Hypertrophy (heart)

Increased size and function of the organ with the same number of cells

Adaptive response to pressure or volume stress

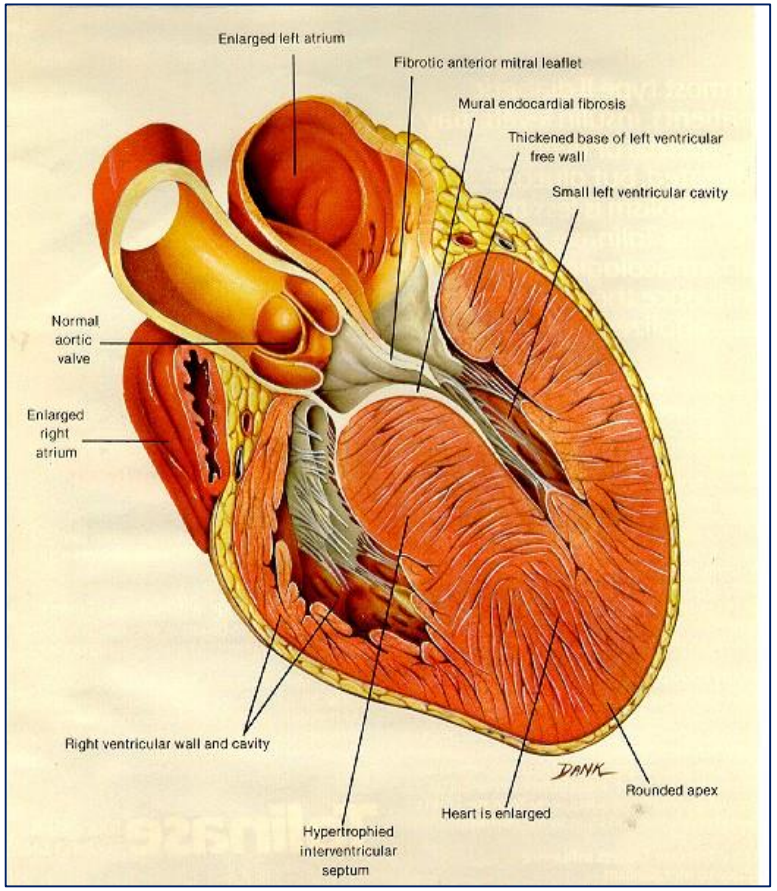
<u>Causes</u>:

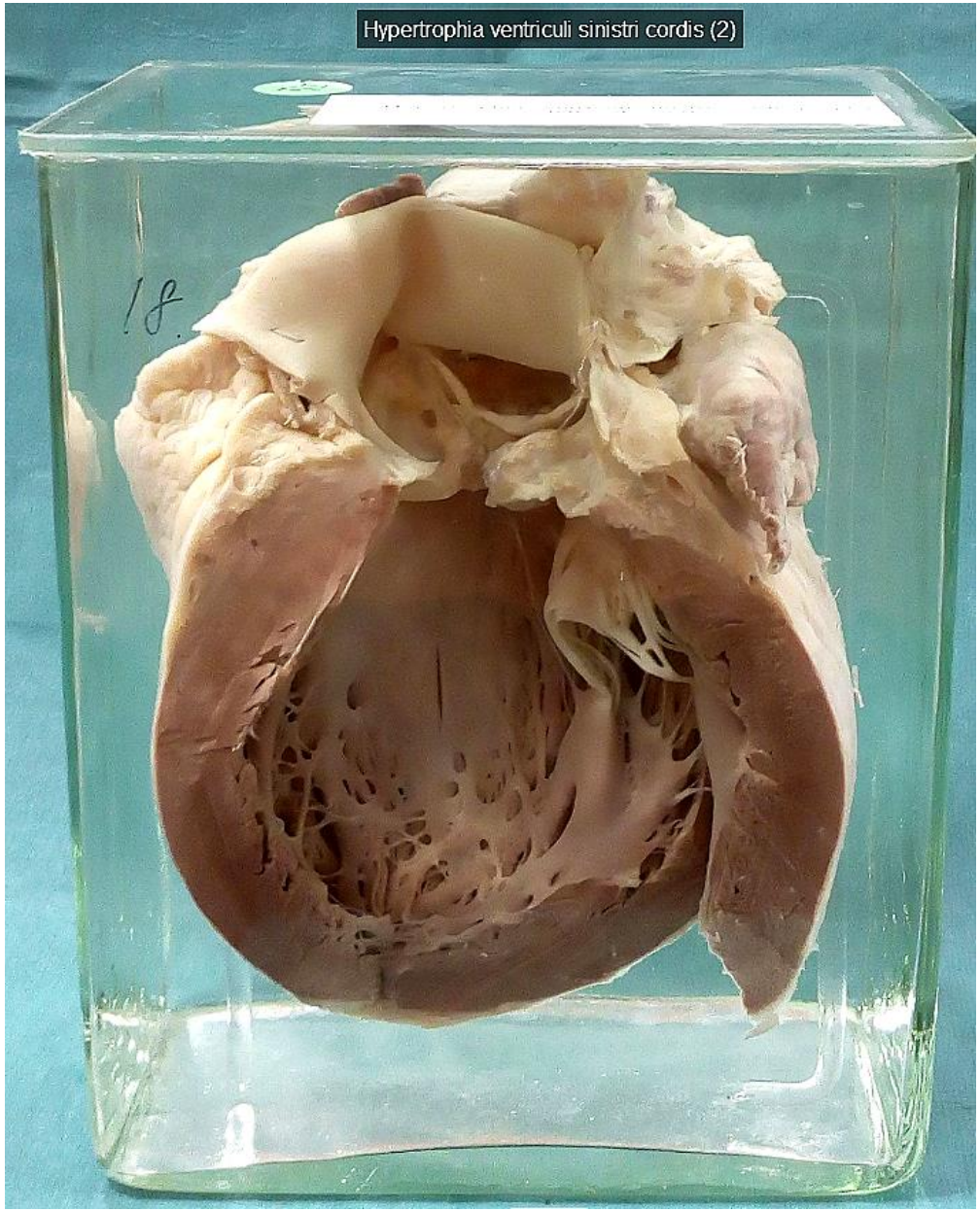
prolonged hypertension (of any cause)
- systemic or pulmonary -

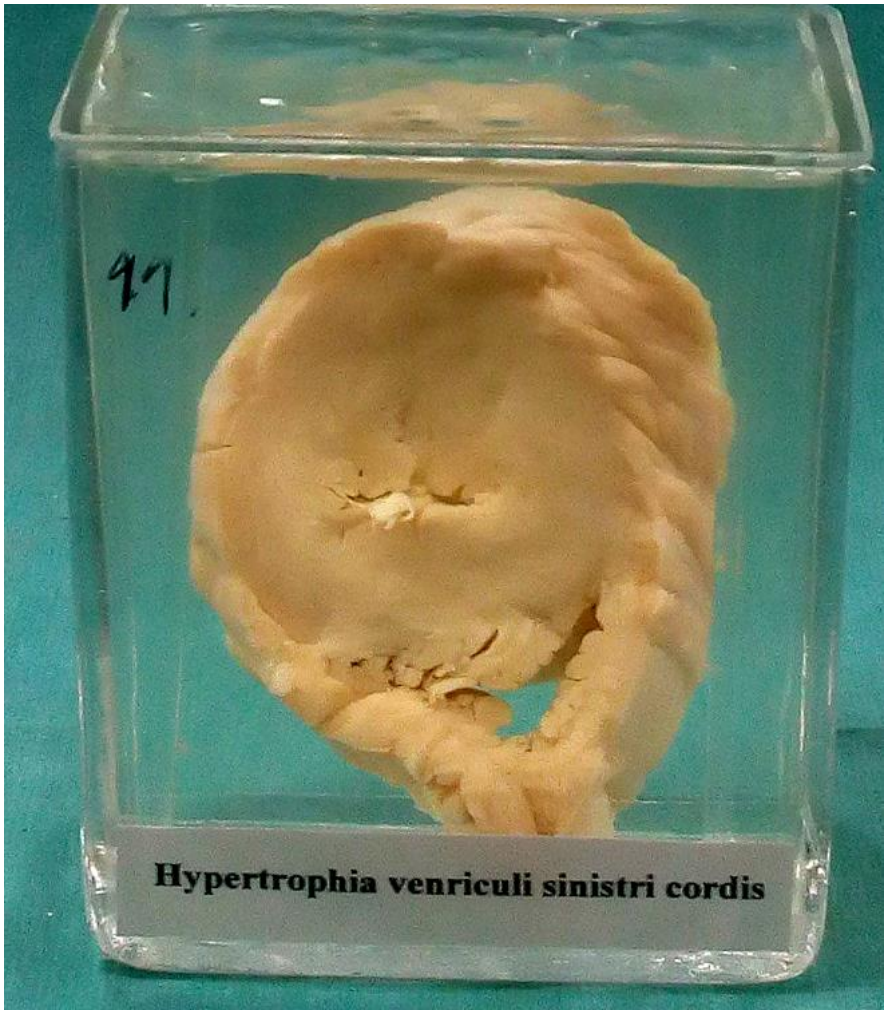
mechanical blockage (valvular stenosis)

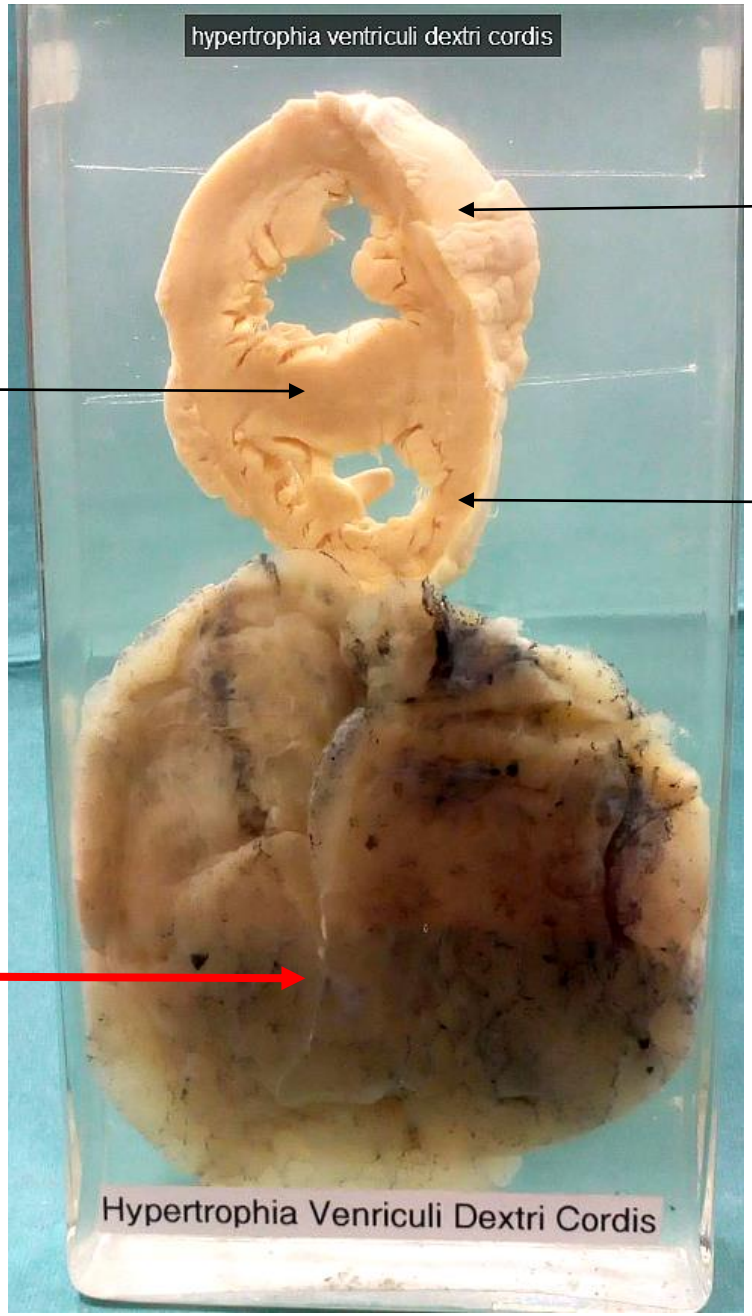
mutations of sarcomeric proteins

(hypertrophic cardiomyopathy)

