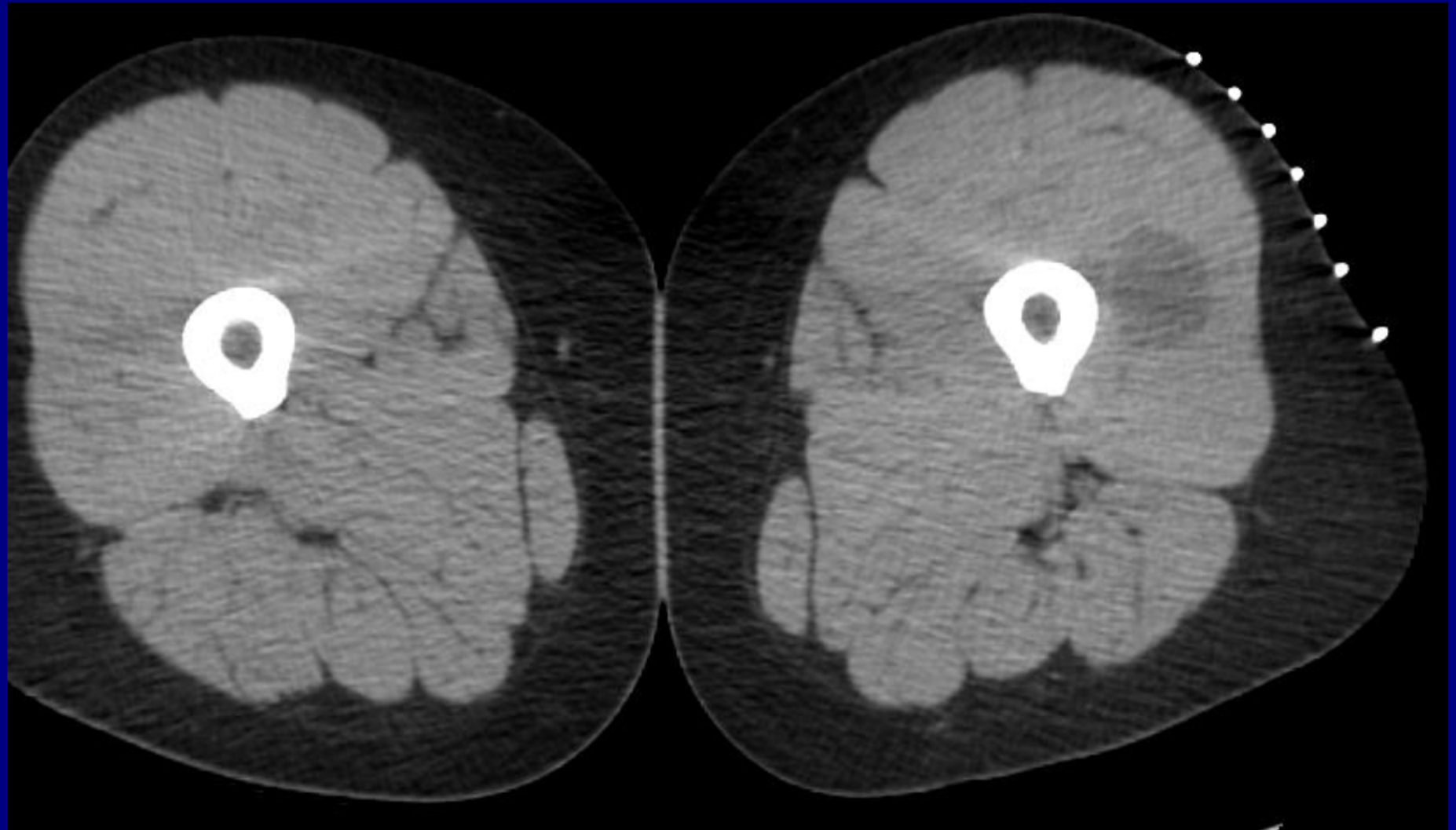


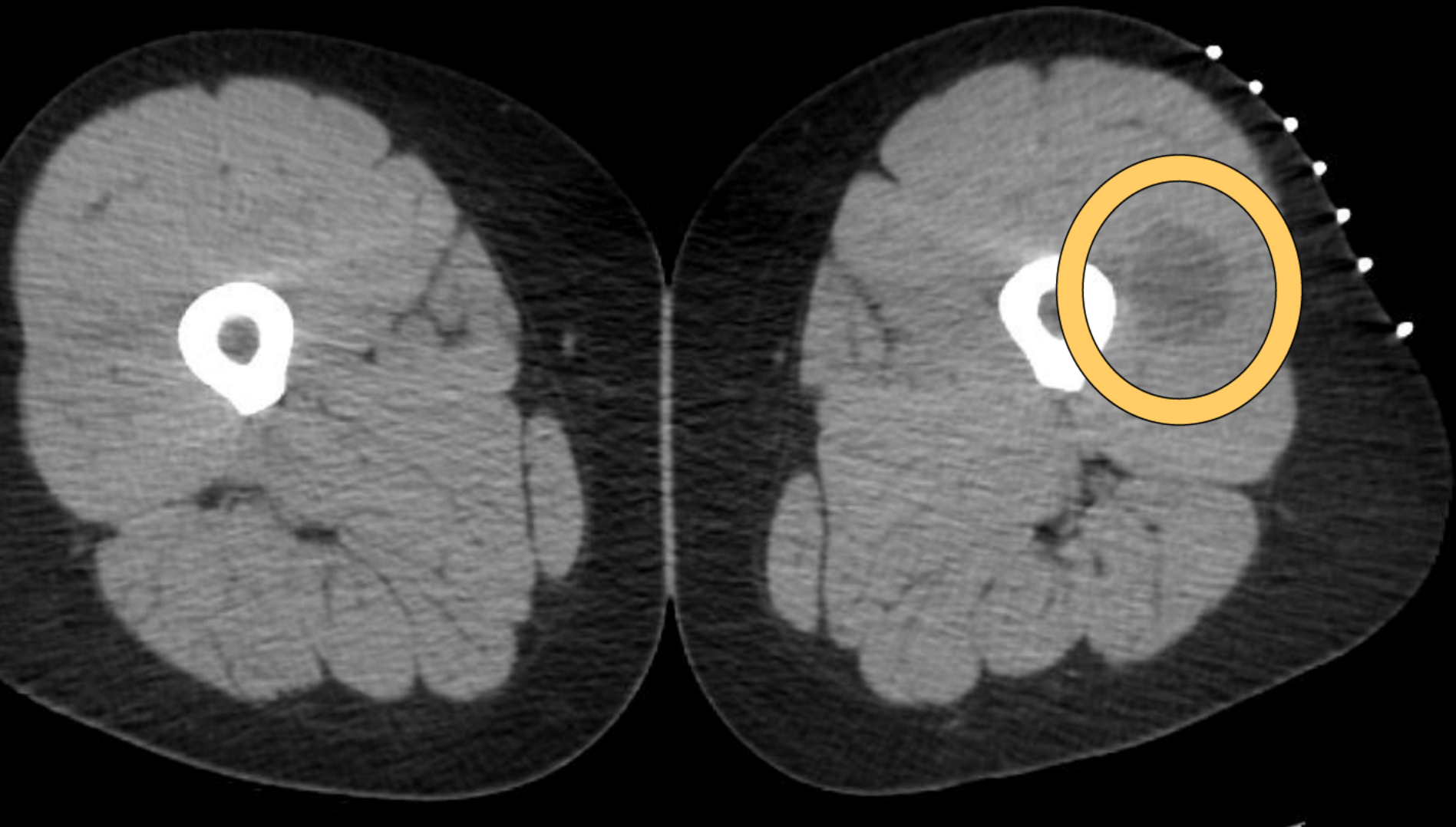
Best Cases of the AIRP

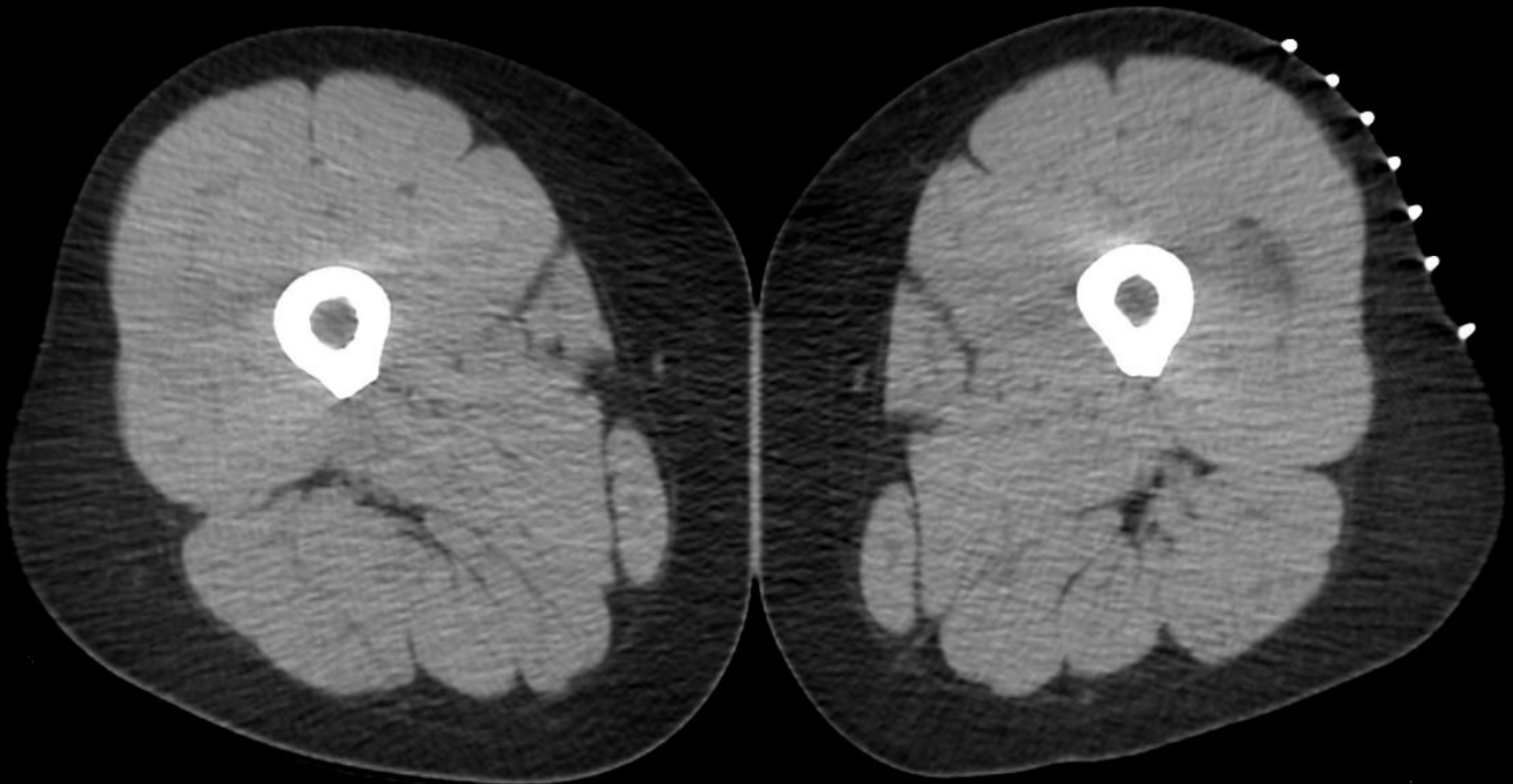
March 10 – April 4, 2014

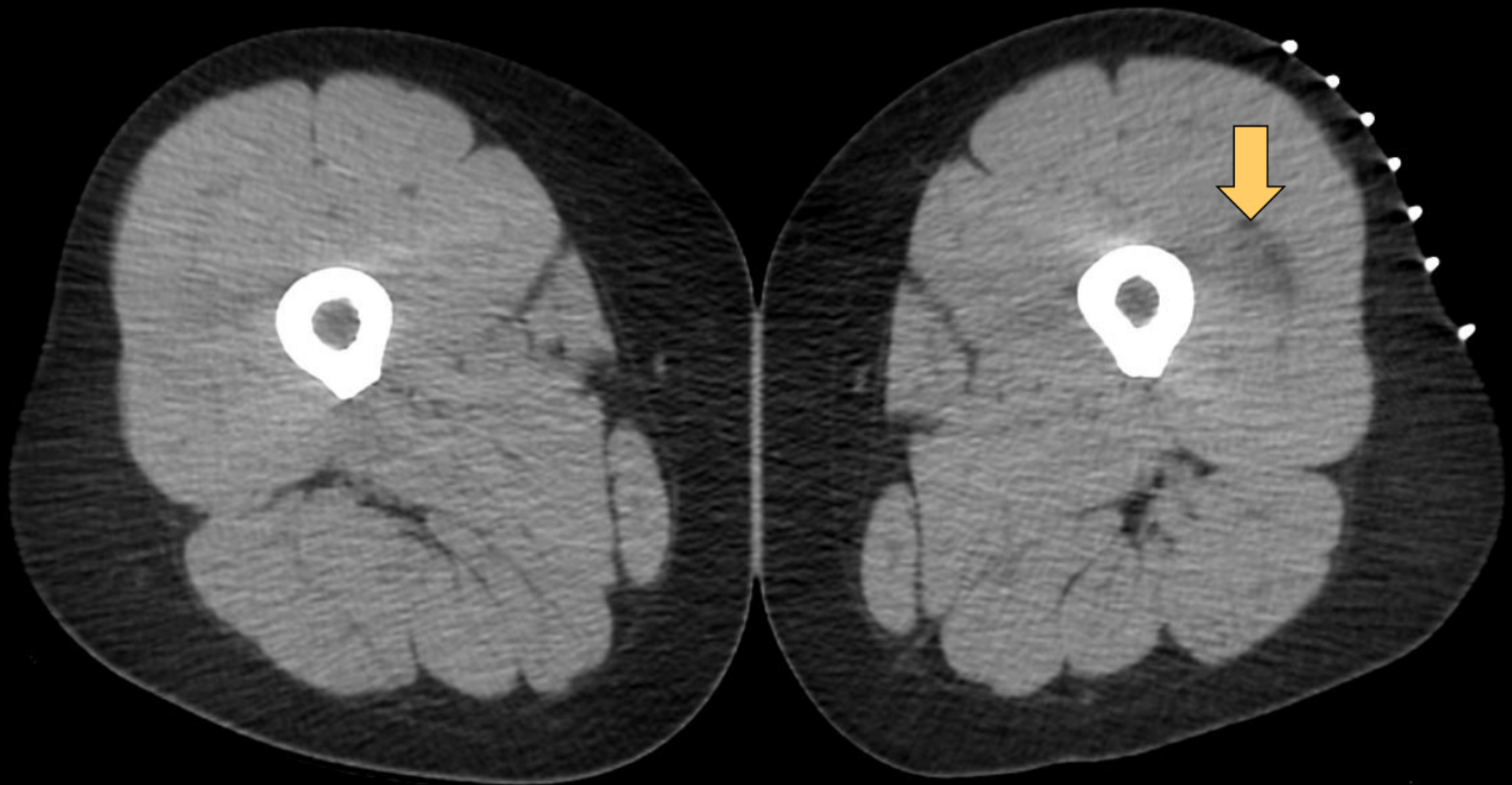
Musculoskeletal Best Case

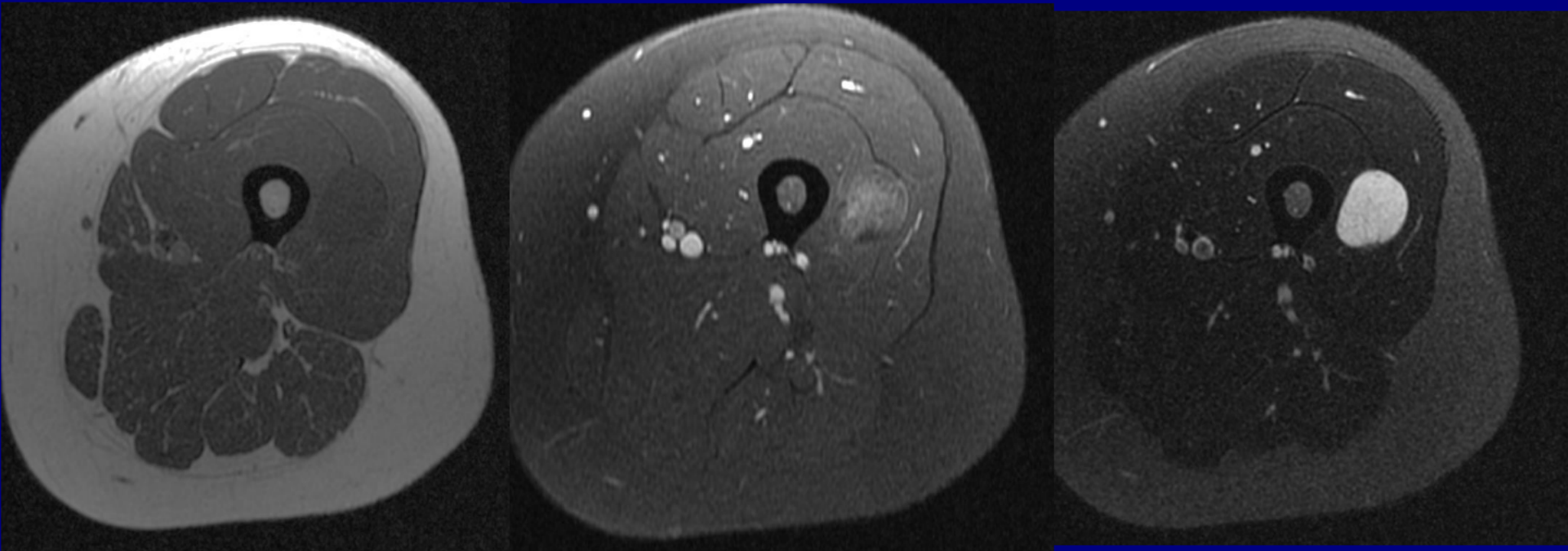
31-year-old woman with left thigh discomfort







