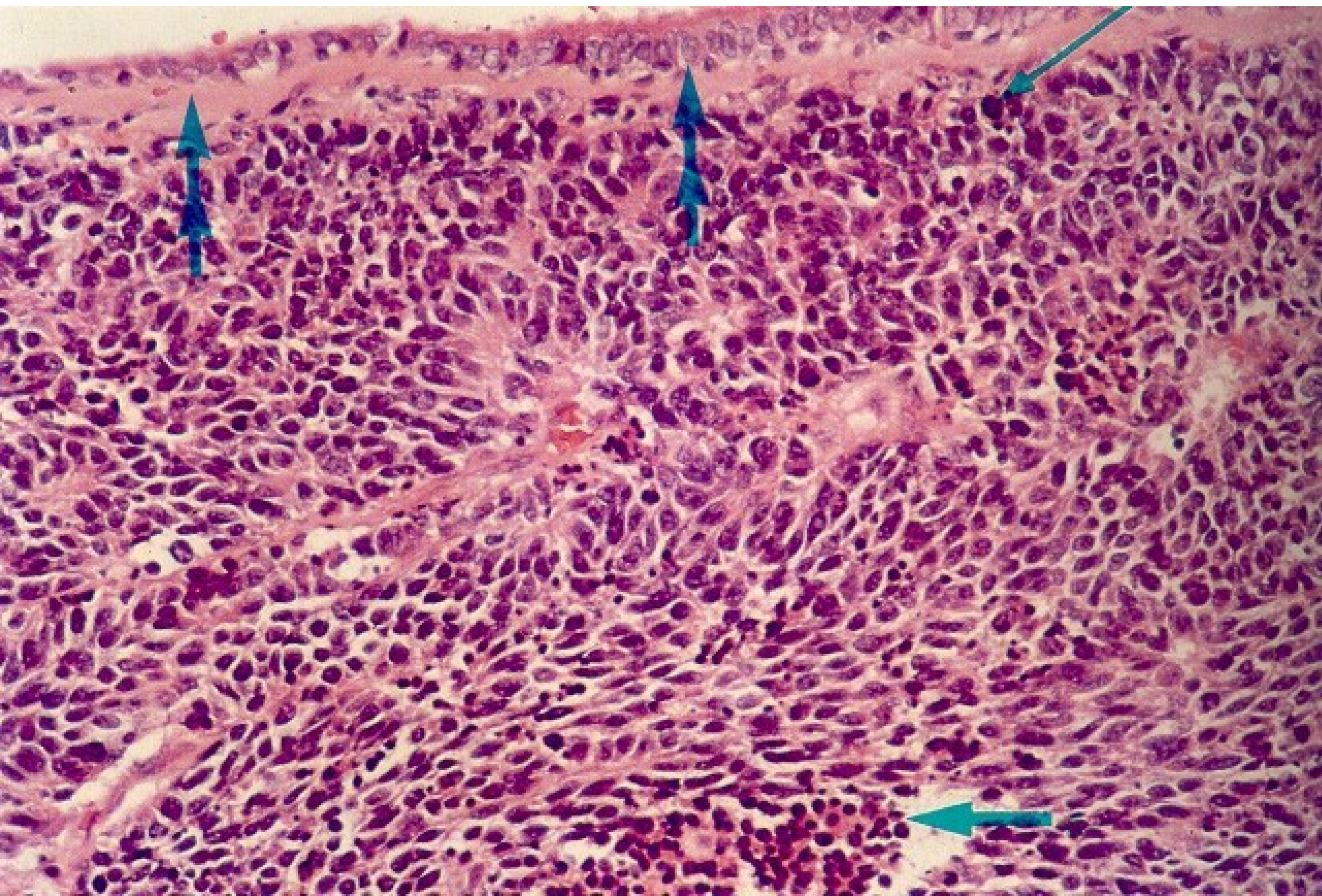






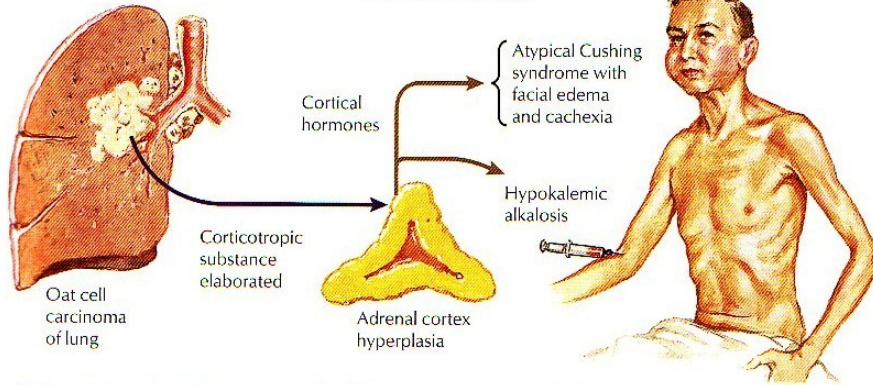
nádory

- nosní polypy
- karcinom laryngu
- karcinom plic (bronchogenní Ca)
 - etiologie: kouření, azbest
 - typy: malobuněčný (endokrinně aktivní)
nemalobuněčný
- metastatické postižení plic
- příznaky: hemoptoe, metastázy...
- mezoteliom