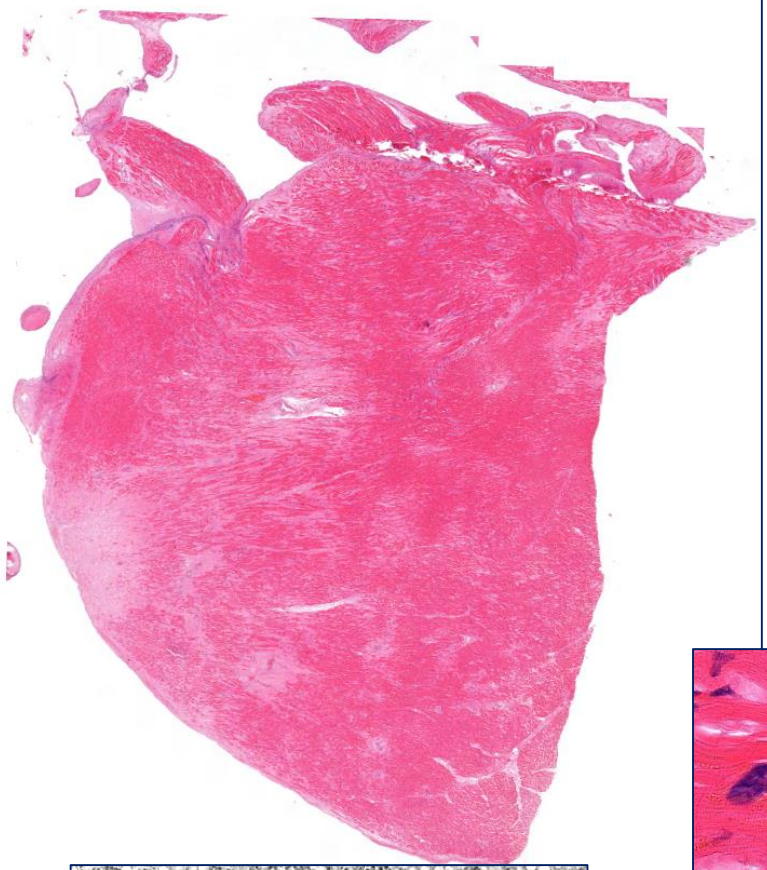


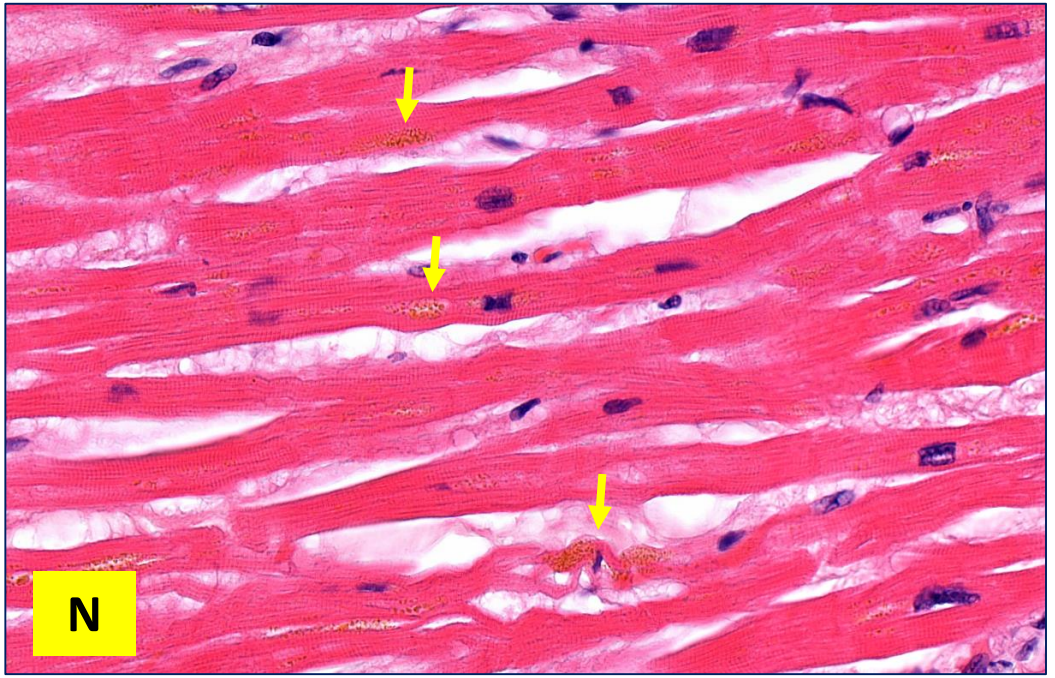

Hypertrophia ventriculi sinistri cordis (2)
18.

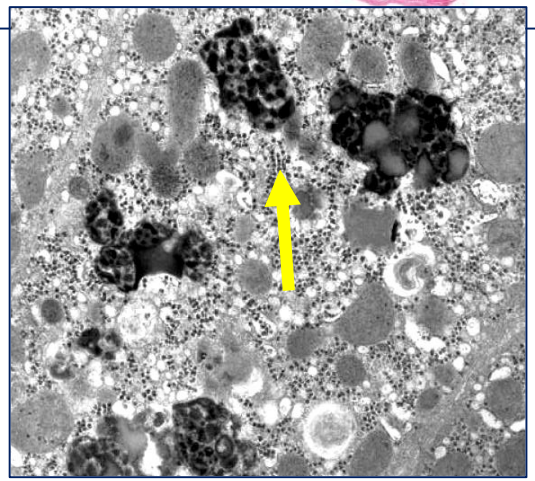

97.
Hypertrophia venriculi sinistri cordis

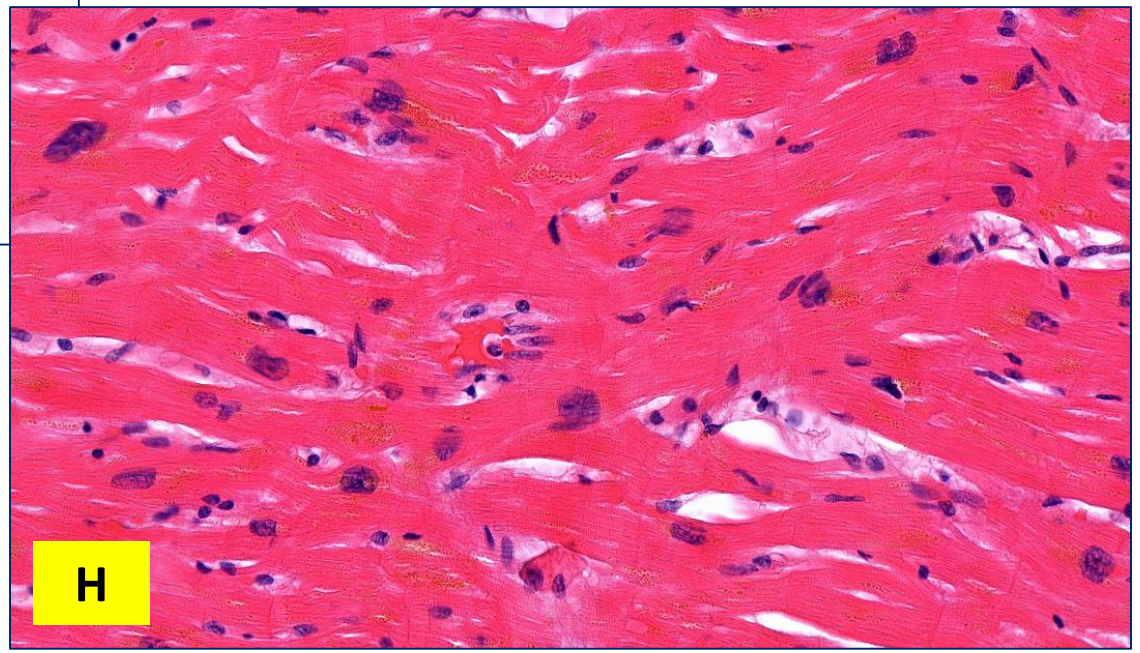

hypertrophia ventriculi dextri cordis
left ventricle
s
right ventricle
lung
Hypertrophia Venriculi Dextri Cordis