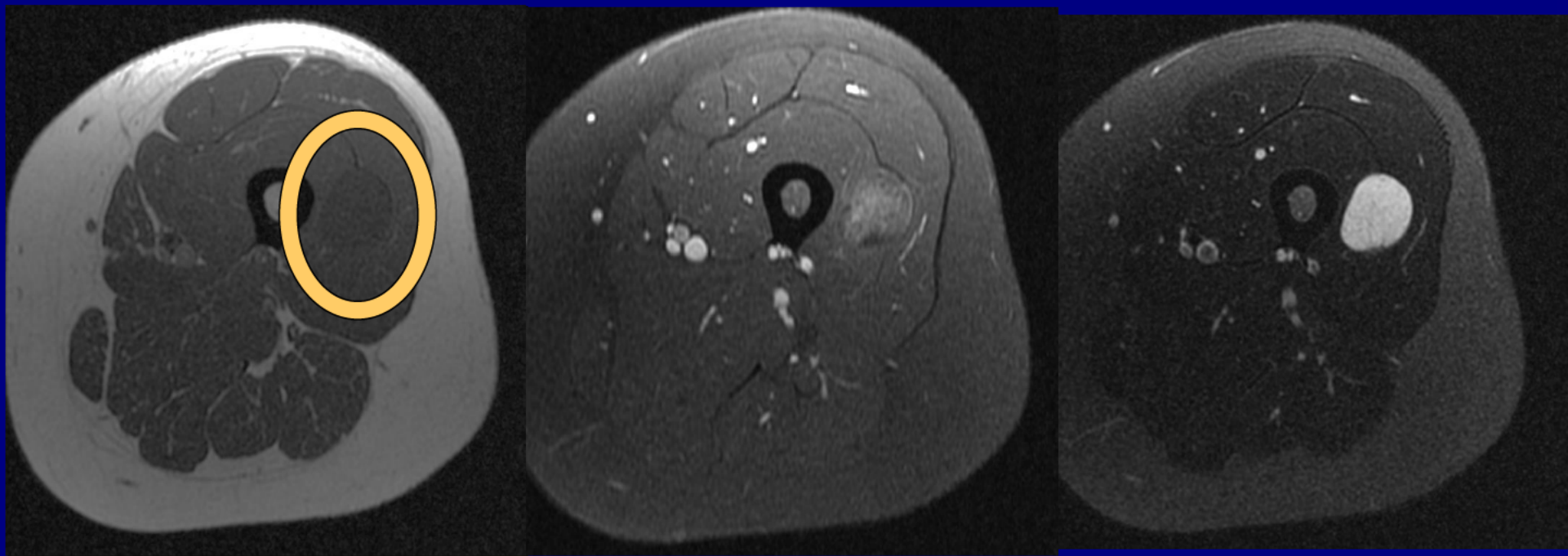




T1

T1 PGFS

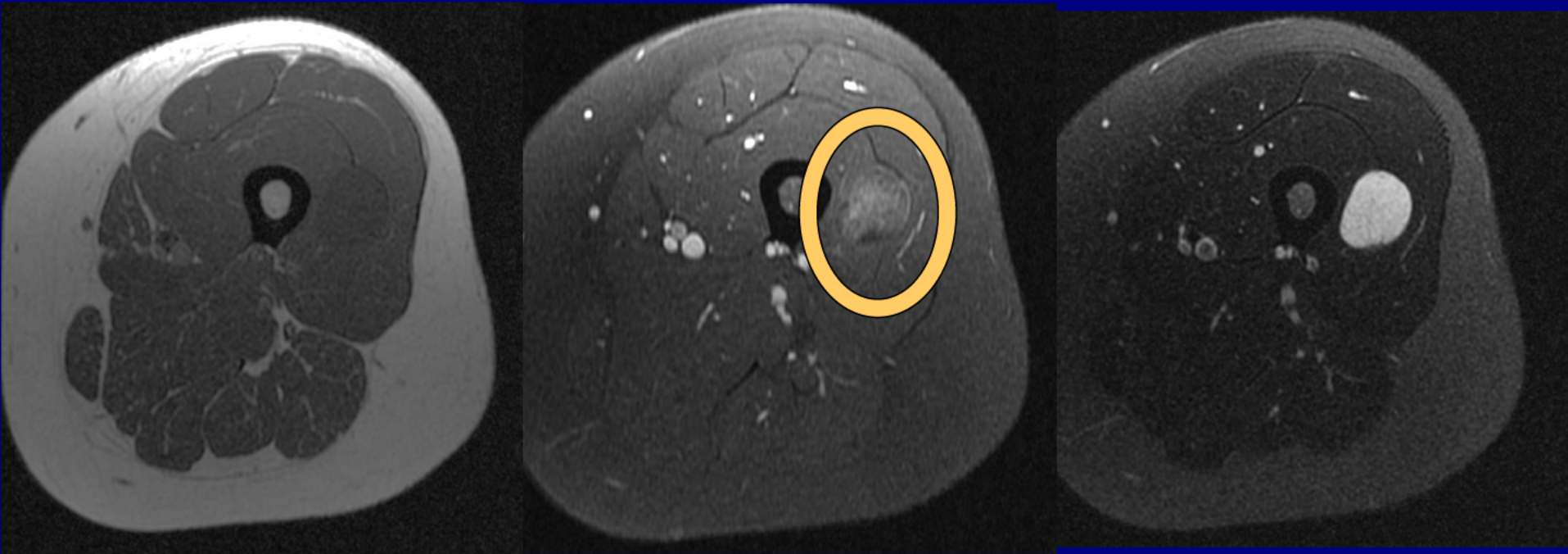
T2 FS



T1

T1 PGFS

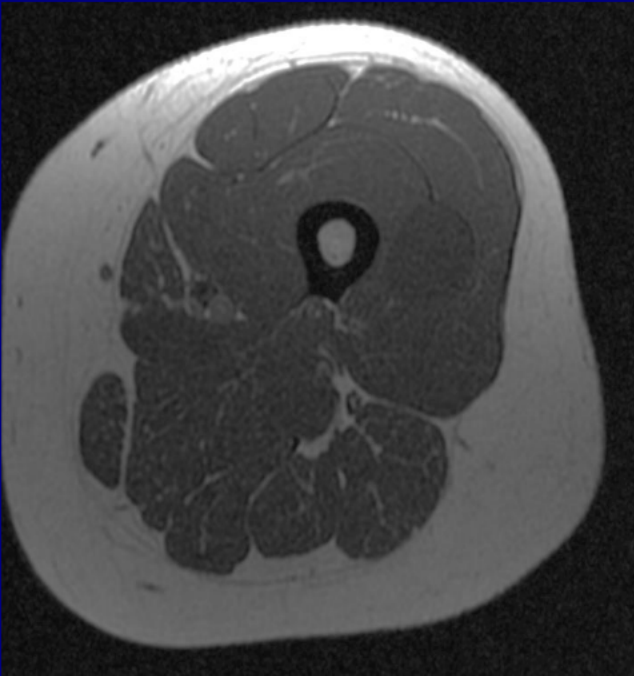
T2 FS



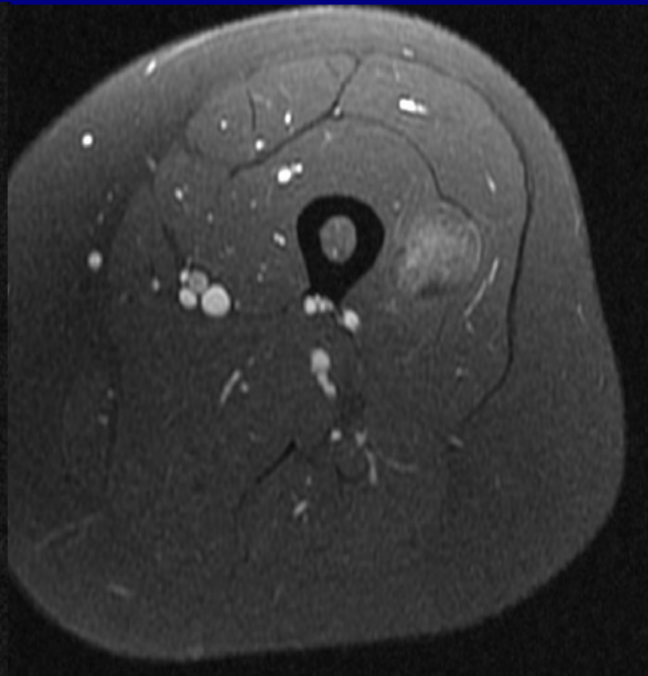
T1

T1 PGFS

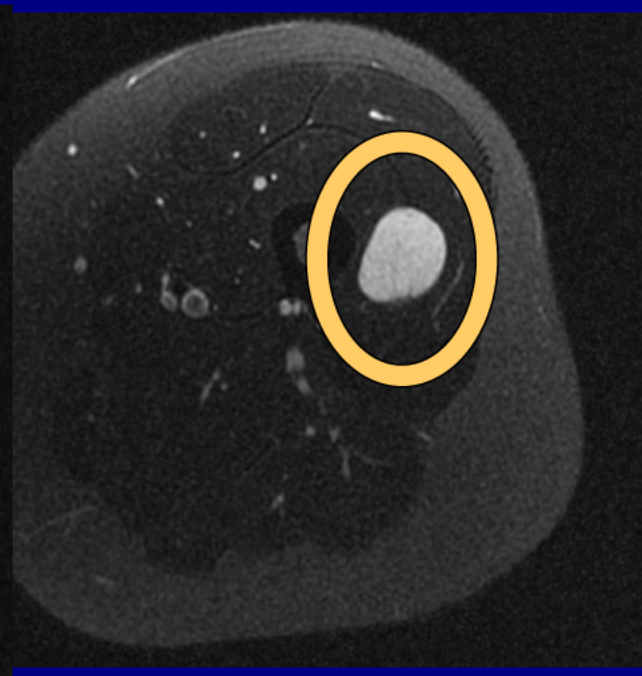
T2 FS



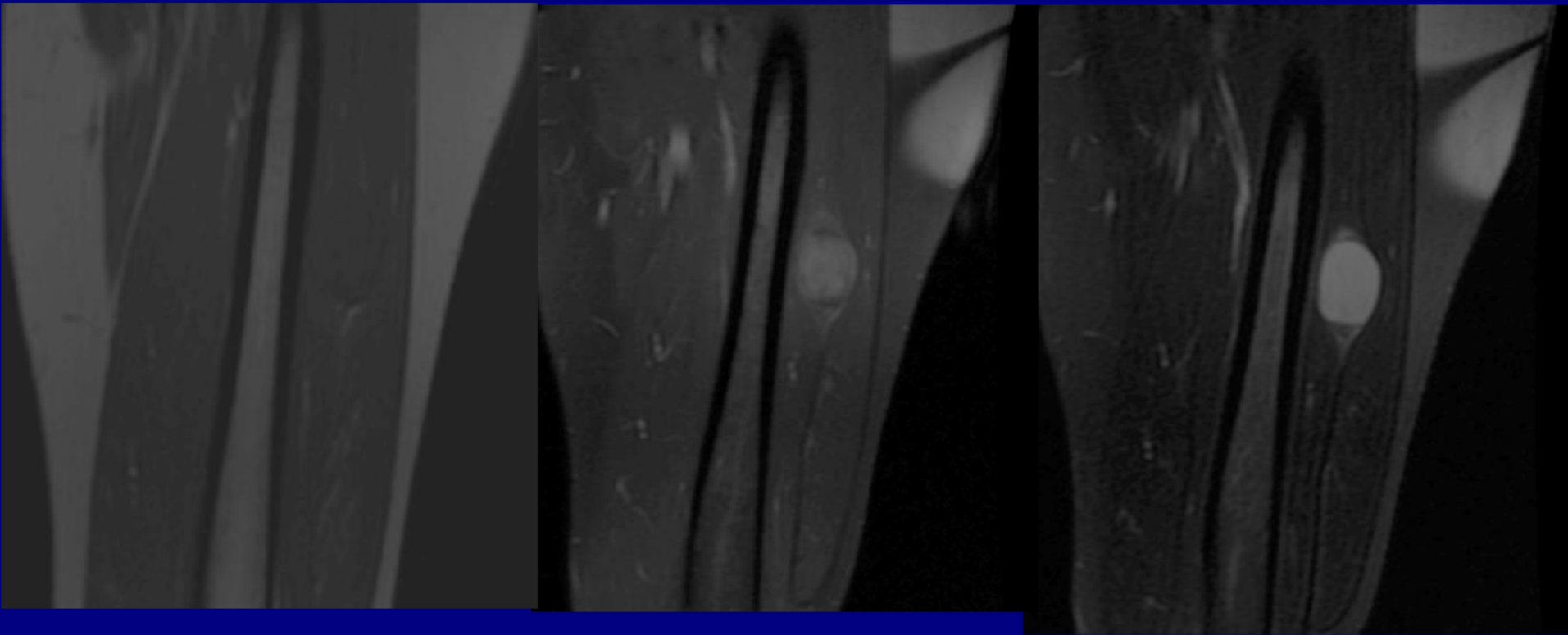