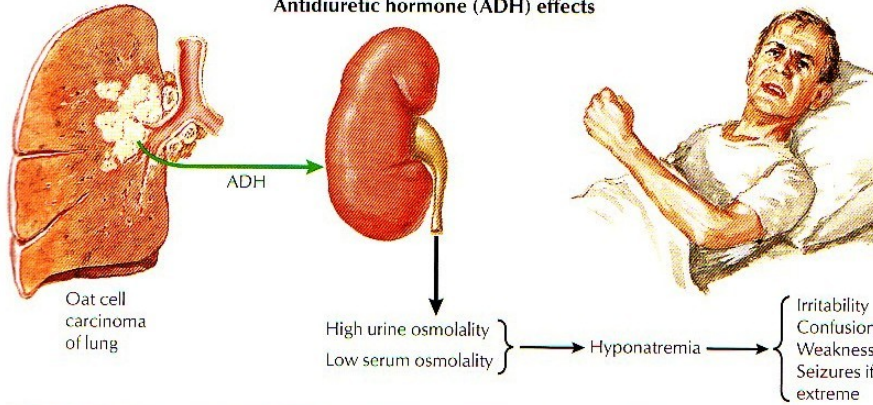


Endocrine Manifestations of Bronchogenic Carcinoma

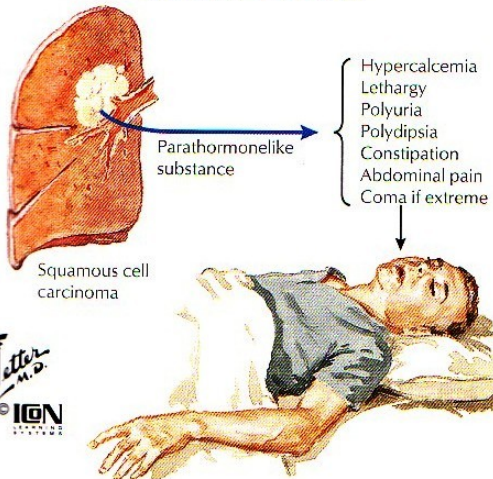
Corticotropic effects



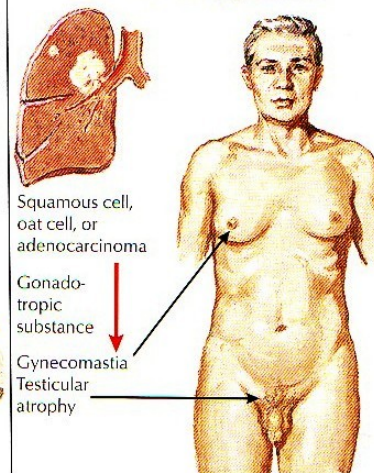
Antidiuretic hormone (ADH) effects

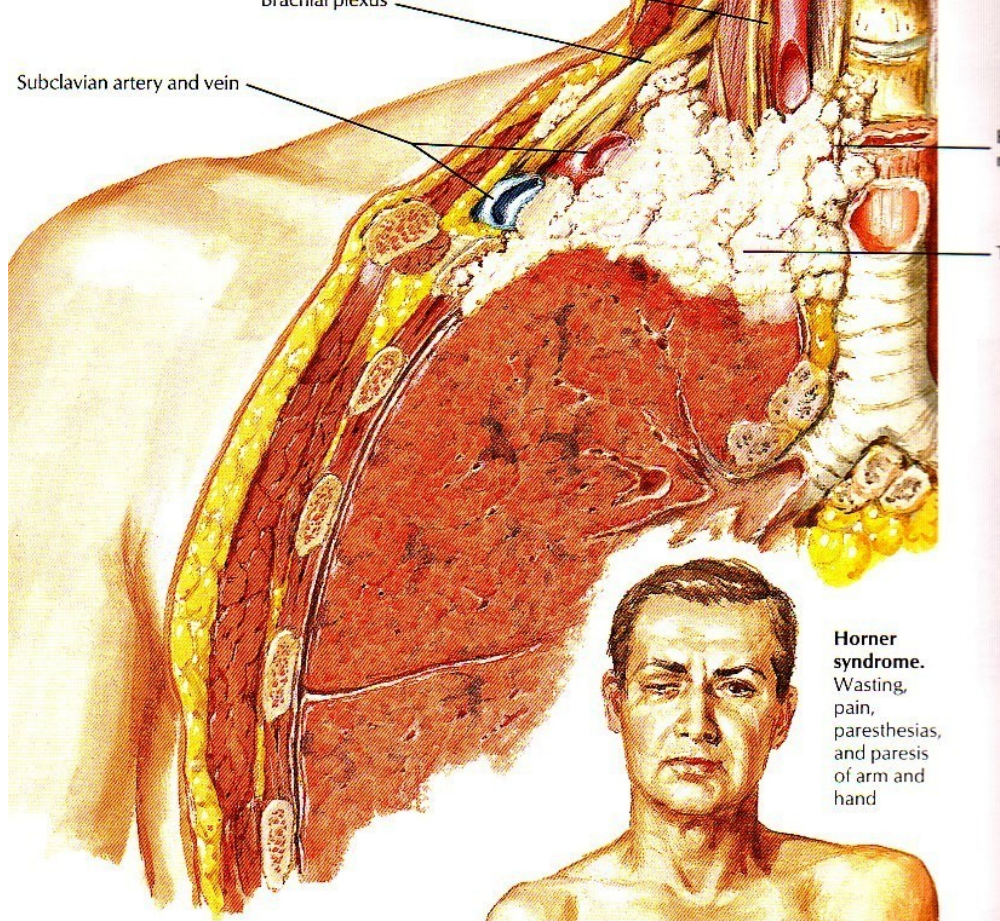


Parathormonelike effects