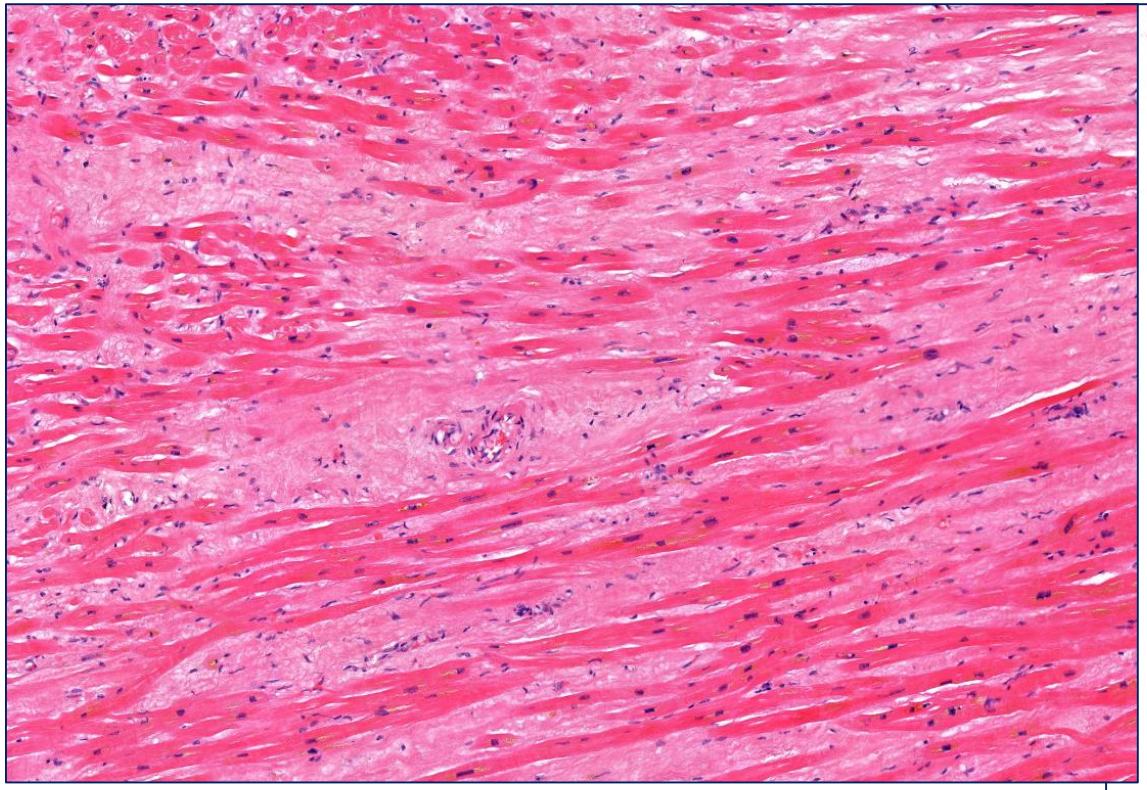
01. Hypertrophia myocardii, CIHD



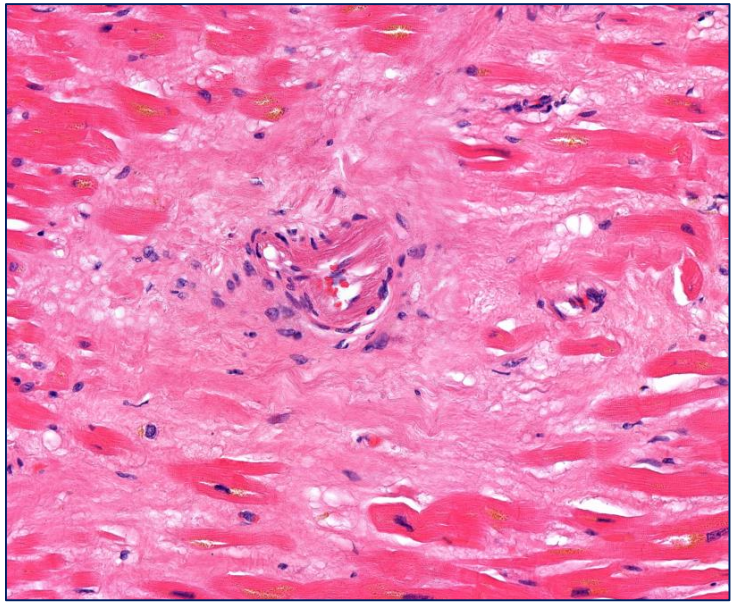


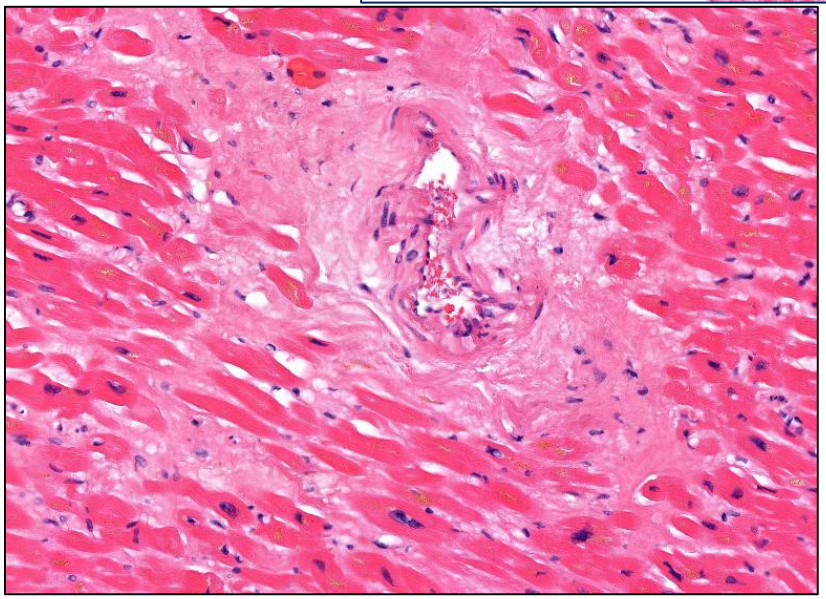






fibrosis



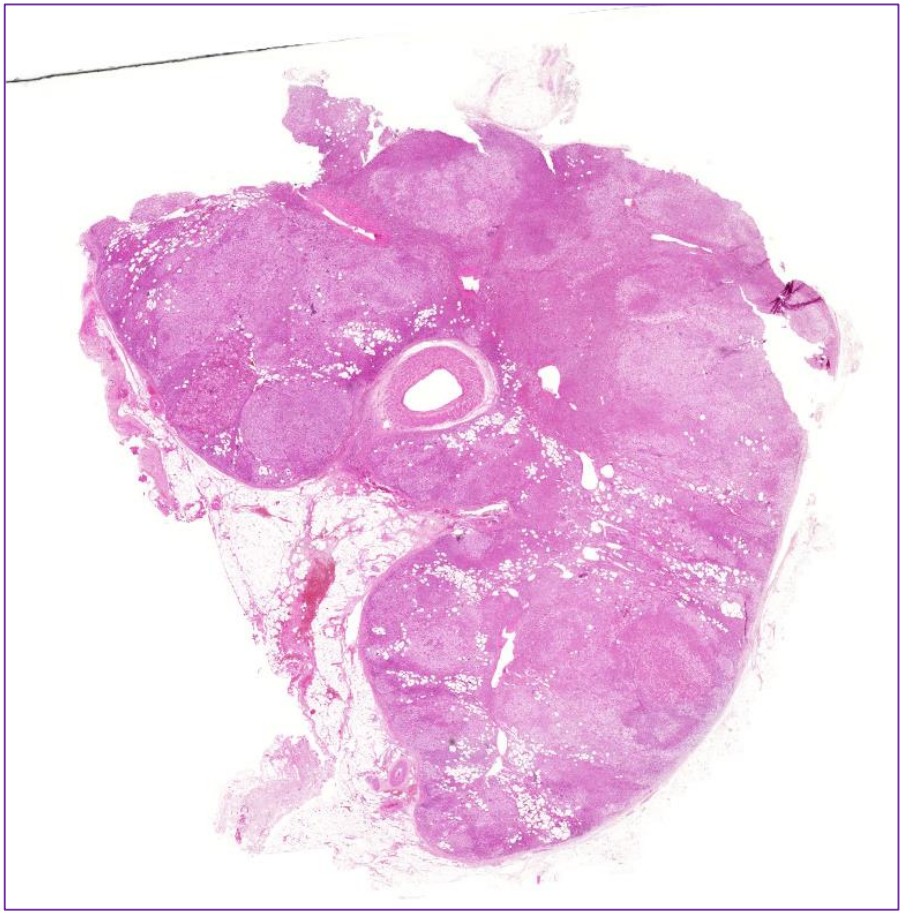