T1



T1 PGFS



T2 FS



T1

T1 PGFS

T2 FS



T1

T1 PGFS

T2 FS



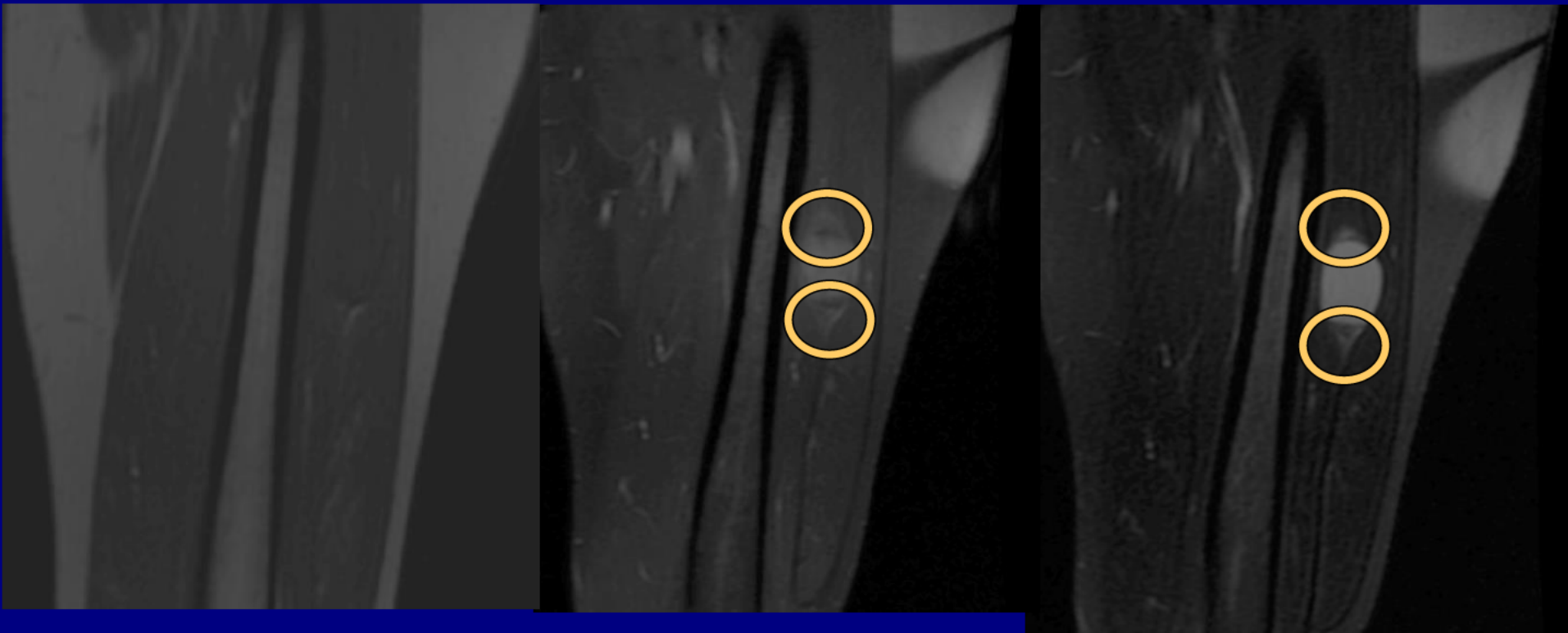
T1



T1 PGFS



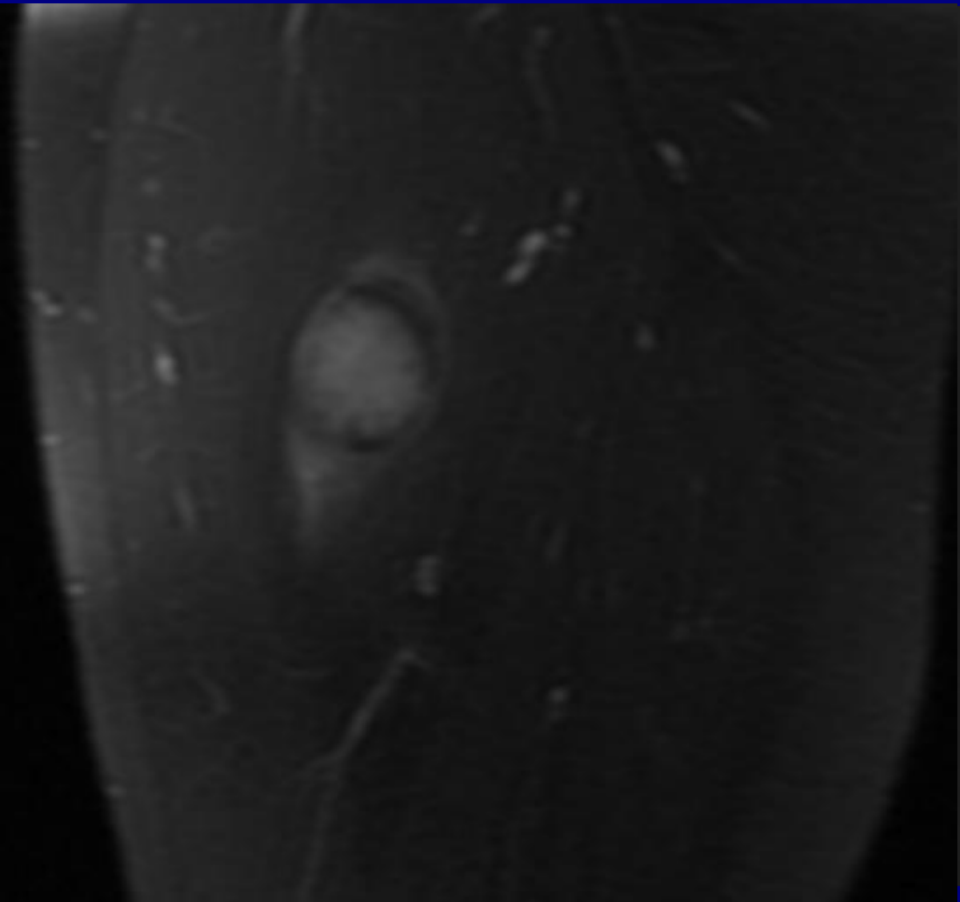
T2 FS



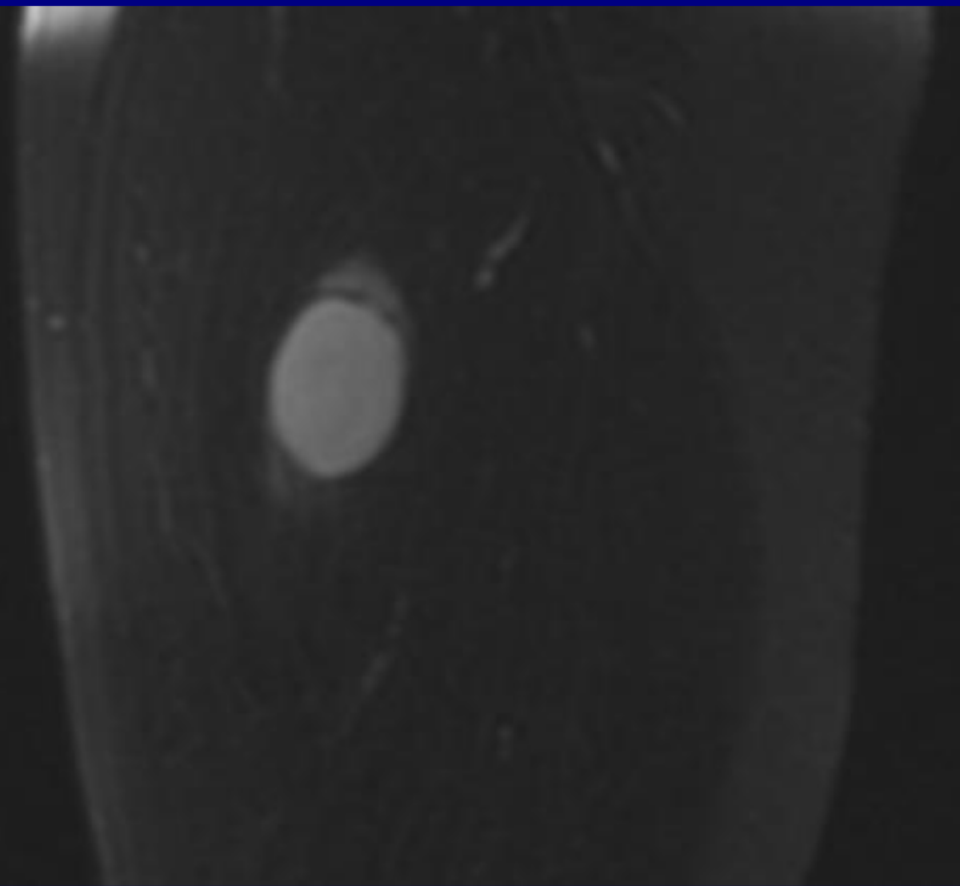
T1

T1 PGFS

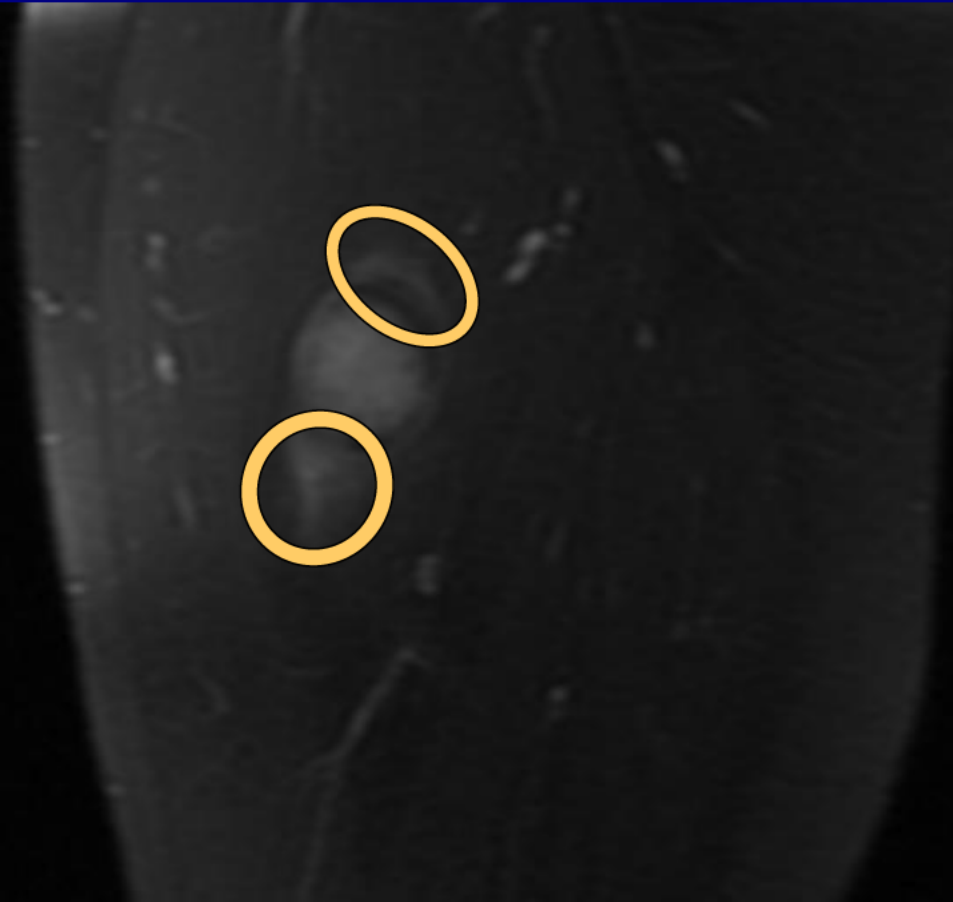
T2 FS