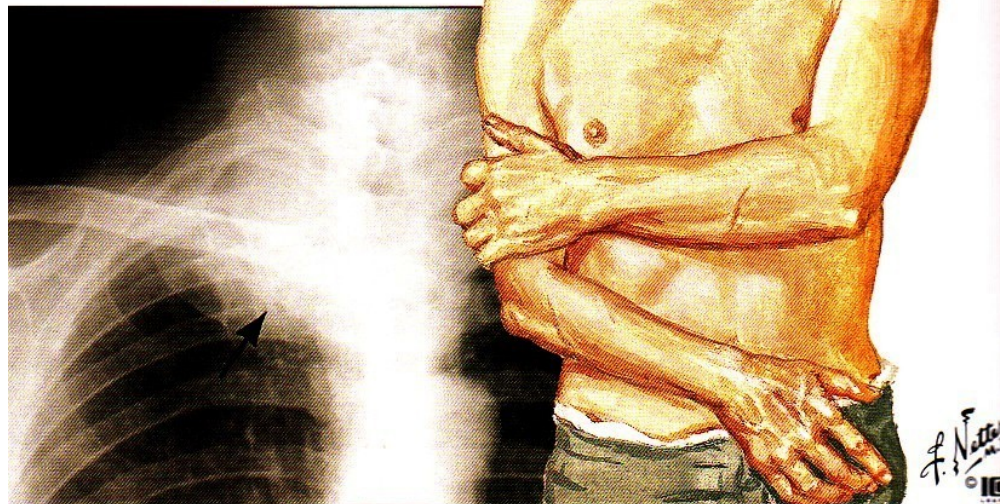


Gonadotropin effects





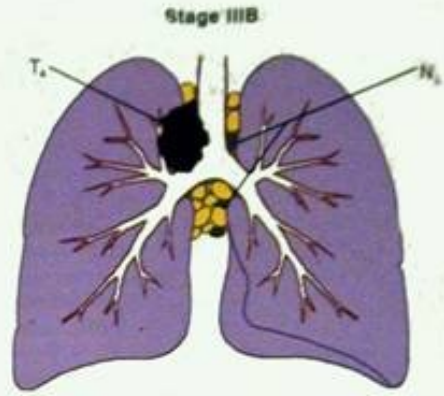
Horner syndrome.
Wasting, pain, paresthesias, and paresis of arm and hand





N₃ involvement of mediastinal nodes indicates stage IIIB

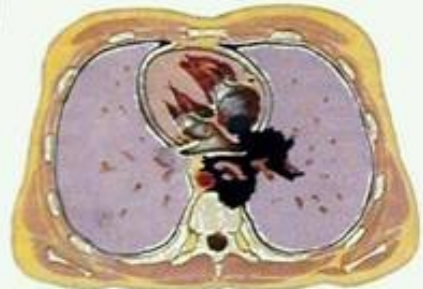
T₄ malignant effusion



T₄N₁₋₃M₀
T₁₋₄N₃M₀

Regional extension of extrapulmonary disease

f. Nelson
© 1998

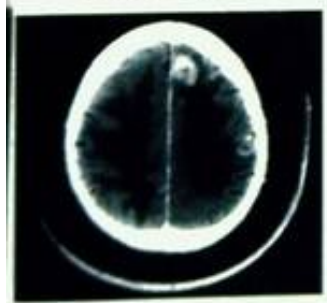


T₄ direct involvement of mediastinal structures

Stage IV



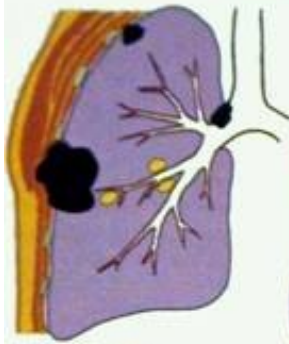
T₄ invasion of mediastinum with compression of superior vena cava