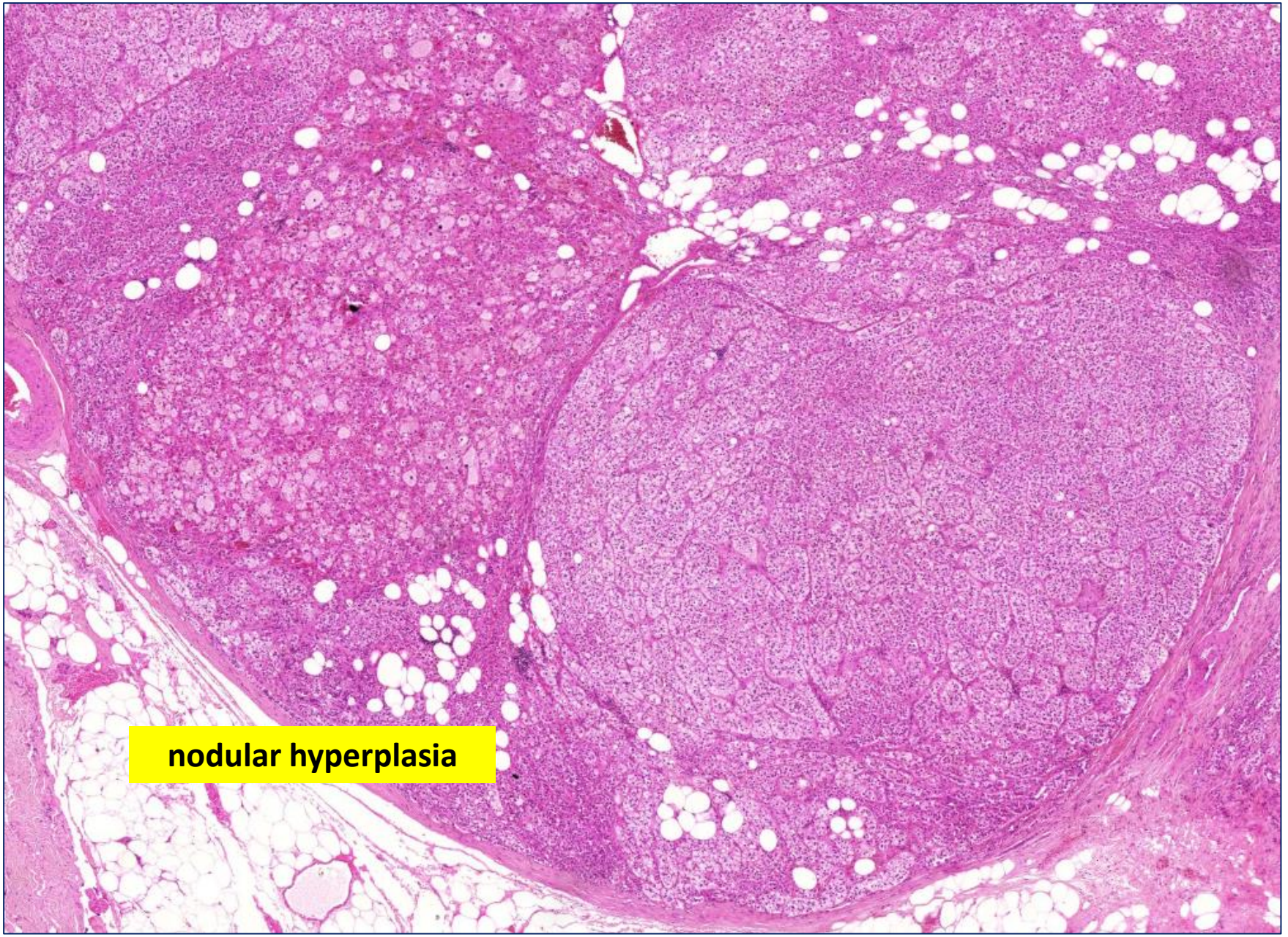
Hyalinic arteriolo-sclerosis

Hyperplasia

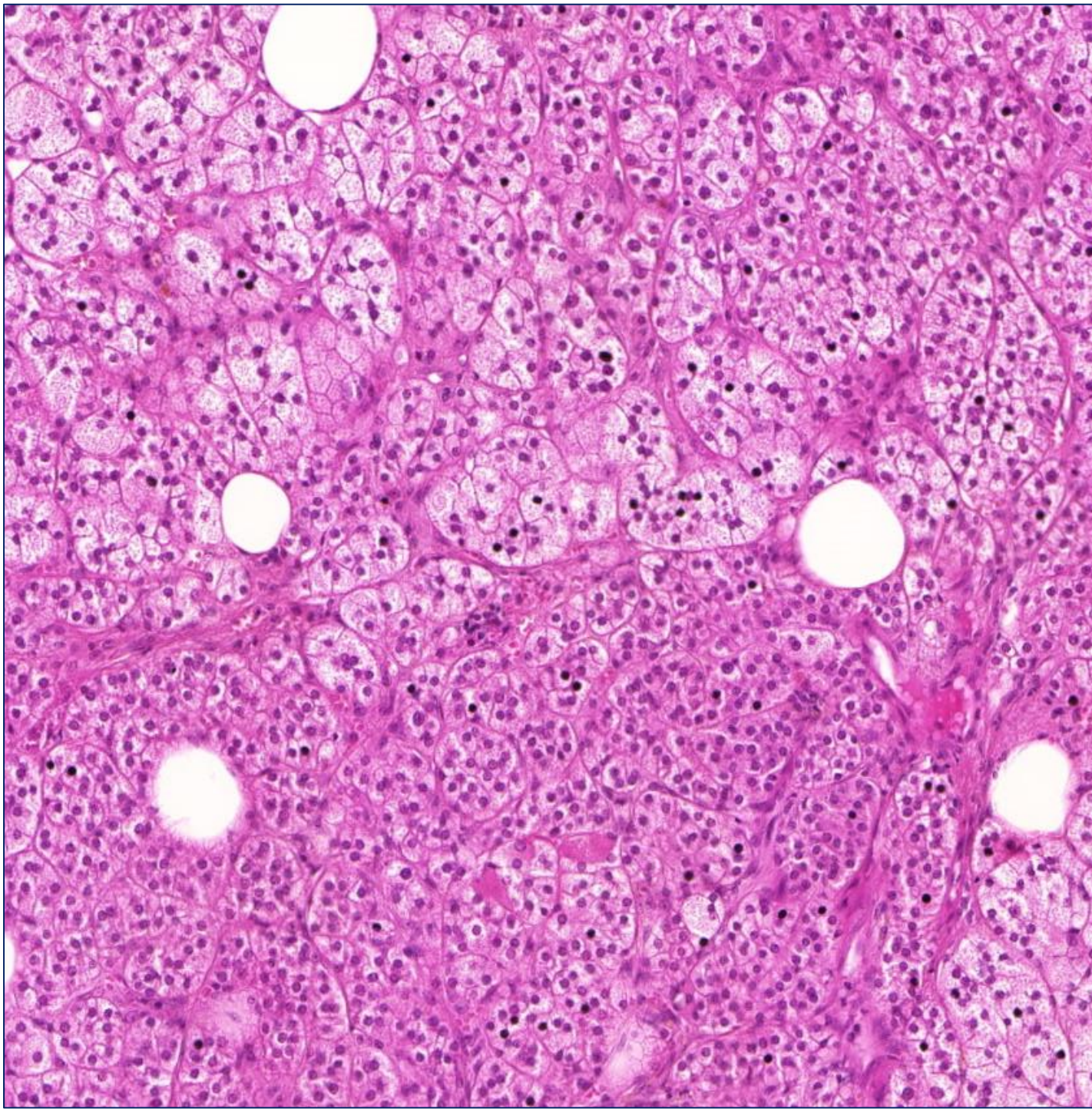
Increased size and function of an organ due to increased number of cells