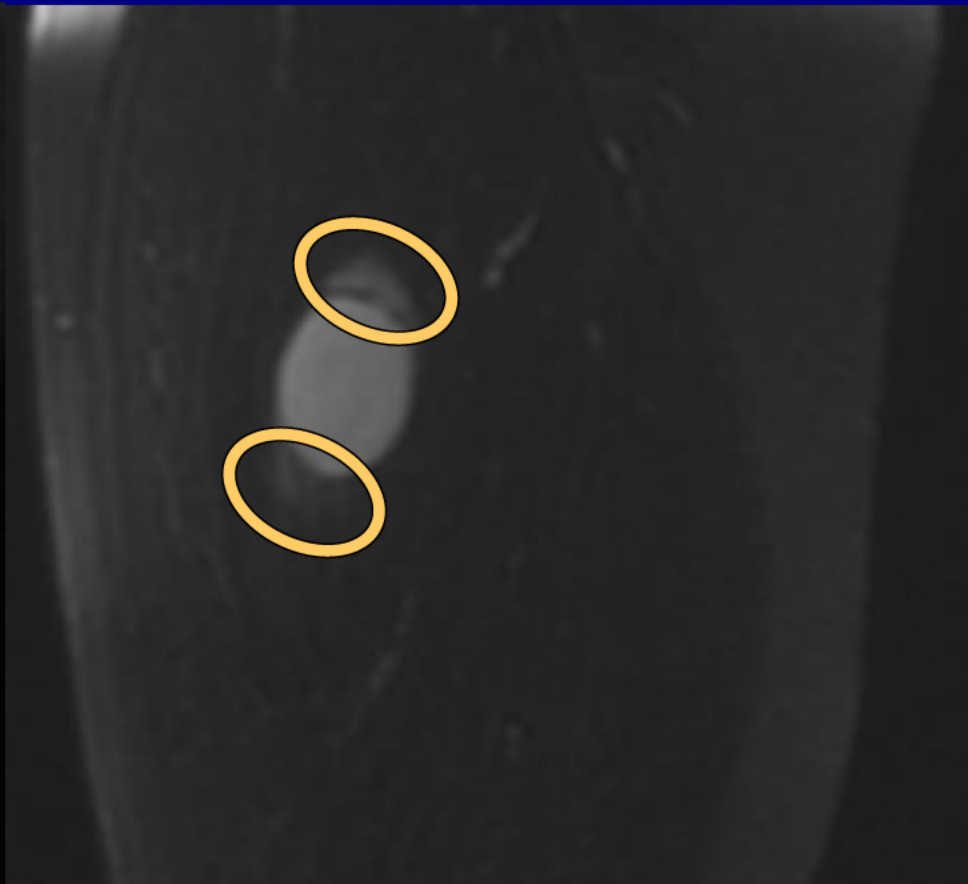
T1 PGFS



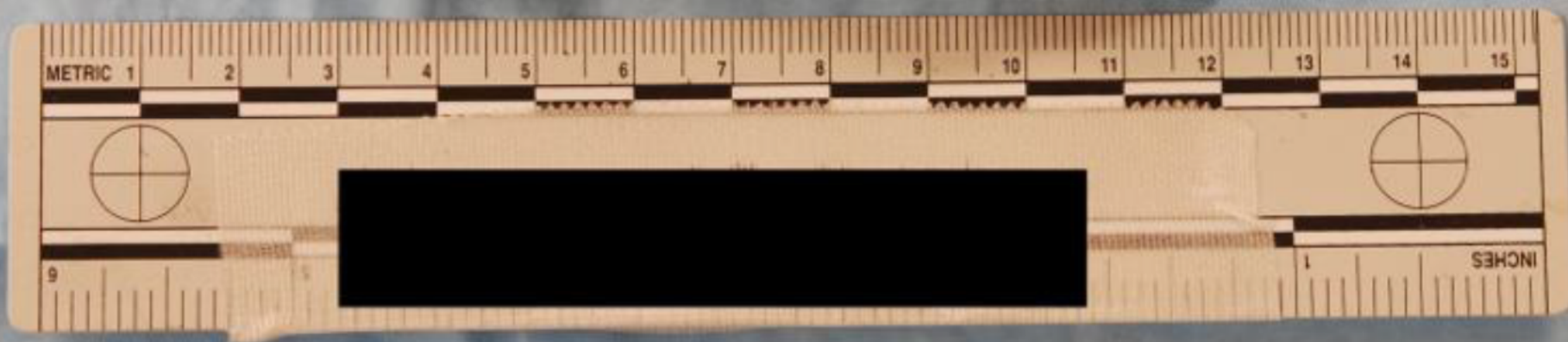
T2 FS

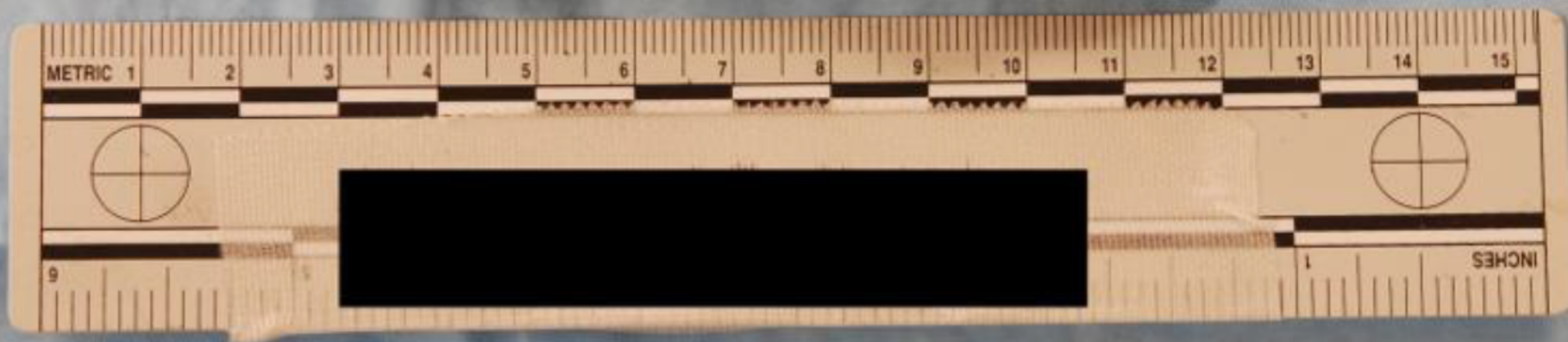


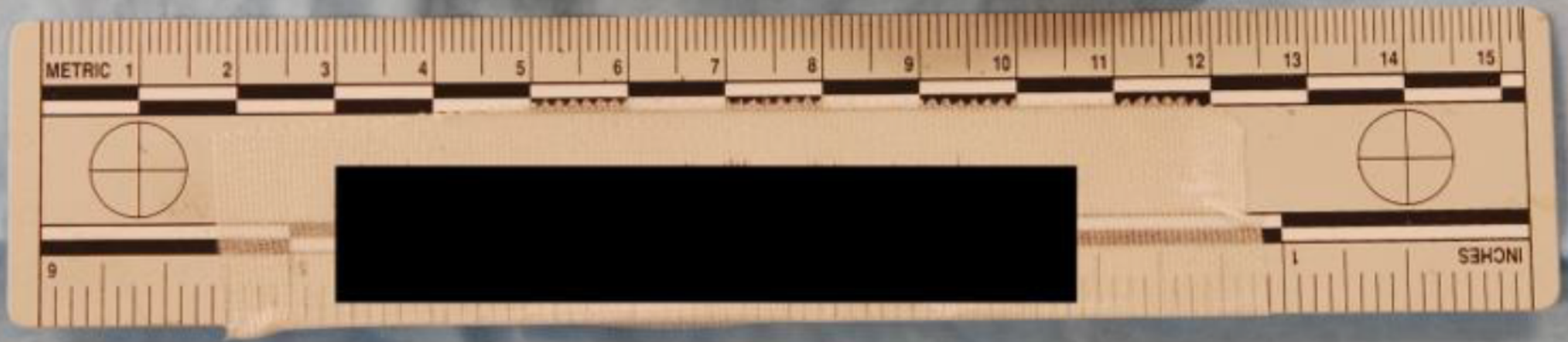
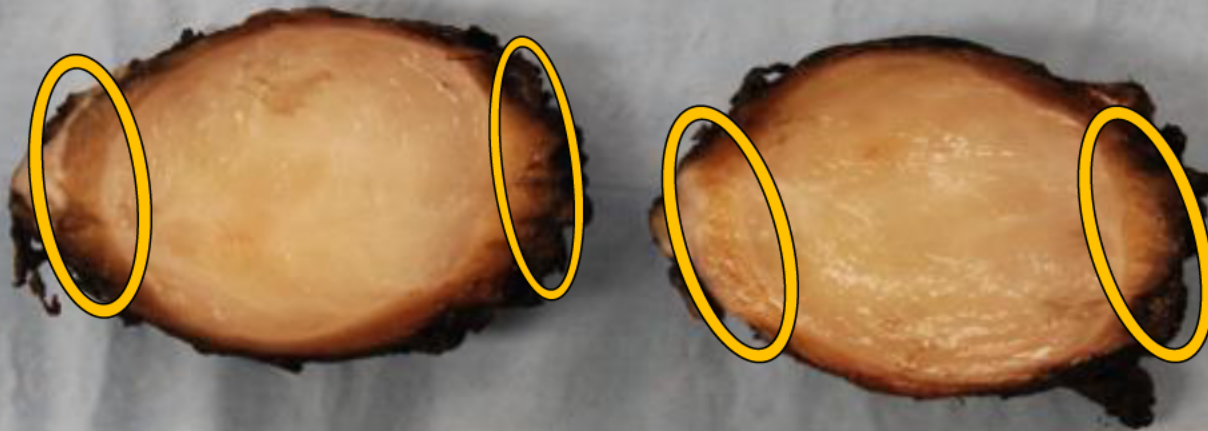
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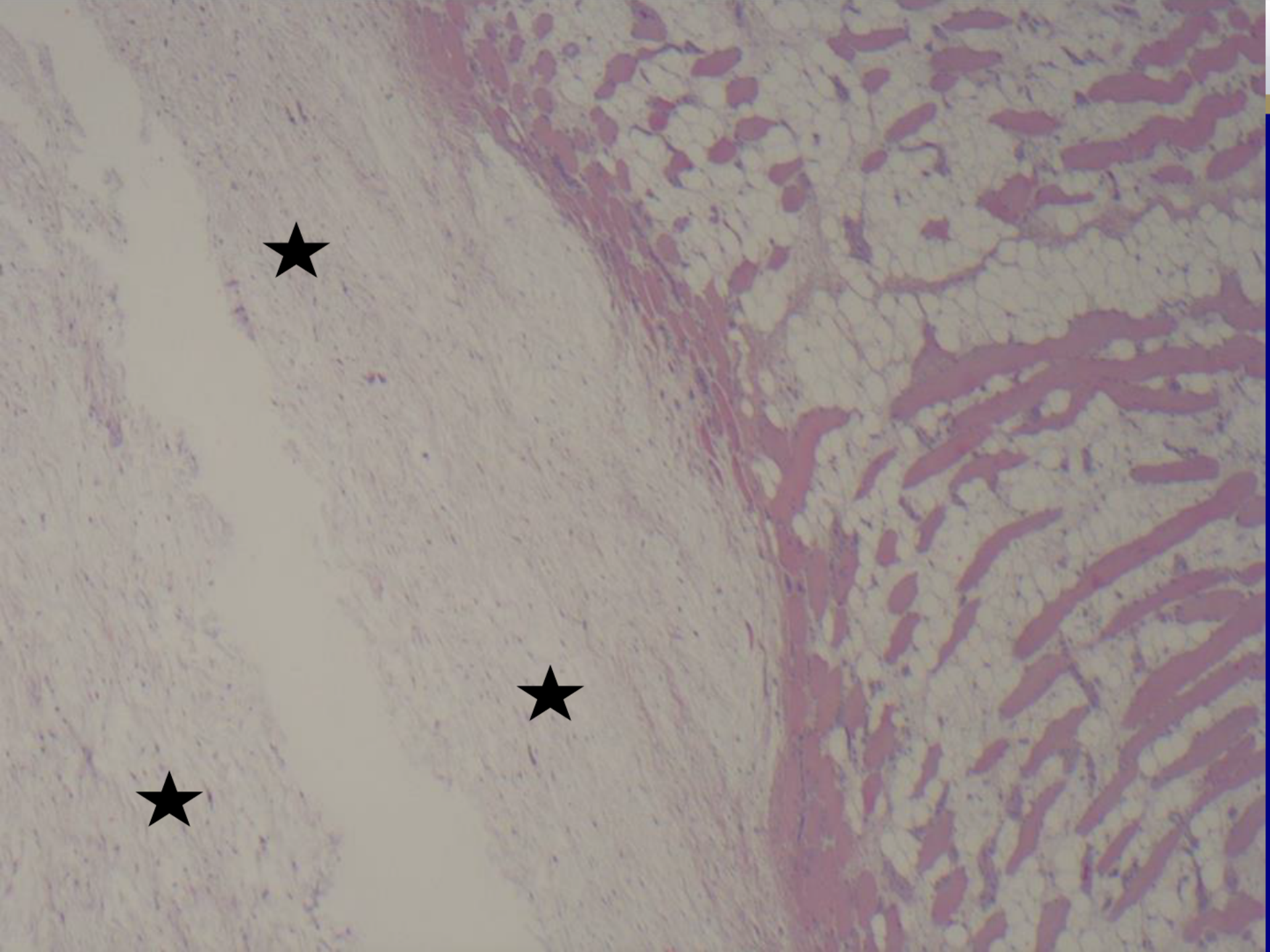