CT scan. Distant metastasis (M₁) in brain indicates stage IV

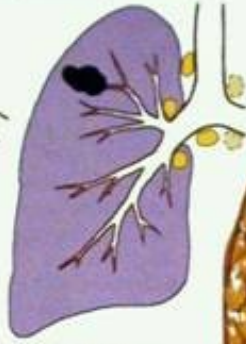
Stage IIIA

Local extension of extrapulmonary disease



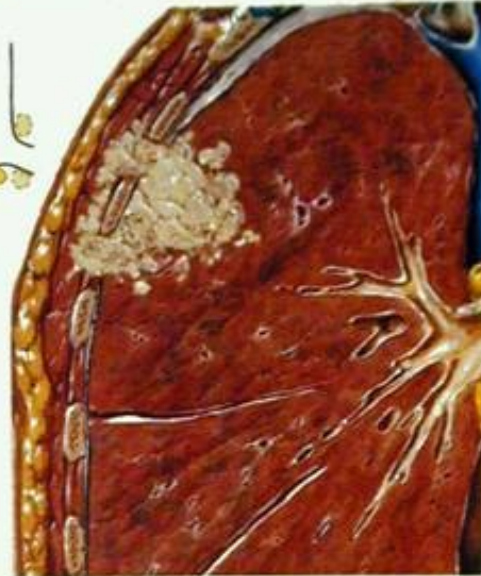
T₃N₀₋₁M₀

Parietal pleura involved



T₁₋₂N₂M₀

Ipsilateral mediastinal lymph nodes involved

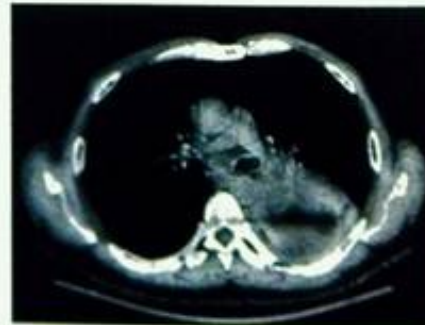