Typical examples: hormone-responsive organs



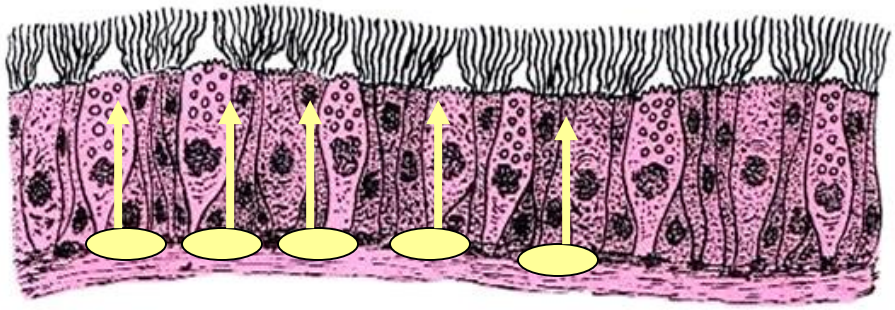

nodular hyperplasia

Zona fasciculari



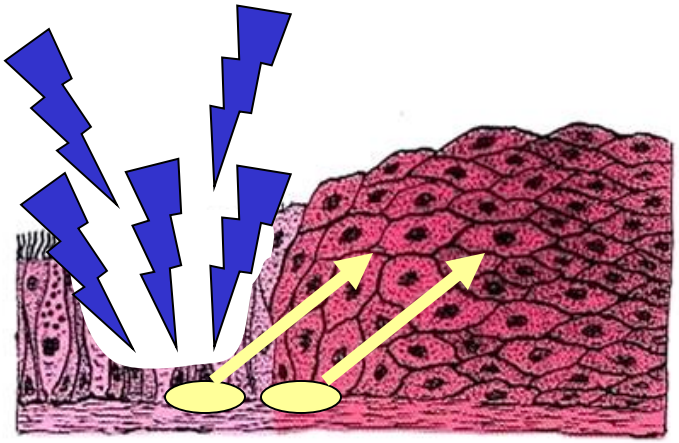
Zona reticularis

Metaplasia

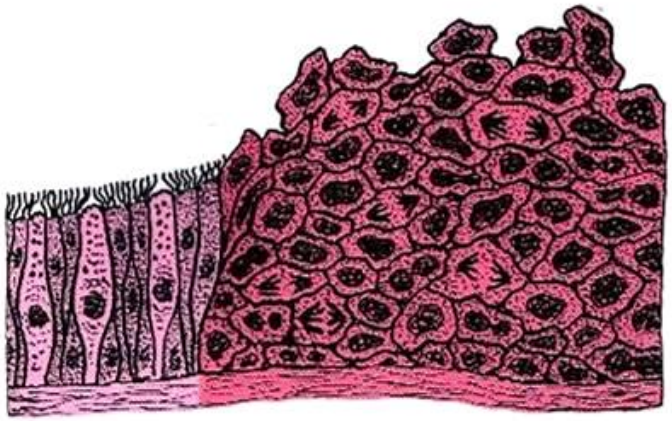


stem cell

Normal ciliated epithelium

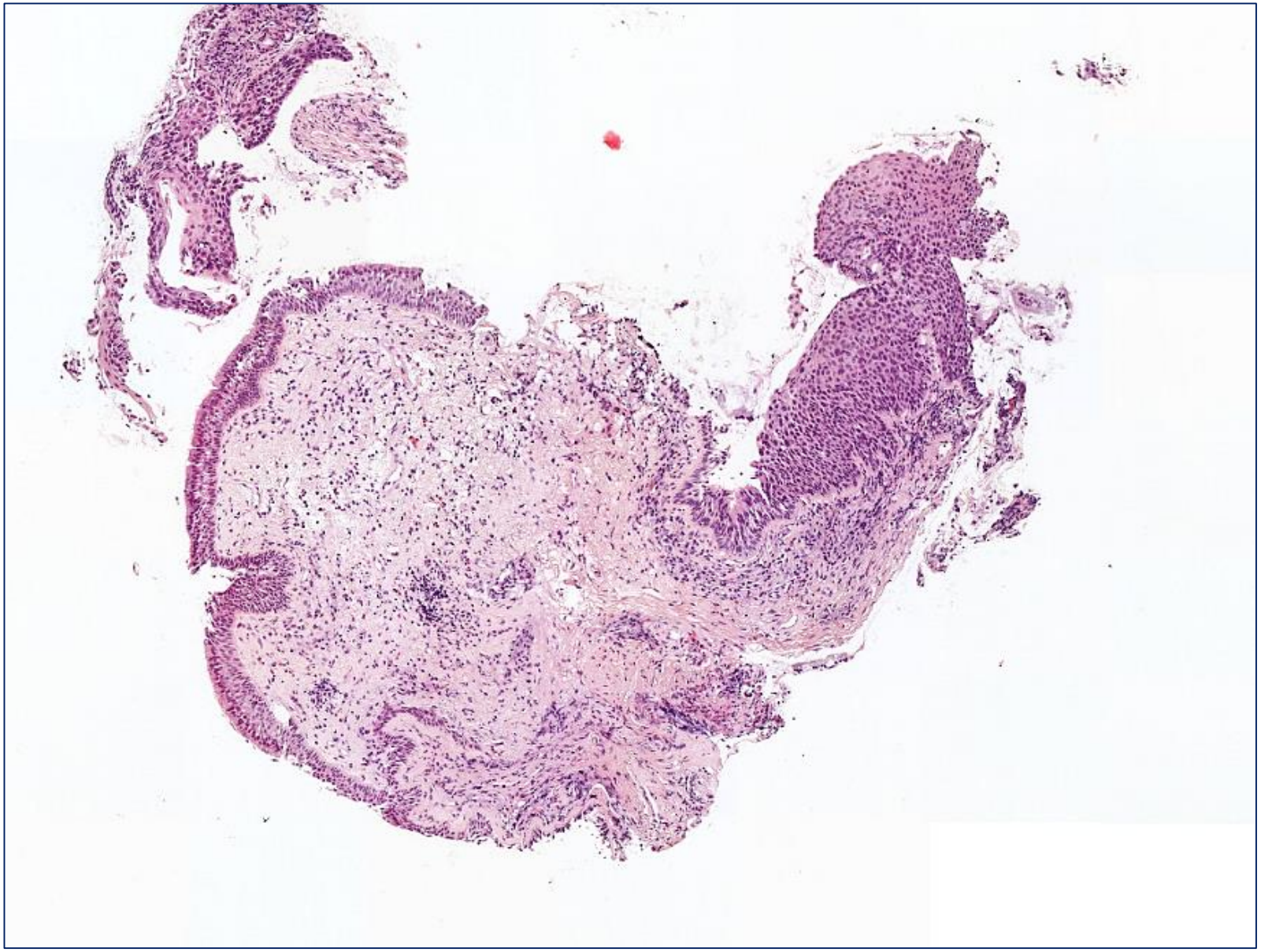


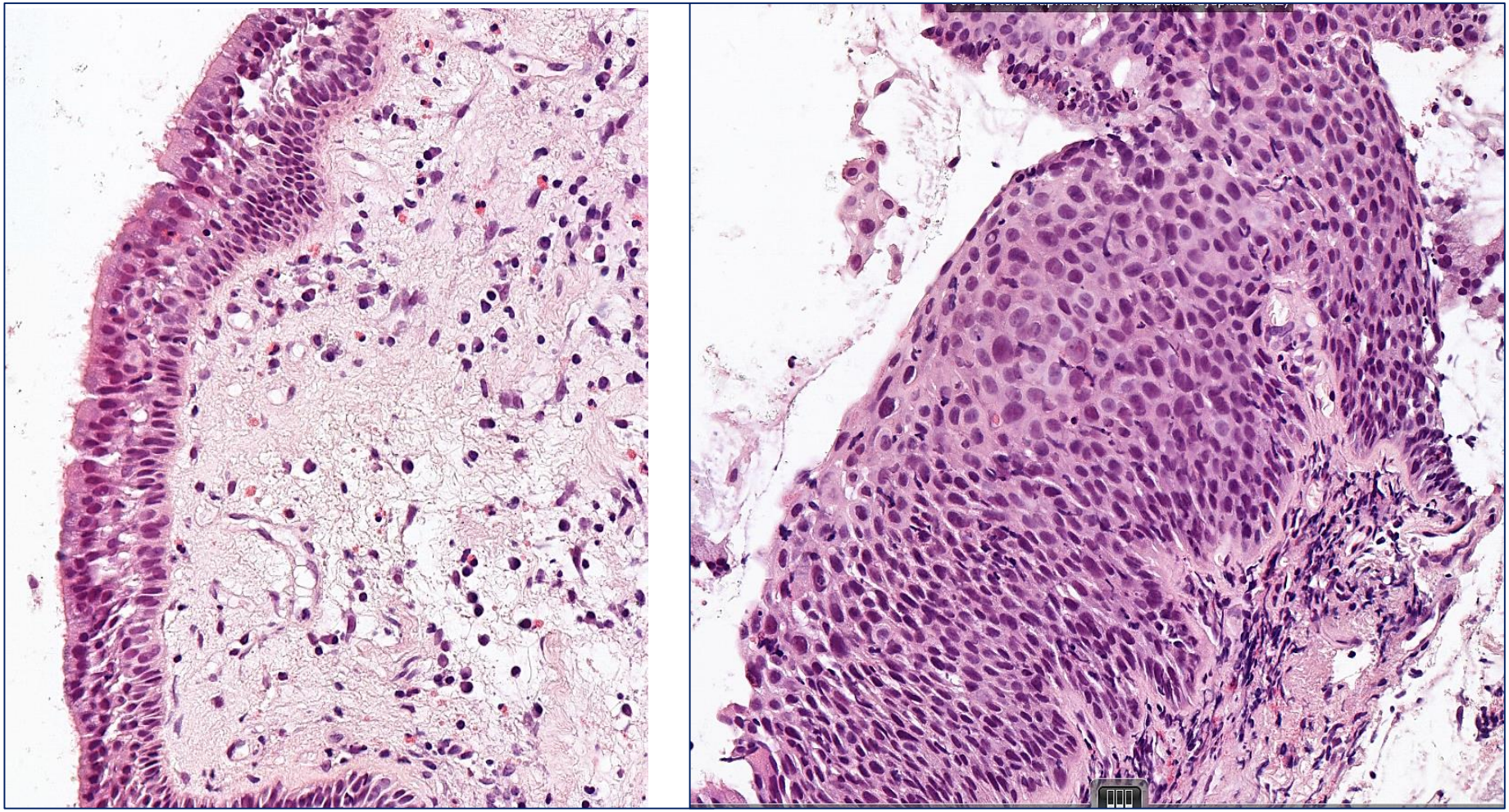
Differentiation shift



Dysplasia

Persistent severe injury or irritation





Bronchial ciliated epithelium

Squamous cell metaplasia + dysplasia

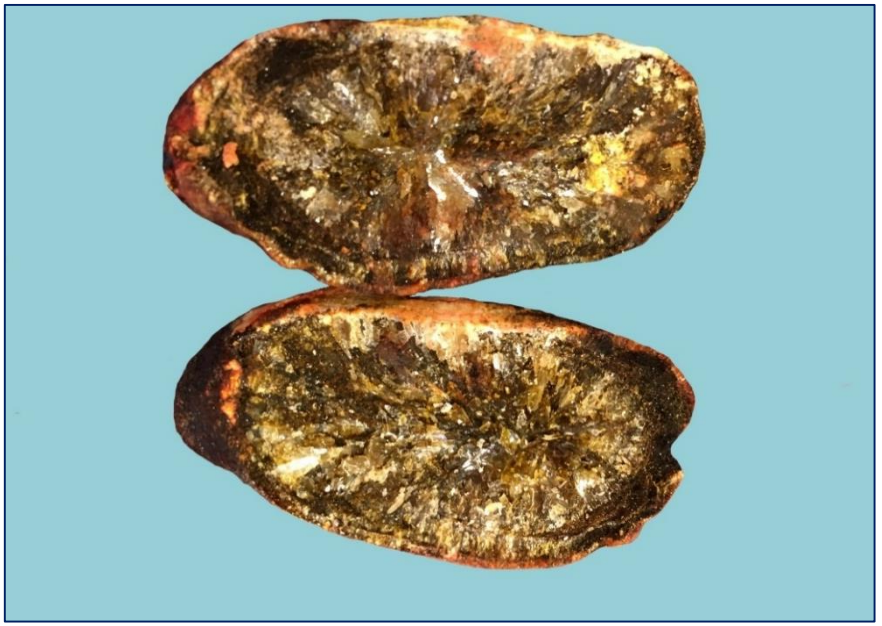
Cholelithiasis

1. Pure stones

cholesterol-

pigment-

2. Mixed-



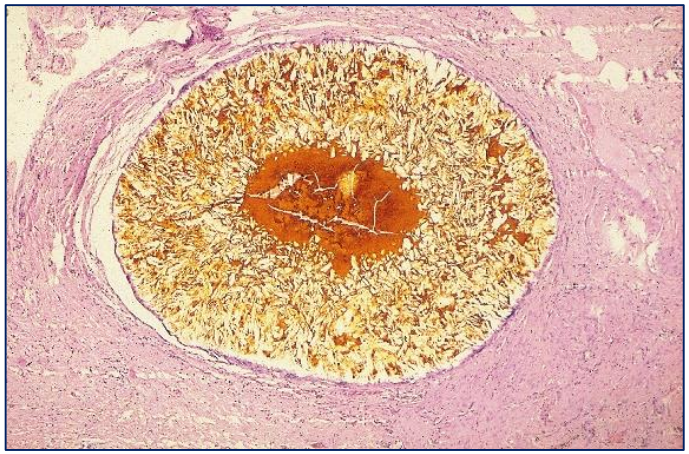
3. Combined-

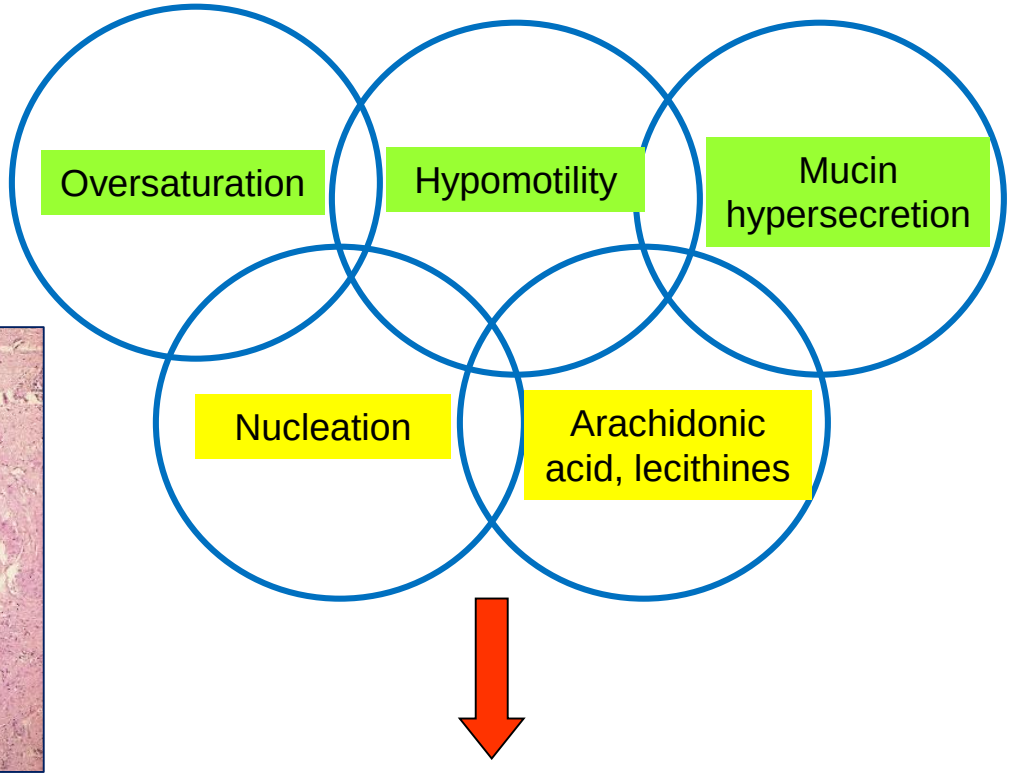
Causes:

- Overconcentration

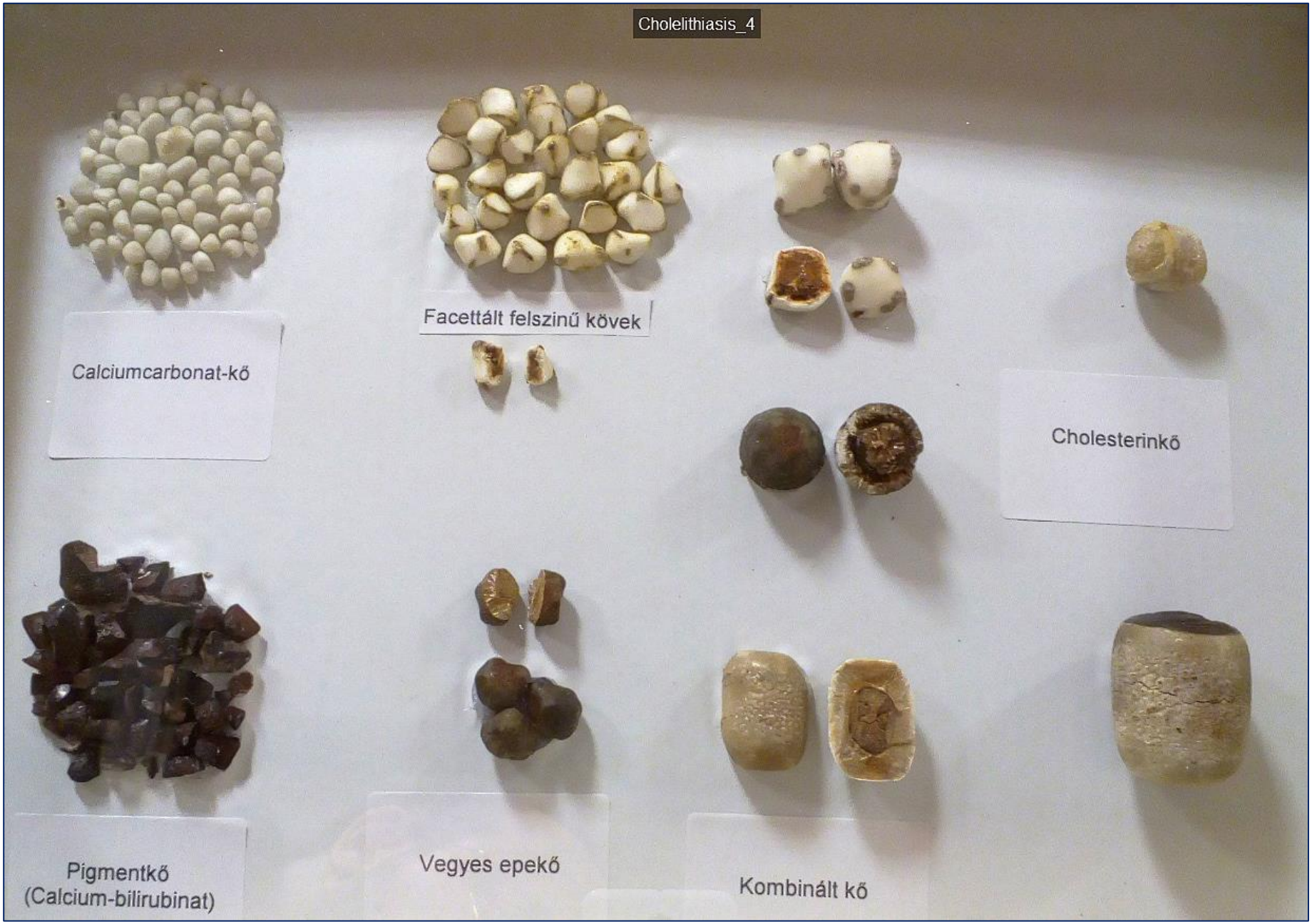
- Dysmotility

- Infection

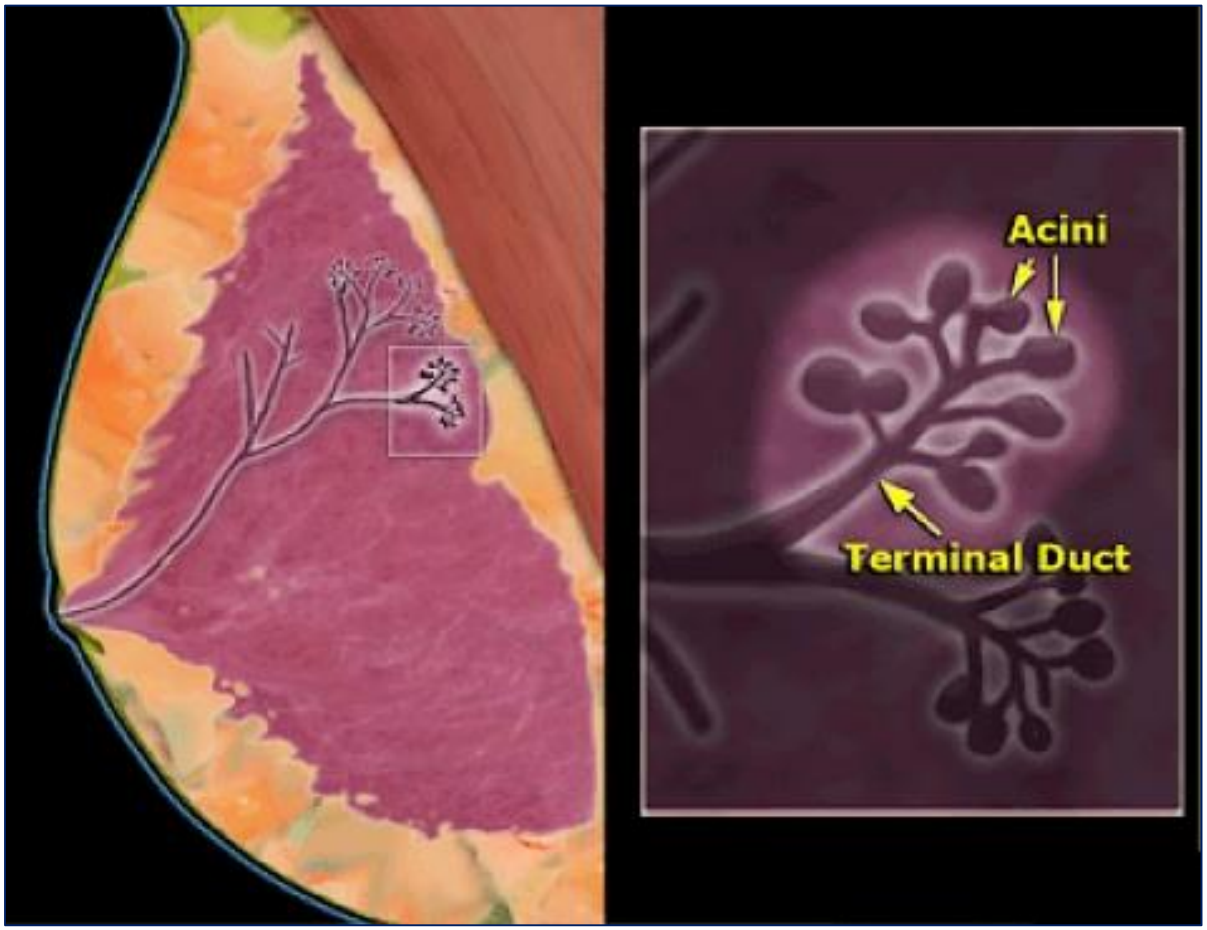


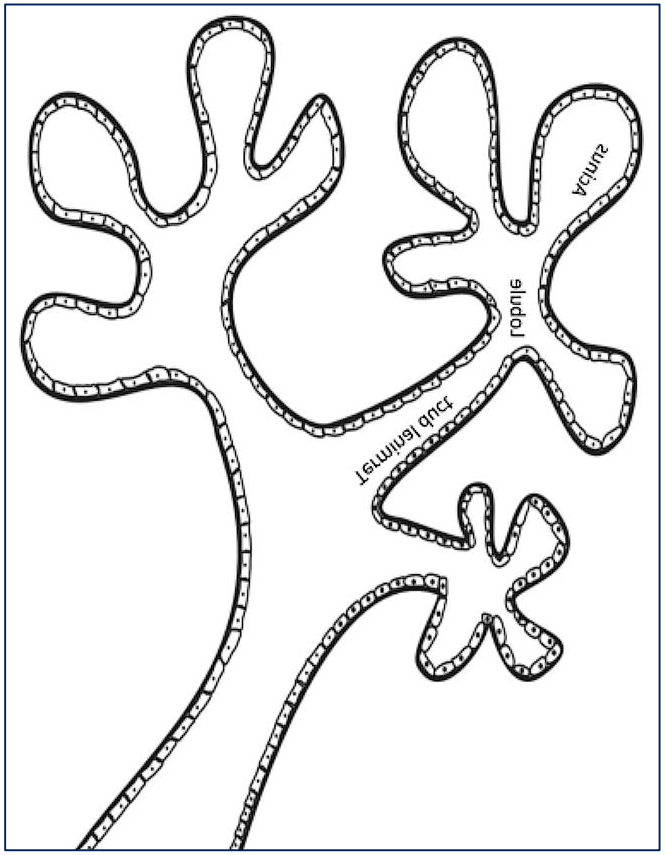


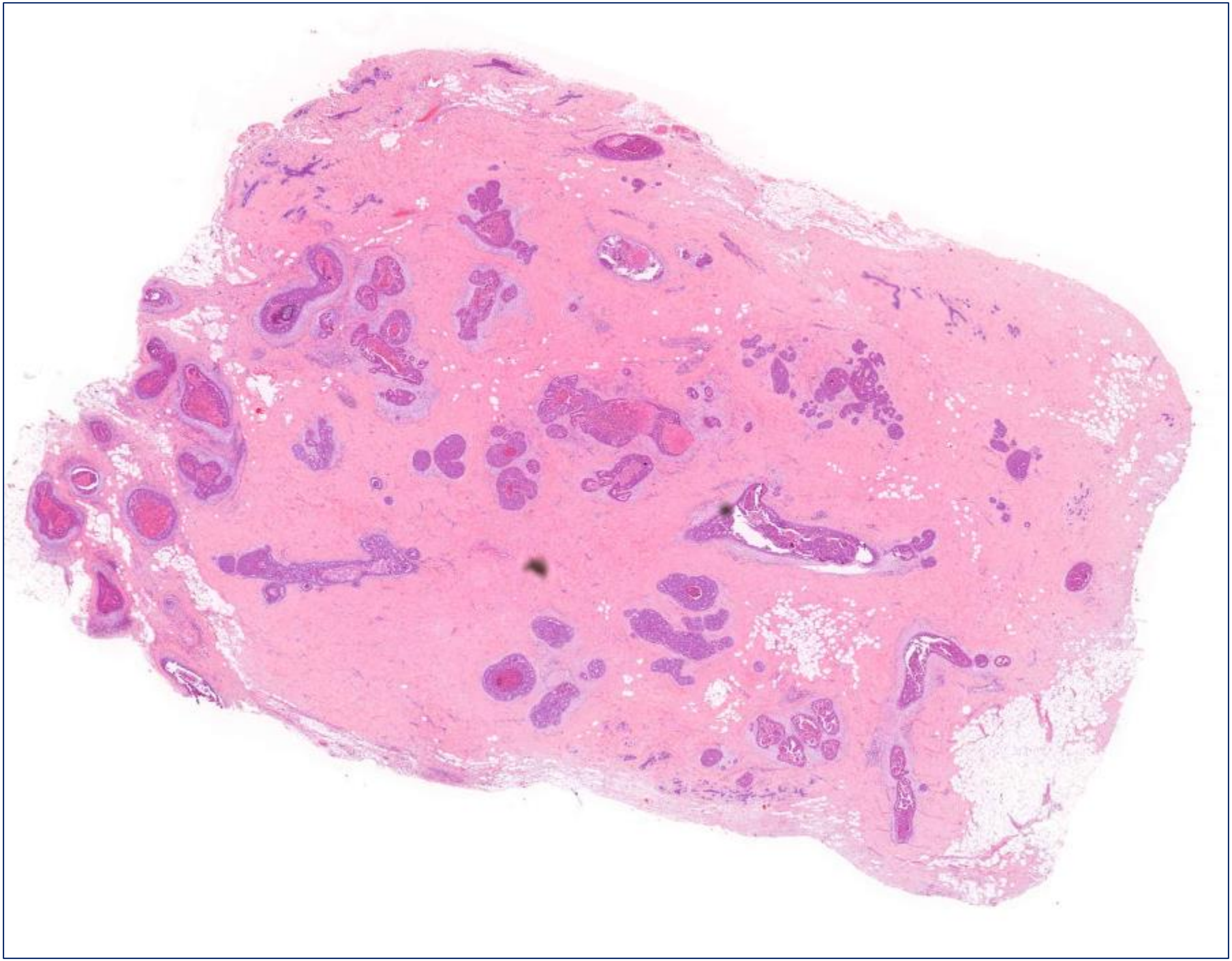
Cholesterol stone