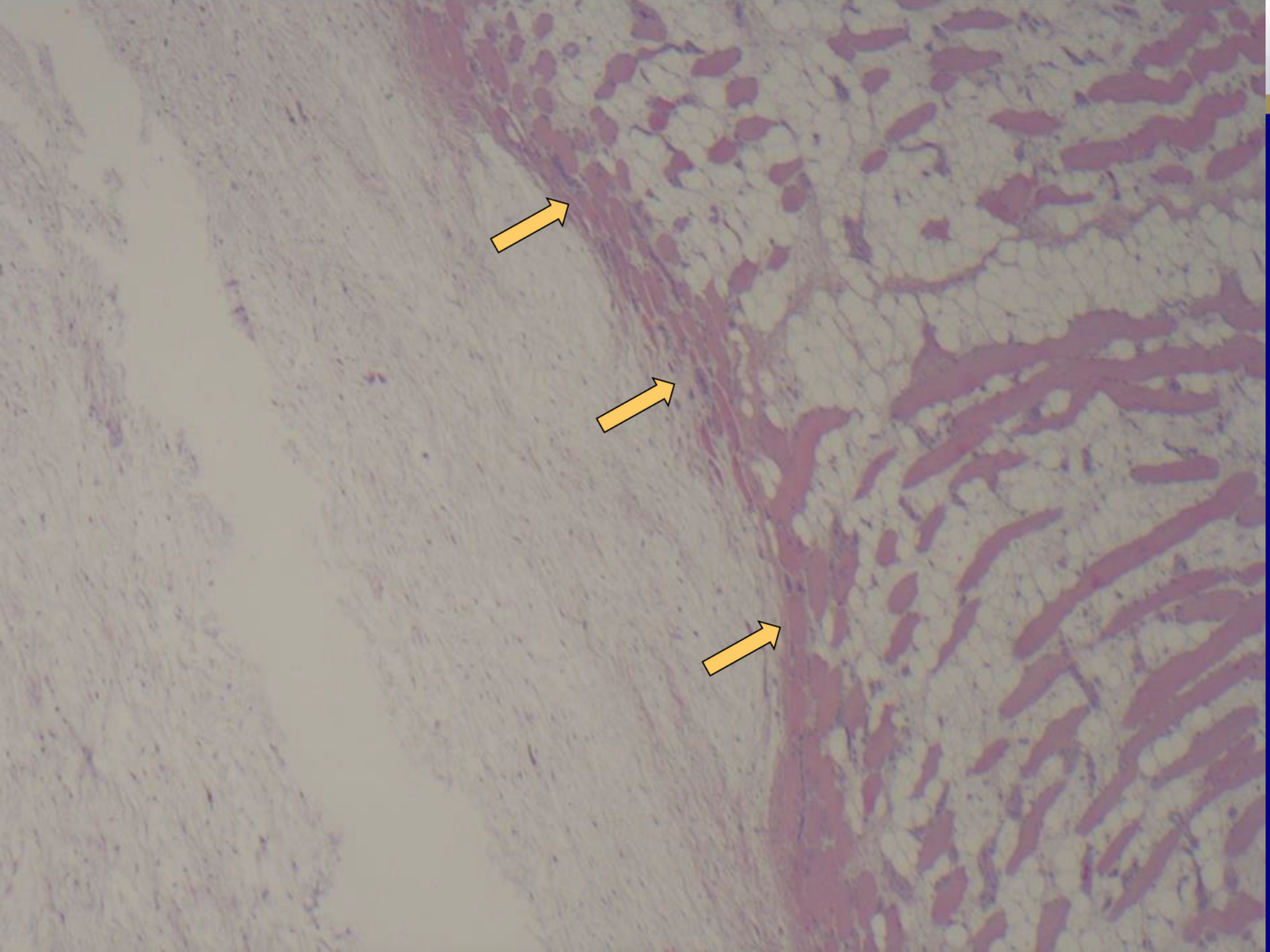
T2 FS

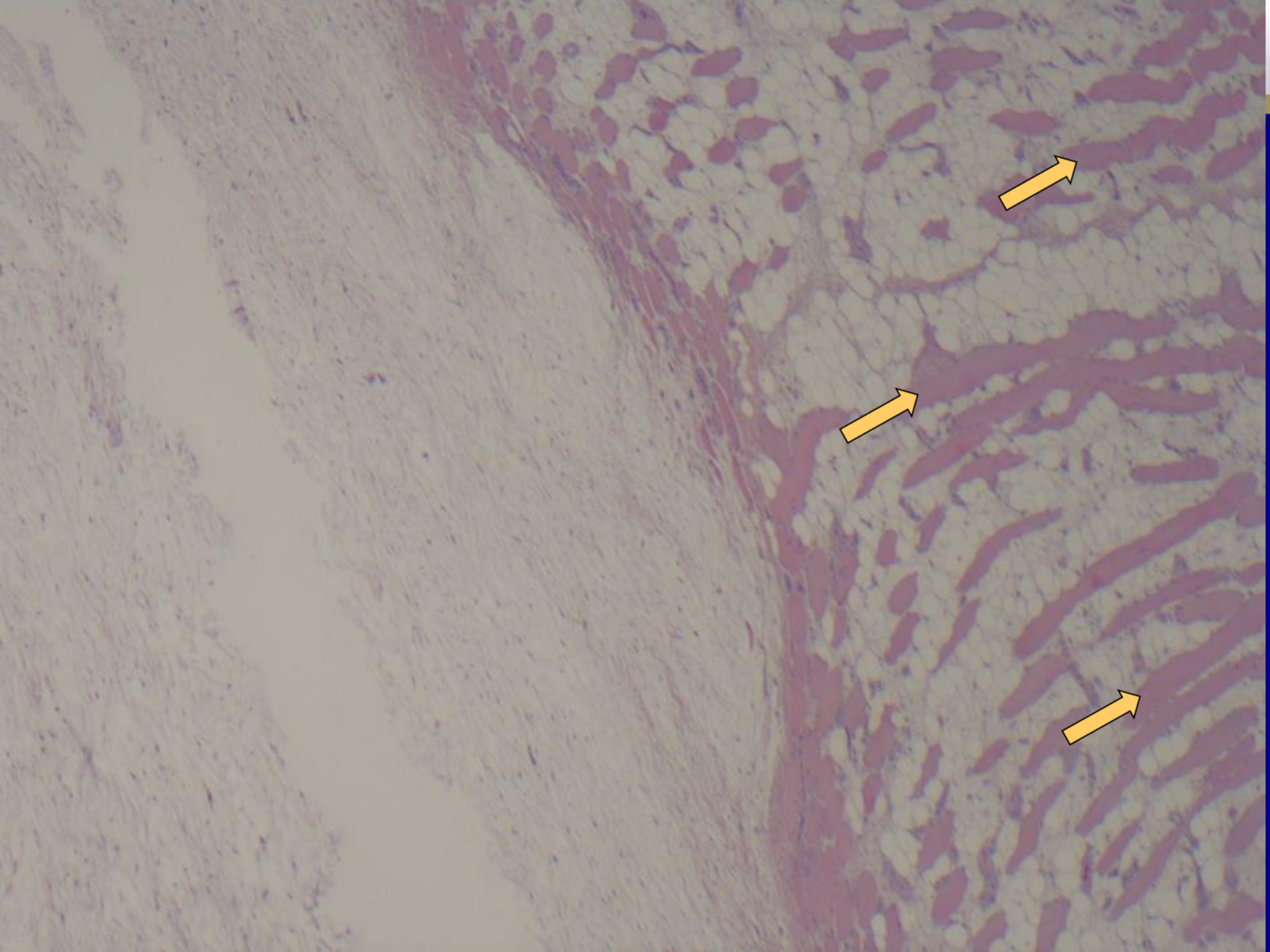


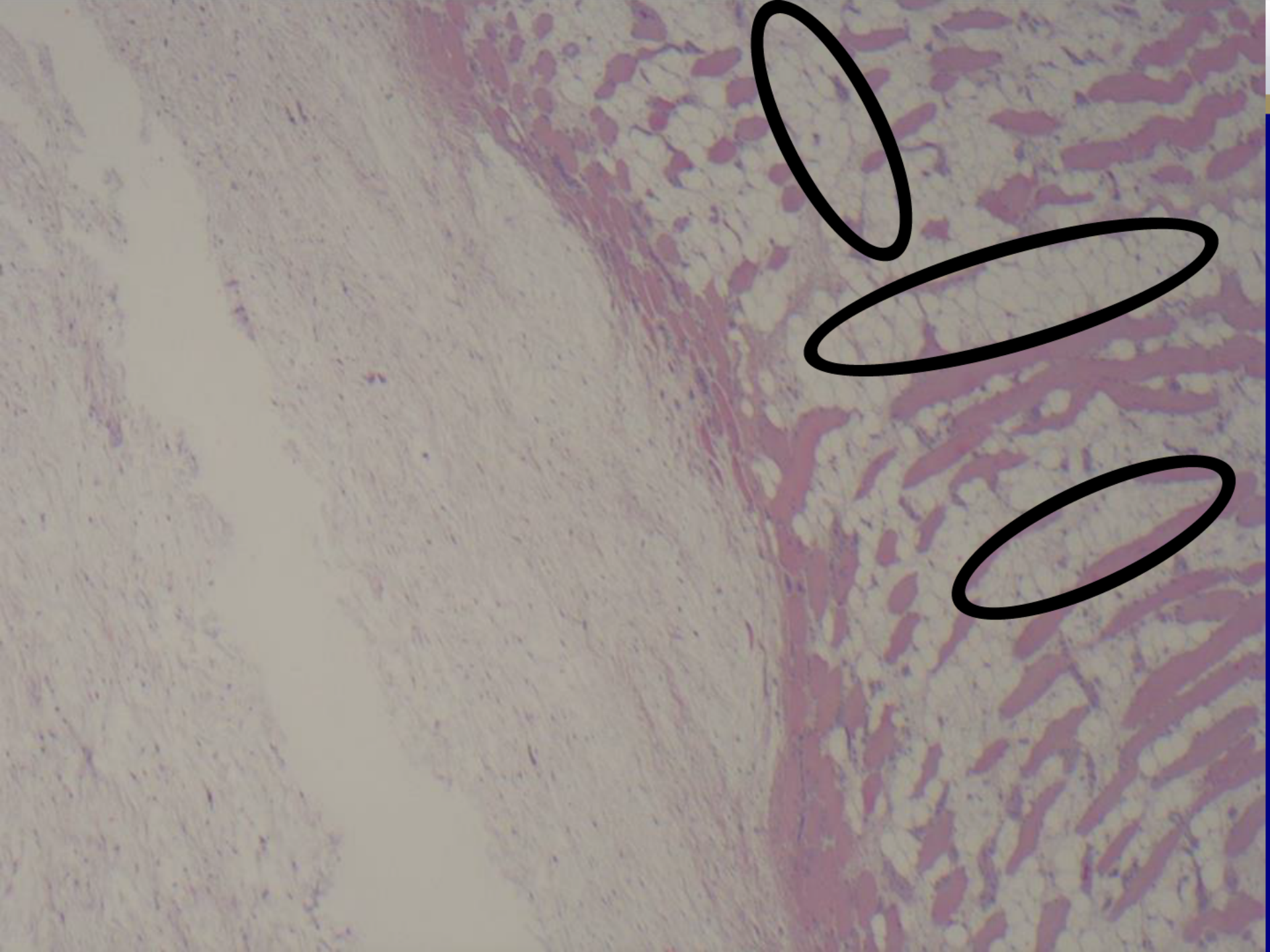












Intramuscular Myxoma

Megan DeCecchis, MD
Naval Medical Center Portsmouth
Portsmouth, Virginia

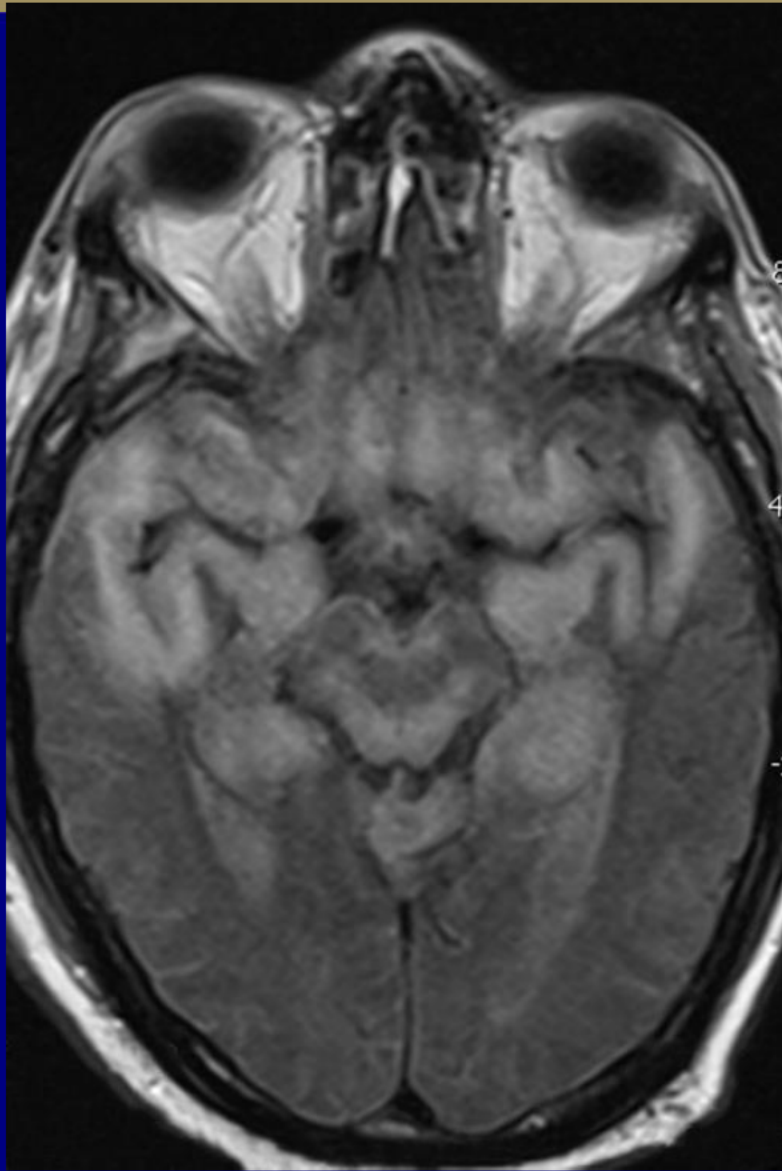
MYXOMA

RADIOLOGY: QUADRAFECTA

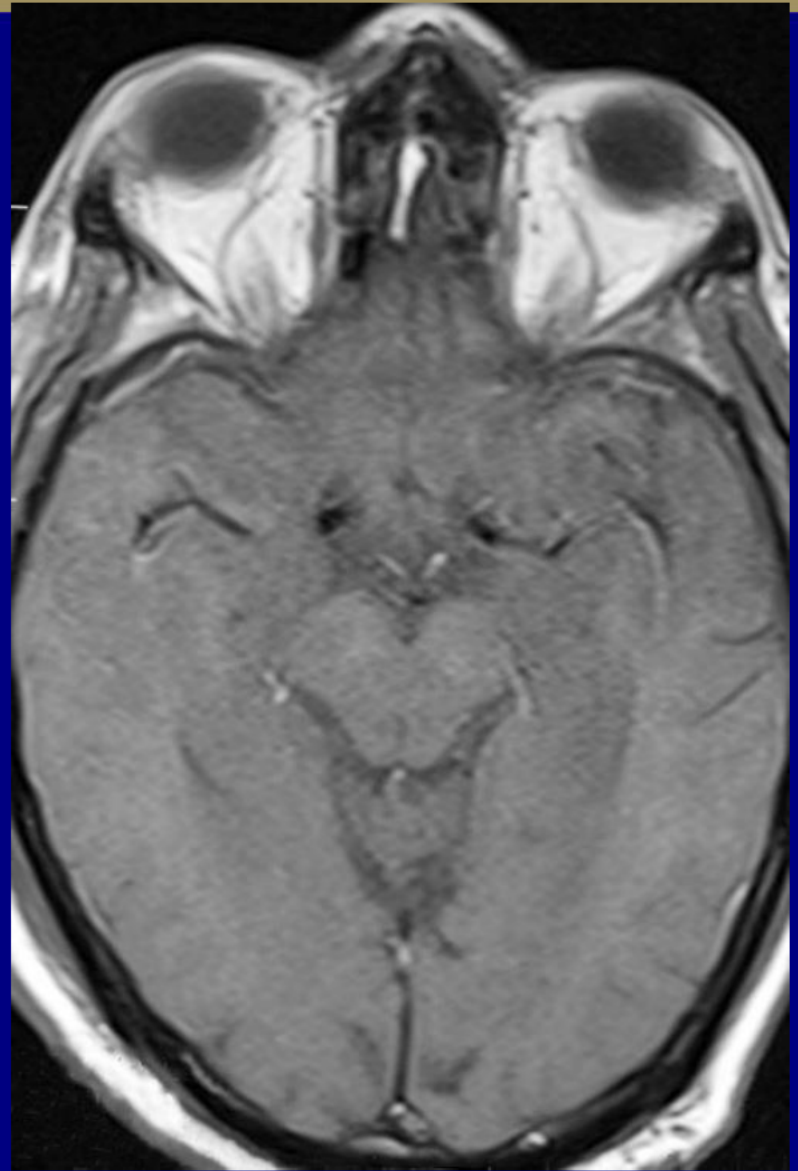
- Small (<5cm) high water content intramuscular mass
- Mild enhancement - Peripheral rim/septae (thick- 43%) or mild diffuse pattern (57%)