T₃N₀M₀ lesion exhibits extension to chest wall

F. Netter



CT scan, Chest wall extension

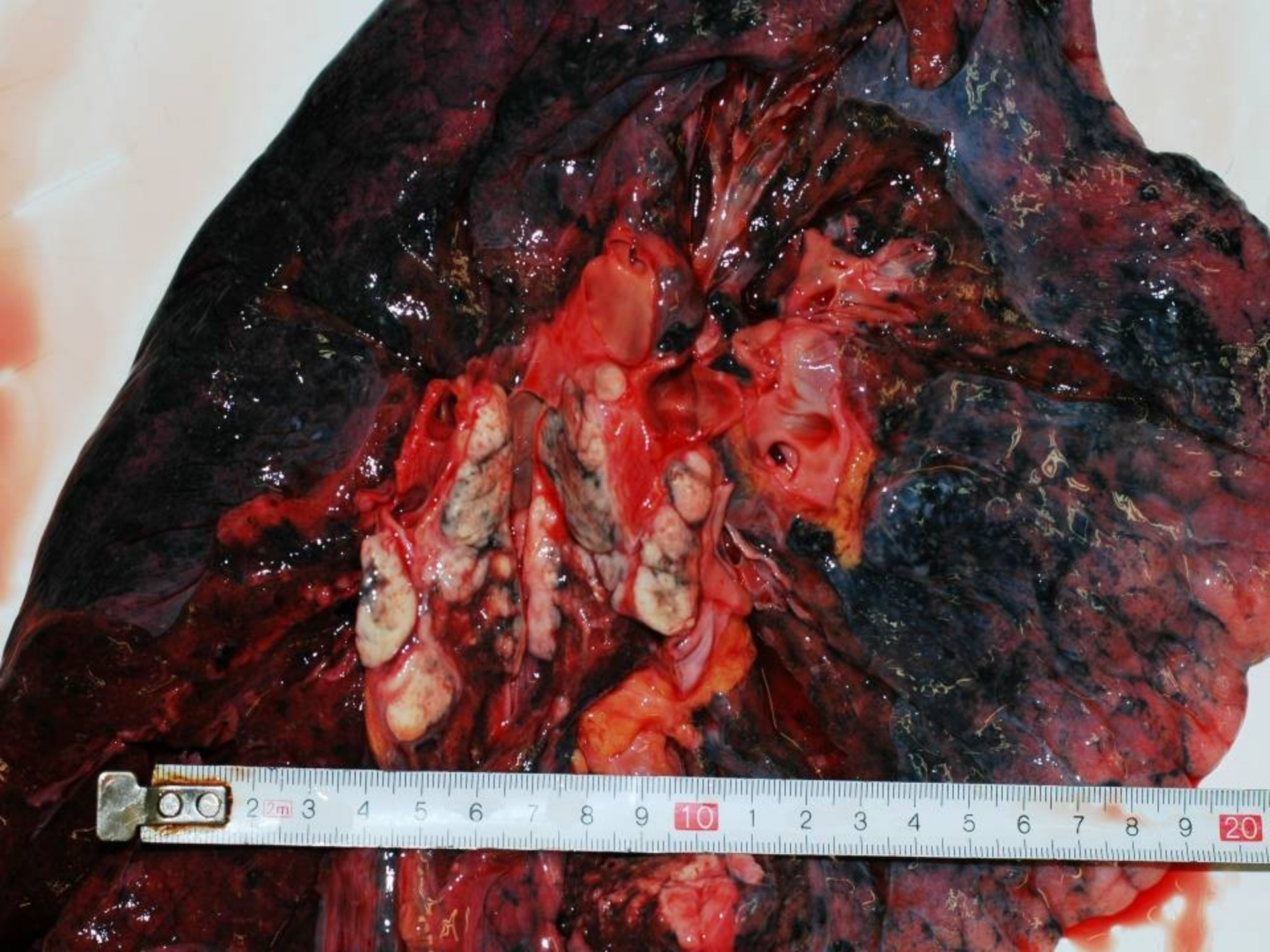


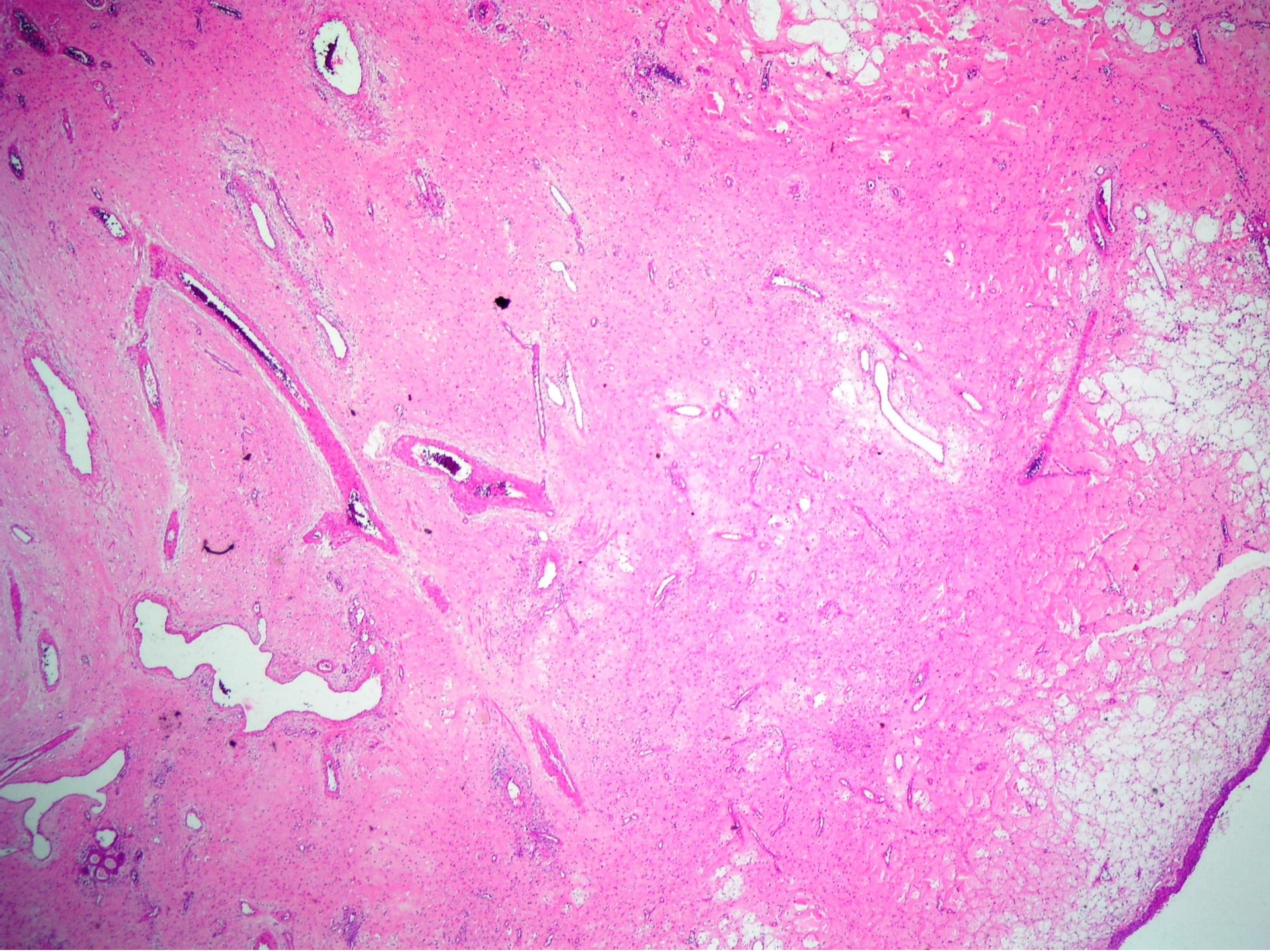


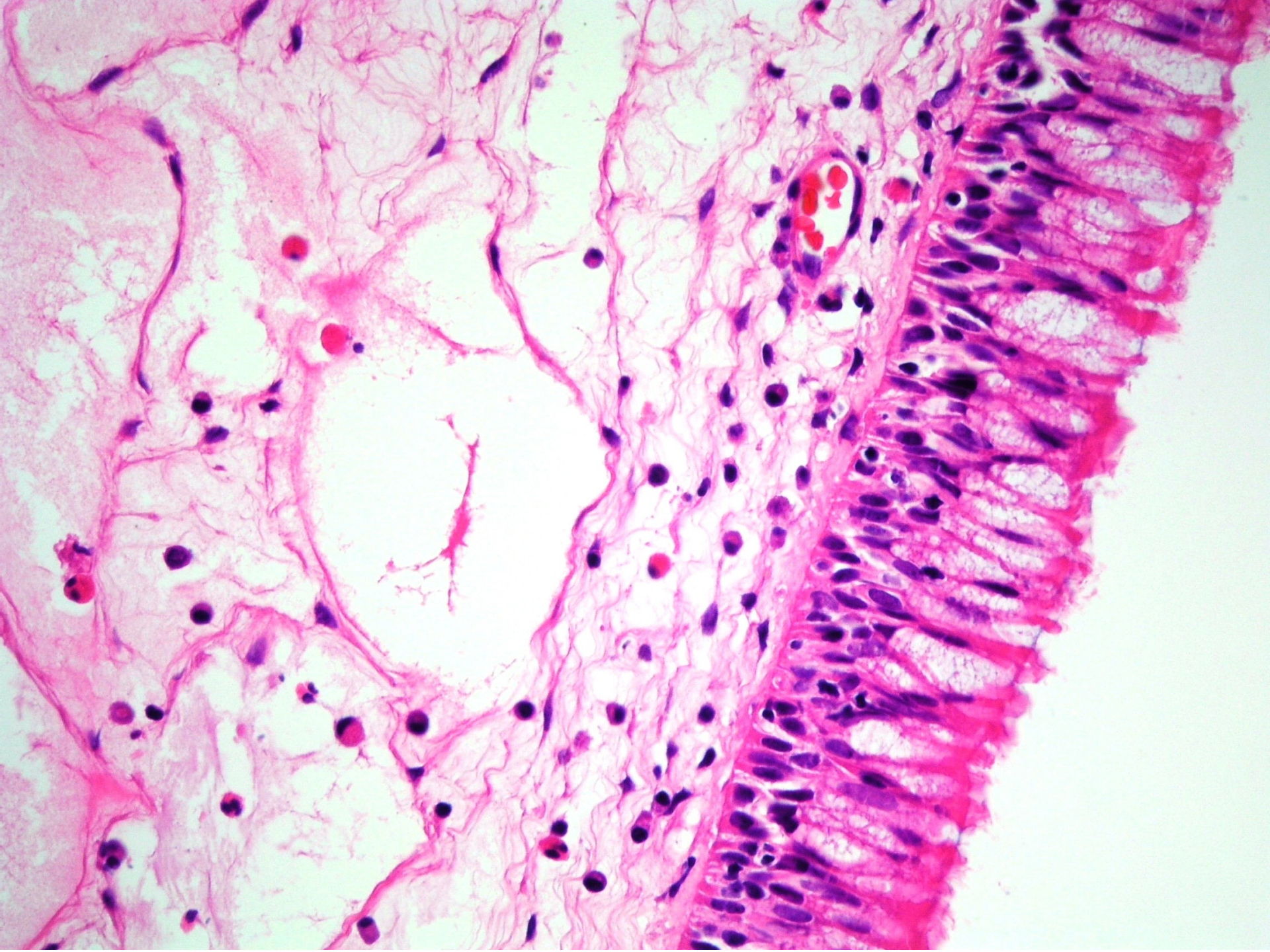












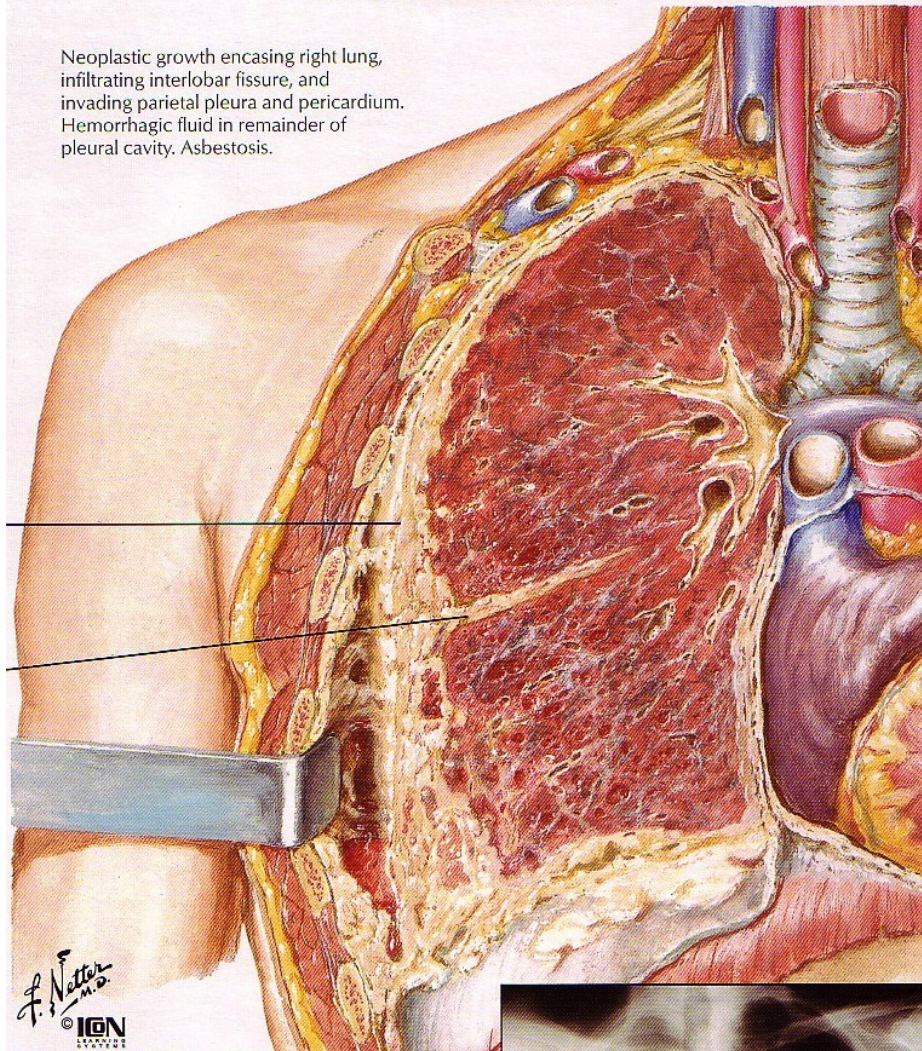
Pleura

Patologický obsah

- **hydrothorax:** transudát v hrudní dutině
- **pneumothorax:** vzduch mezi listy pleury, traumaticky, rupturou emfysematózní buly, otevřený pneumothorax – komunikace s vnějším prostředím při perforaci hrudní stěny, někdy ventilový mechanismus – v obou případech kolaps plic
- **hemothorax:** krev v pohrudniční dutině: trauma, ruptura aneurysmatu aorty
- **empyém:** hnis v dutině pohrudniční

Mesothelioma of Pleura

Neoplastic growth encasing right lung, infiltrating interlobar fissure, and invading parietal pleura and pericardium. Hemorrhagic fluid in remainder of pleural cavity. Asbestosis.



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