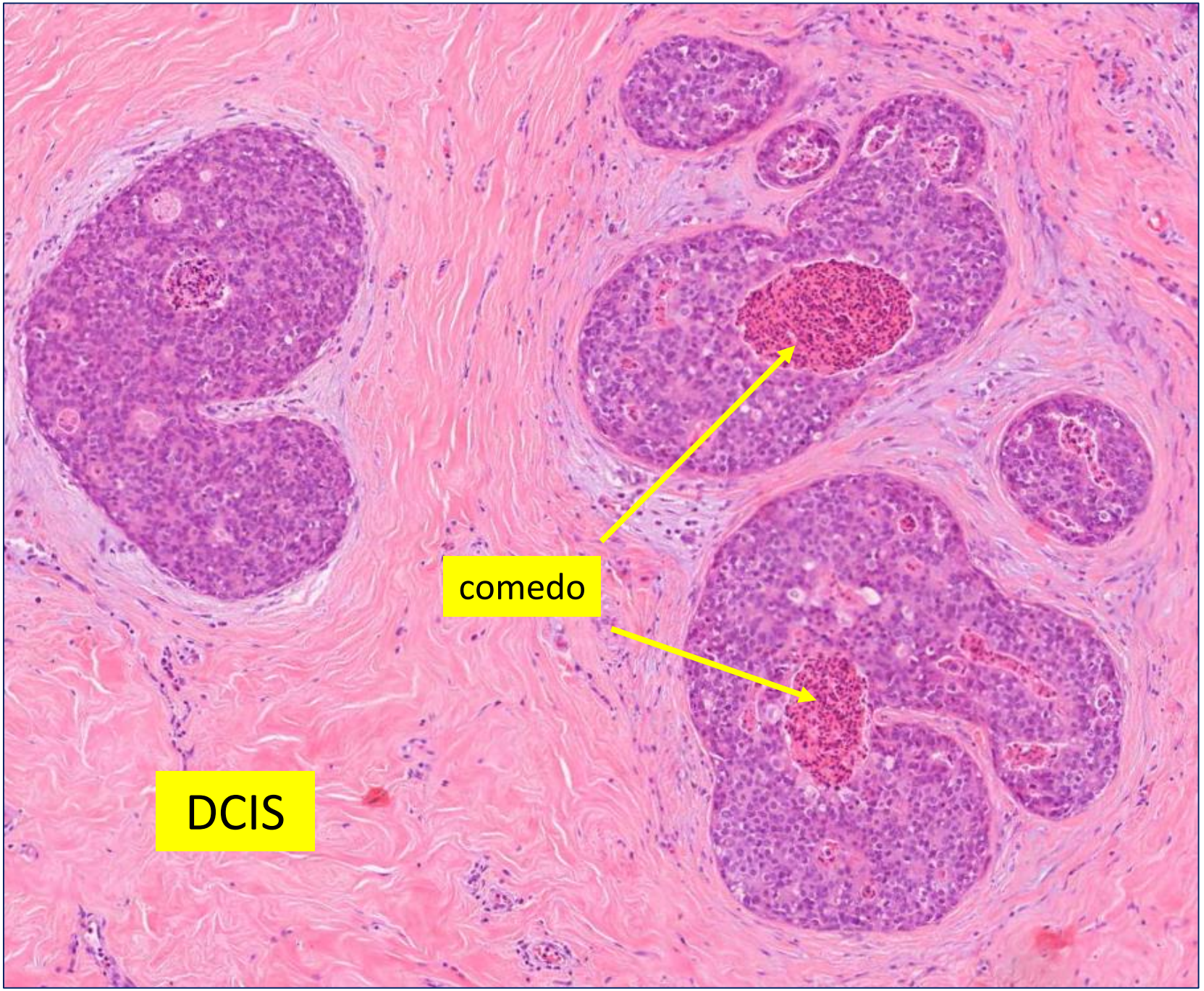

Cholelithiasis_4
Calciumcarbonat-kő
Facettált felszinű kövek
Cholesterinkő
Pigmentkő
(Calcium-bilirubinat)
Vegyes epekő
Kombinált kő

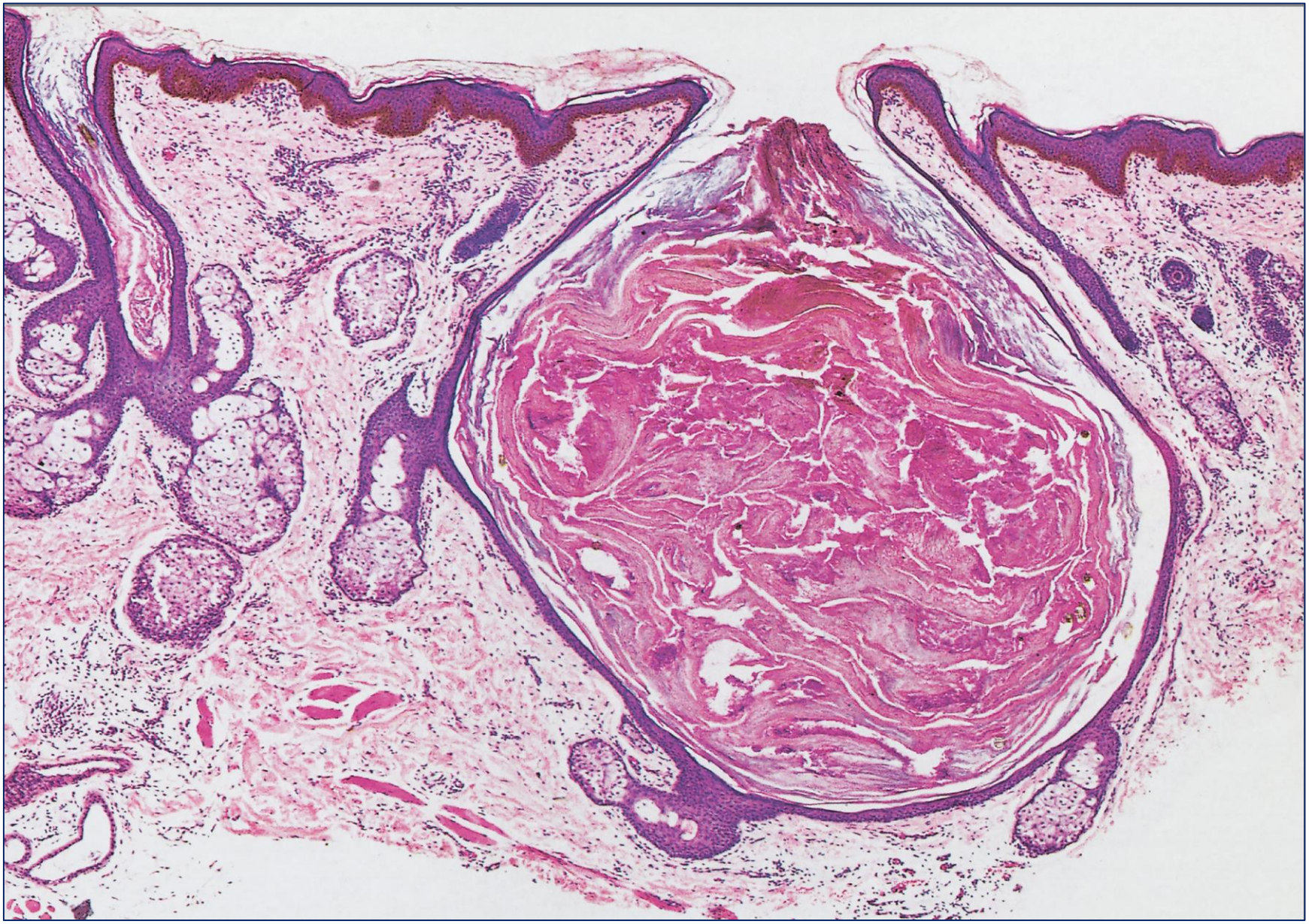
Breast / Terminal ductular-lobular unit (TDLU)