- Small rim of fat-like tissue CT (25%), MR (71%)
- Edema surrounding mass MR (79%)

Neuroradiology Best Case

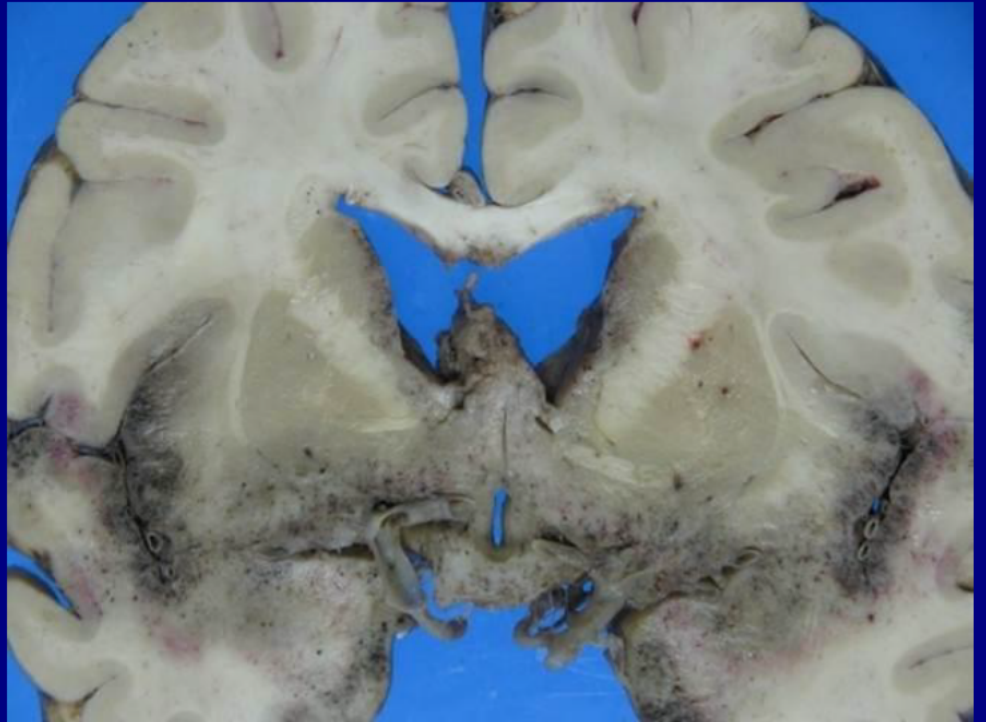
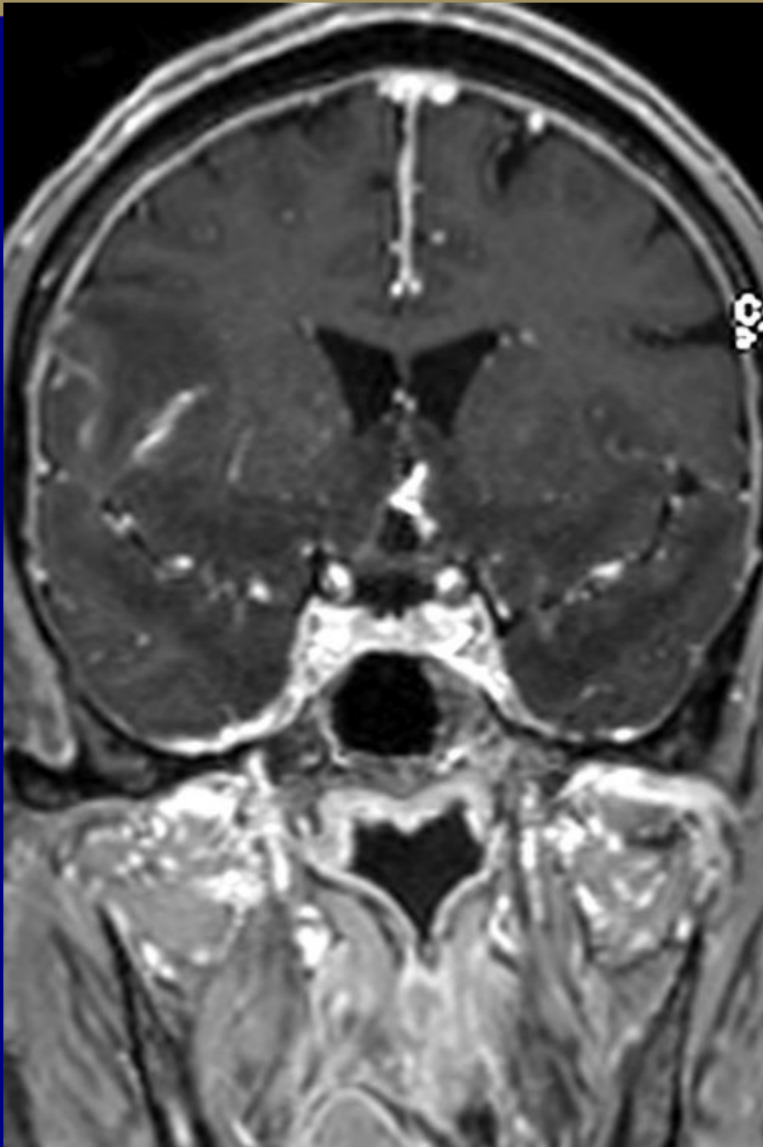
72-year-old man status post renal transplant for 5 months and on immunosuppressive therapy now with fever, gait disturbance, and rapidly progressive altered mental status. Broad-spectrum therapy for viral, bacterial, and fungal pathogens was unsuccessful.