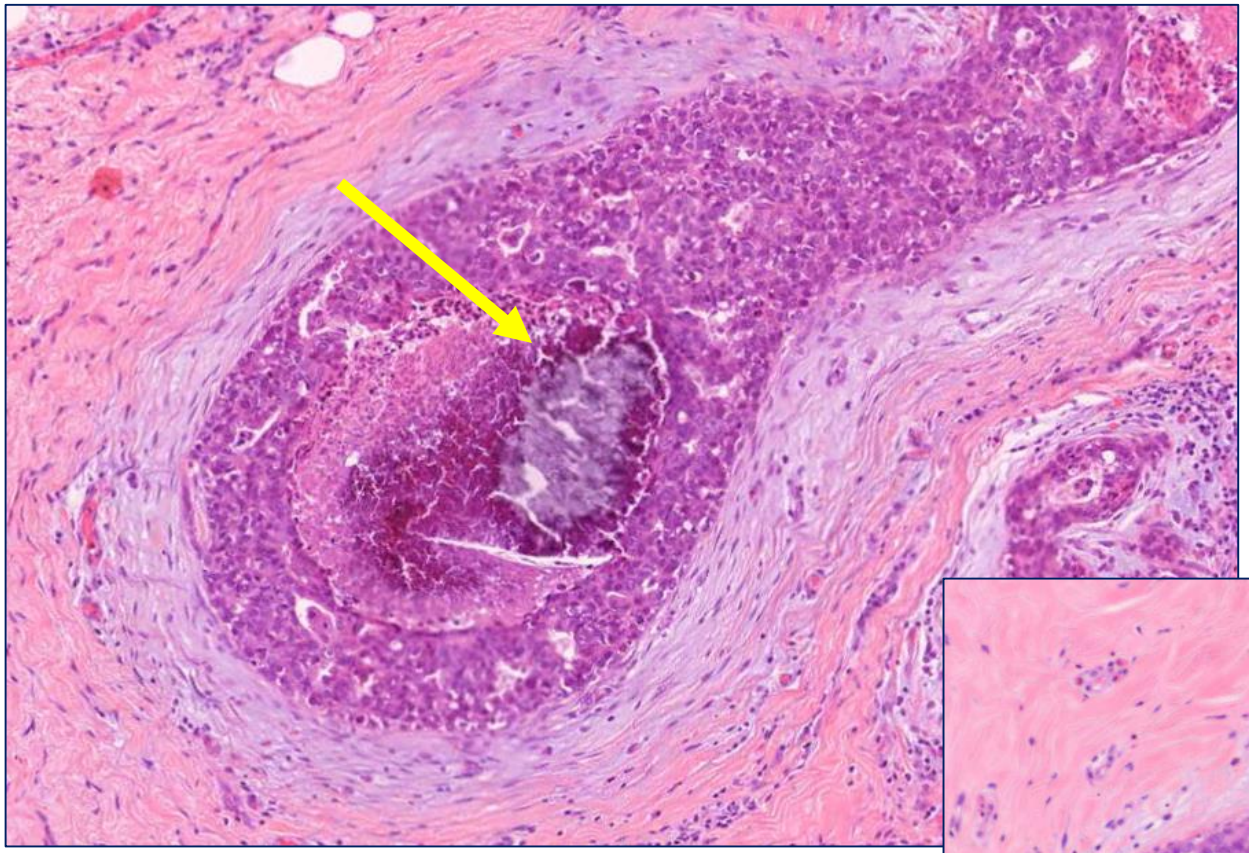




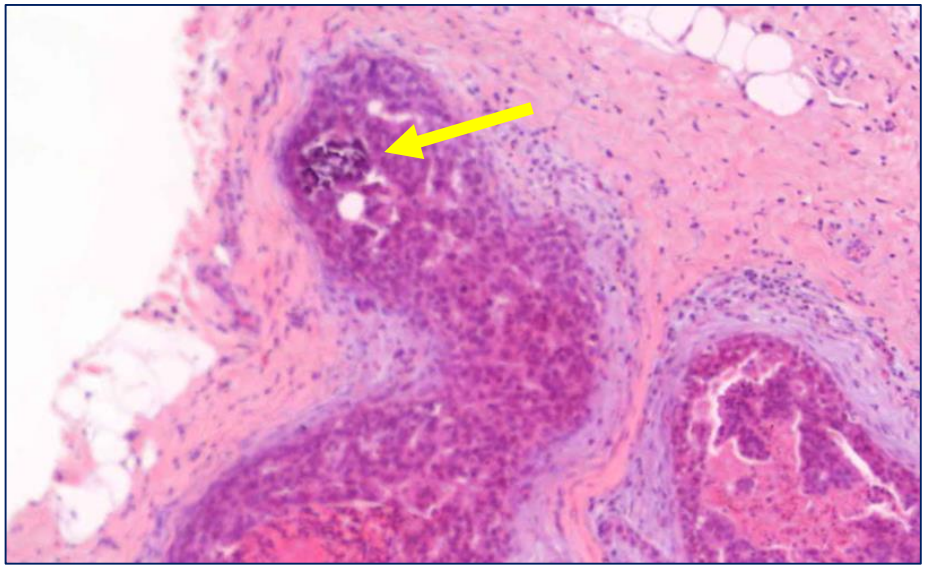


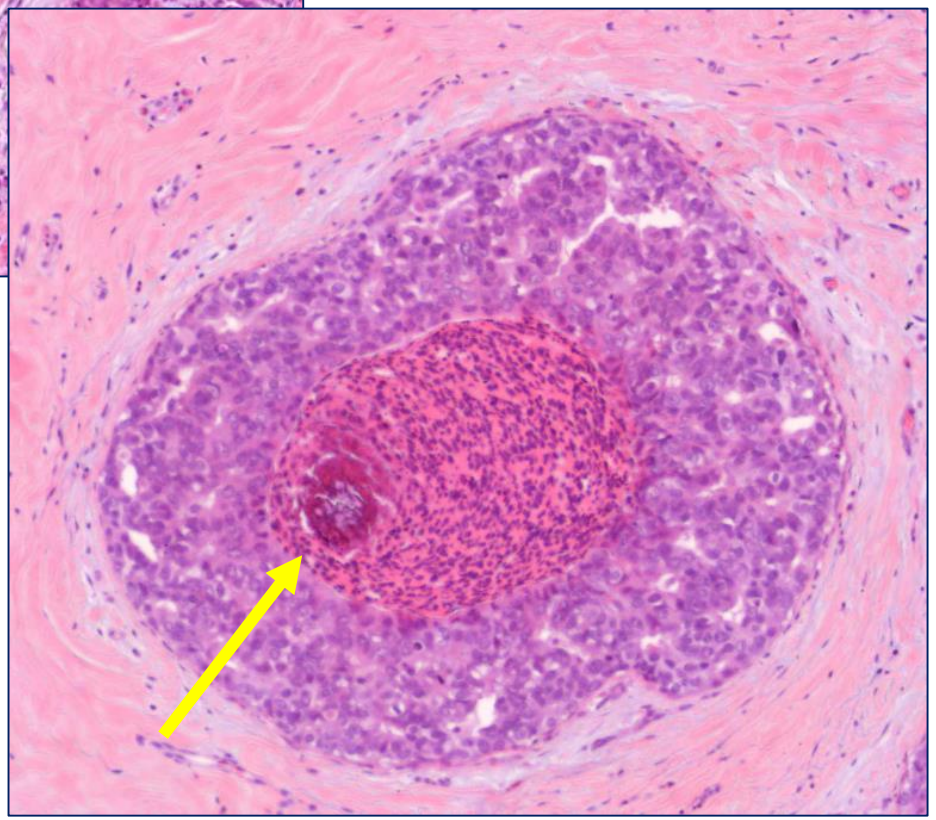

comedo
DCIS

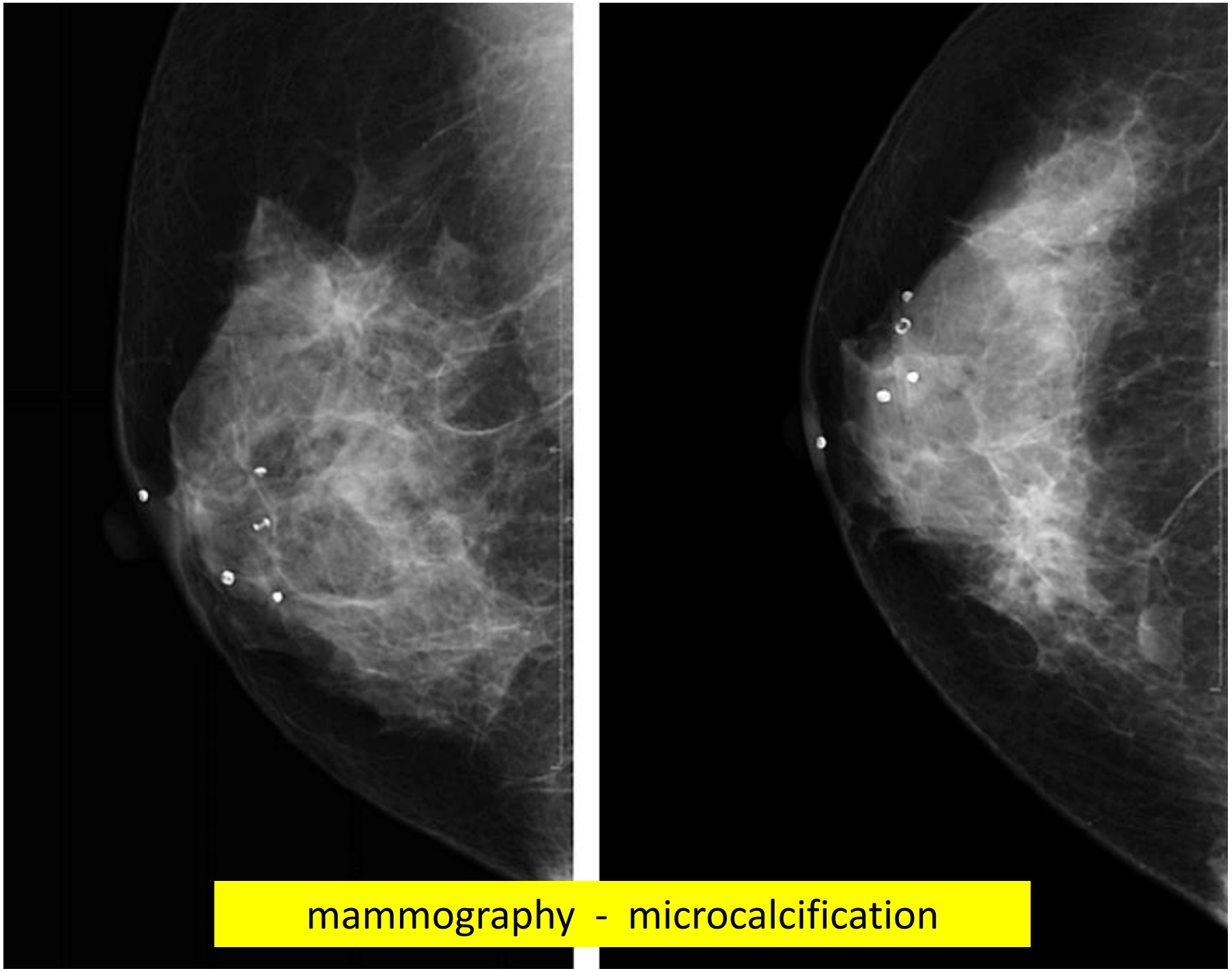




dystrophic calcification







mammography - microcalcification