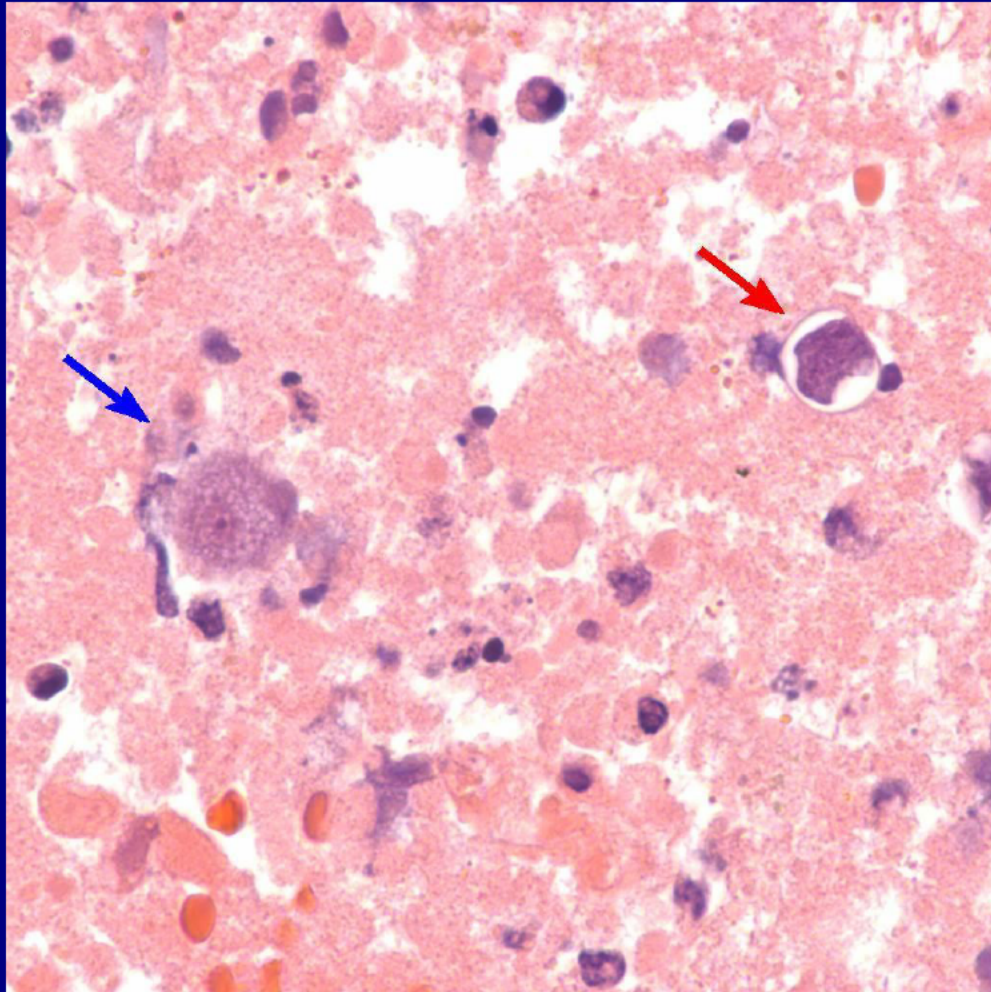
Axial FLAIR



Axial T1 W pre



Post Coronal T1W



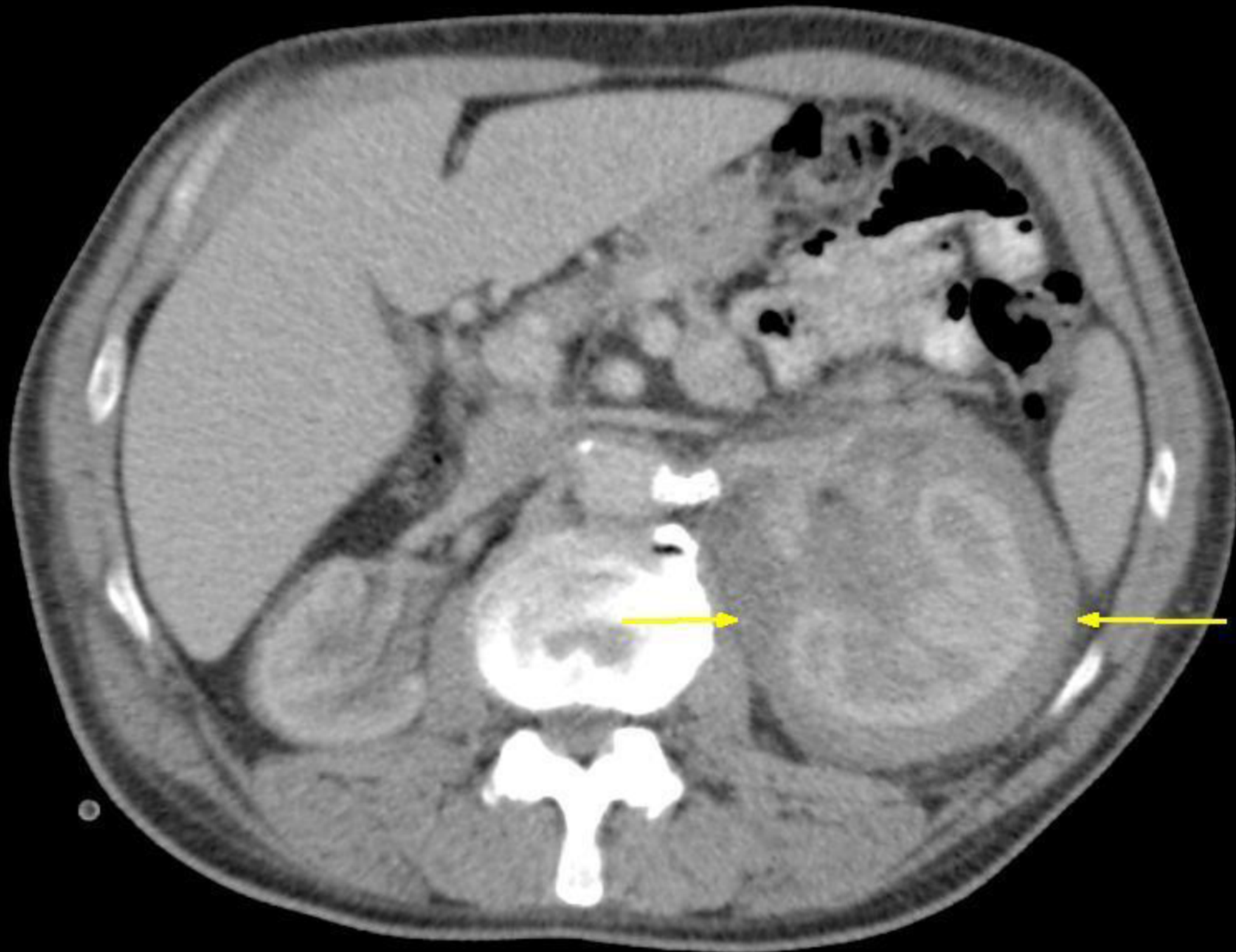
Amoeba in cyst stage (red arrow)
and trophozoite stage (blue arrow)

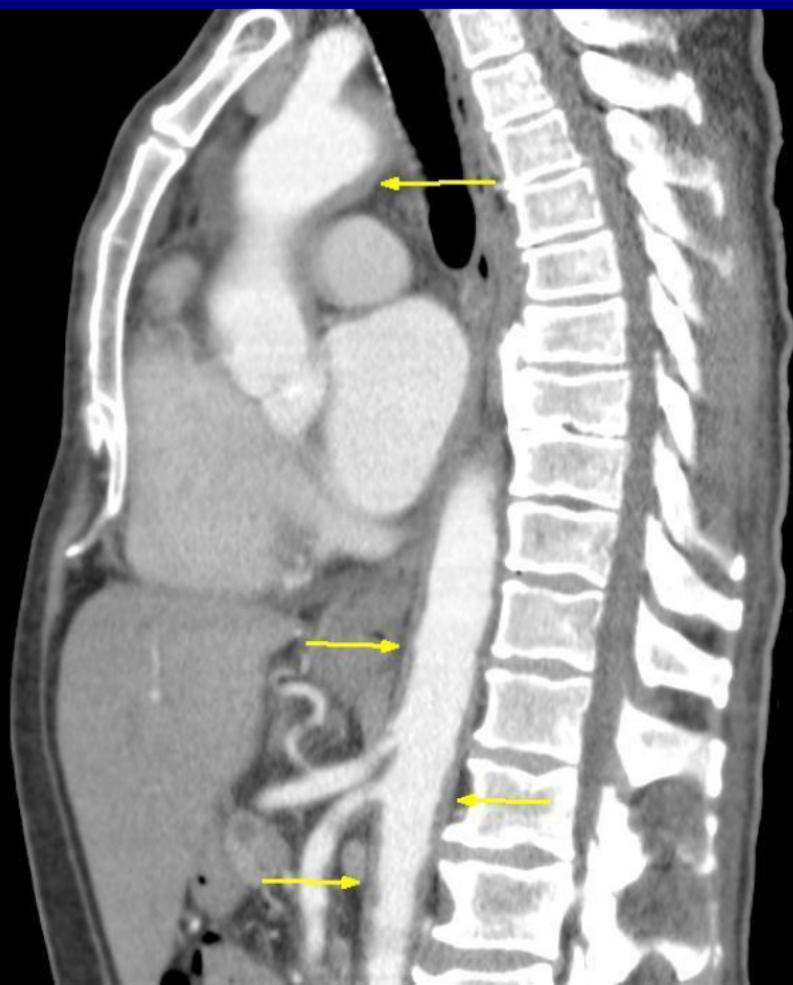
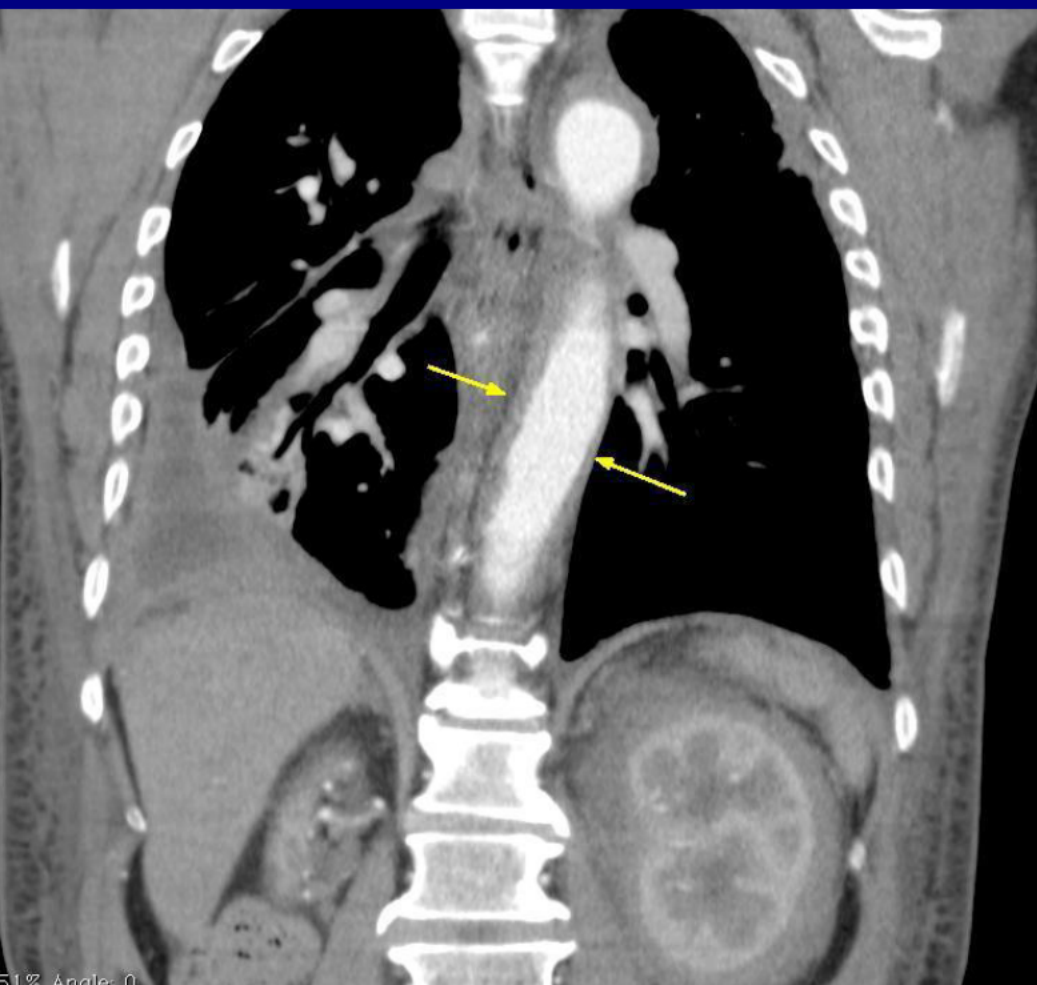
Amebic Encephalitis

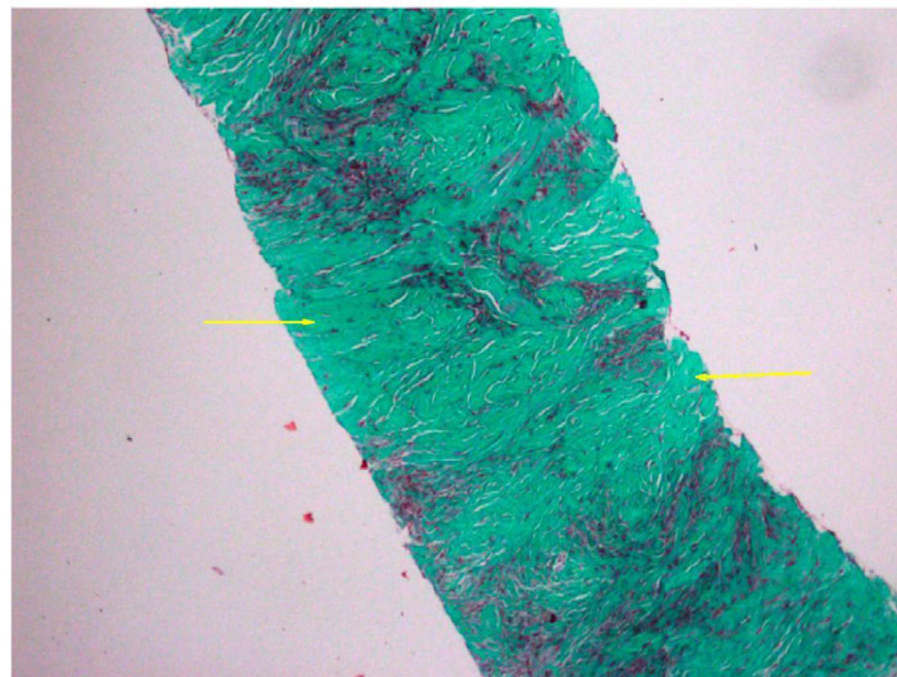
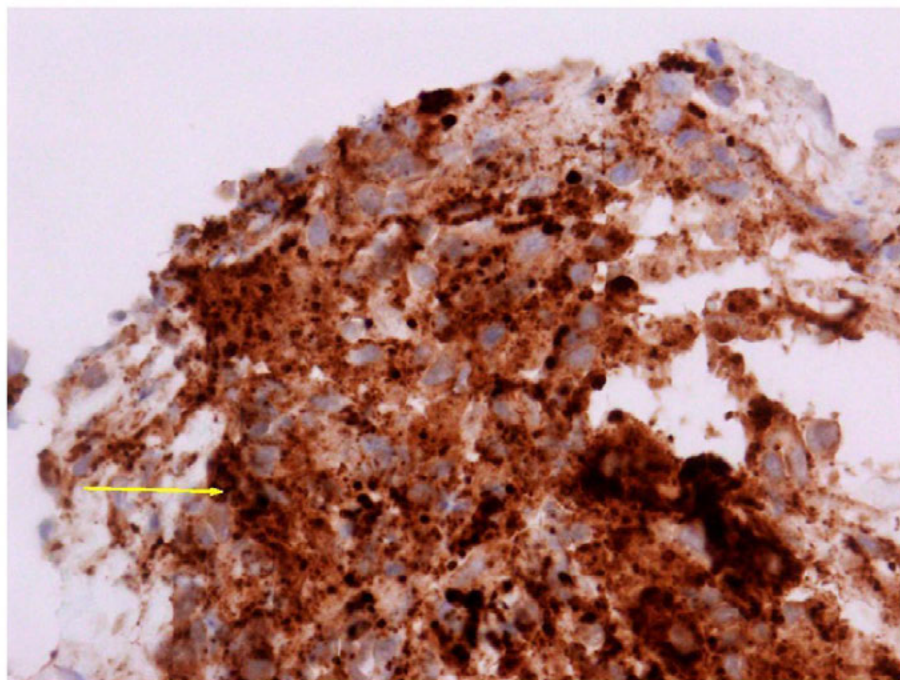
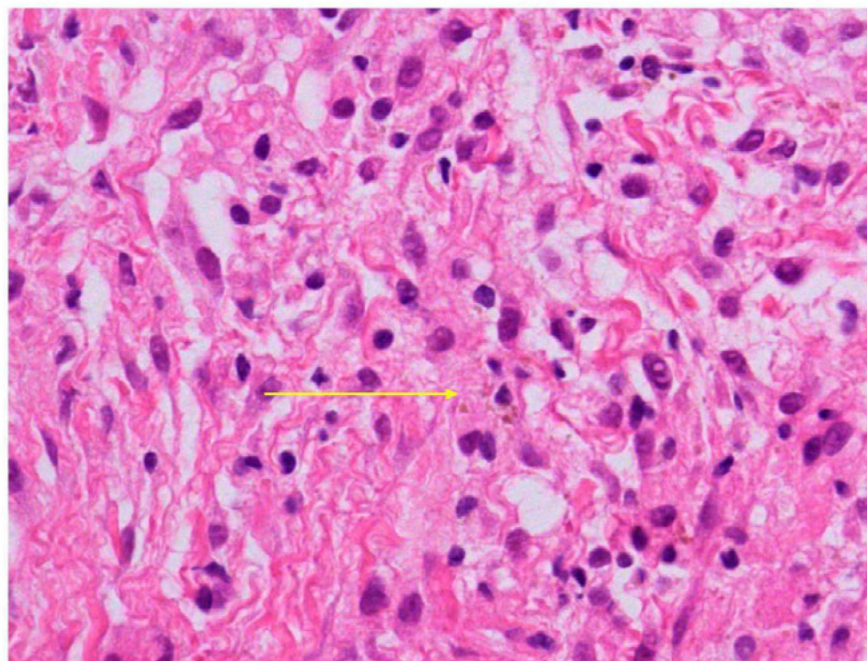
Leah Carlson, MD
Emory University Hospital
Atlanta, Georgia

Genitourinary Best Case

74-year-old male nonsmoker presented with shortness of breath, chest pain, and a one-year history of significant weight loss. Medical history included hypertension and chronic kidney disease secondary to bilateral renal artery stenosis. Clinical examination was suggestive of a right pleural effusion.







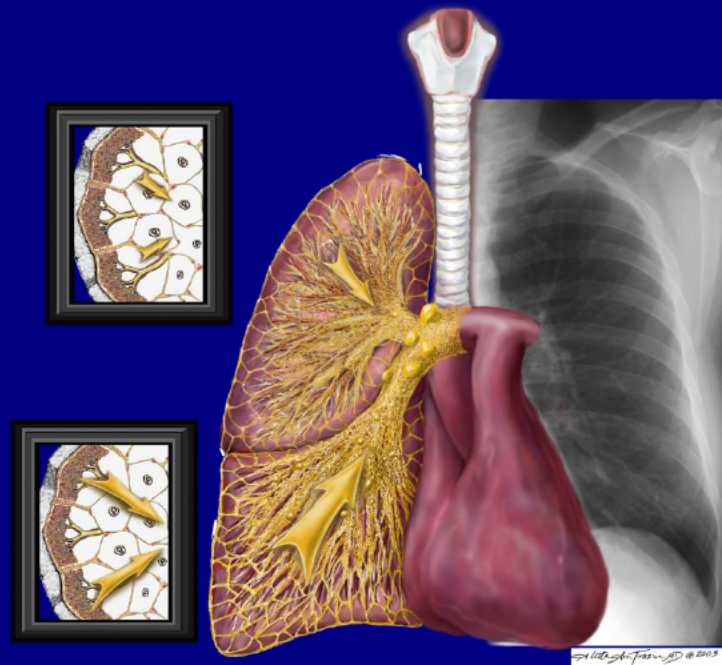
Erdheim Chester Disease

Davinia Ryan, MD

Royal College of Surgeons in Ireland

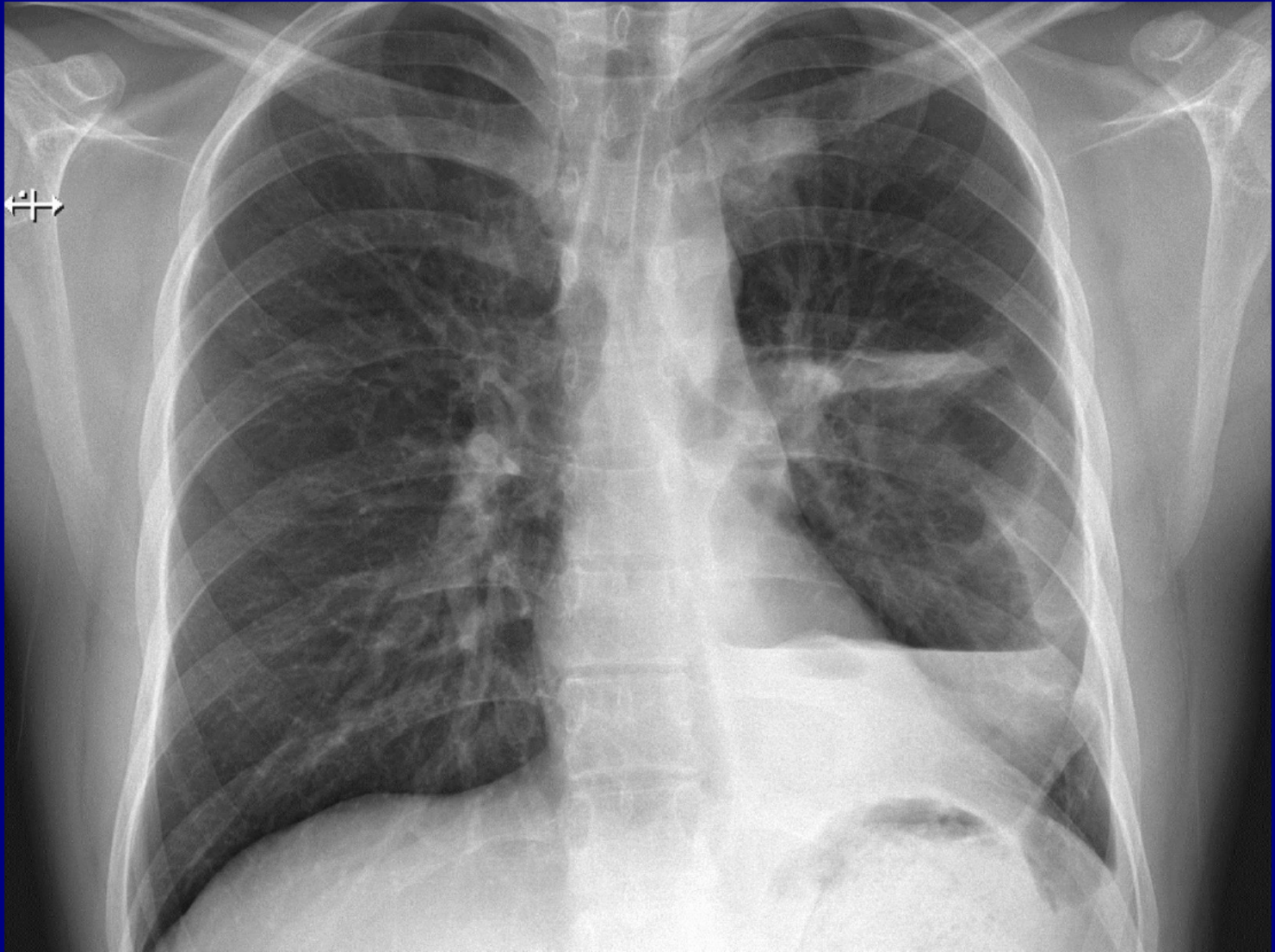
Dublin, Ireland

PULMONARY AND MEDIASTINAL IMAGING

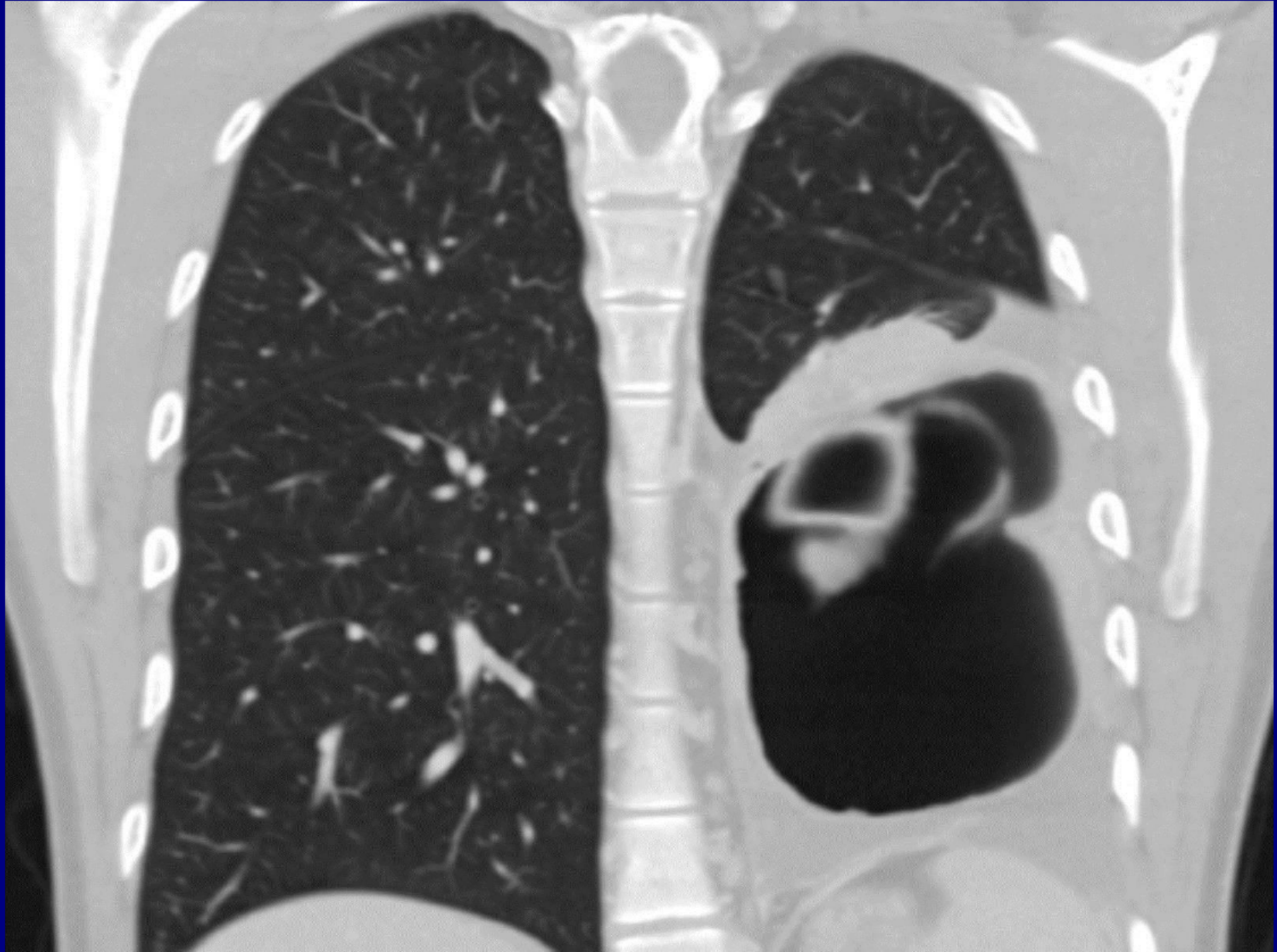


26-year-old Saudi man with a 4-week history
of cough productive of brownish-yellow
sputum

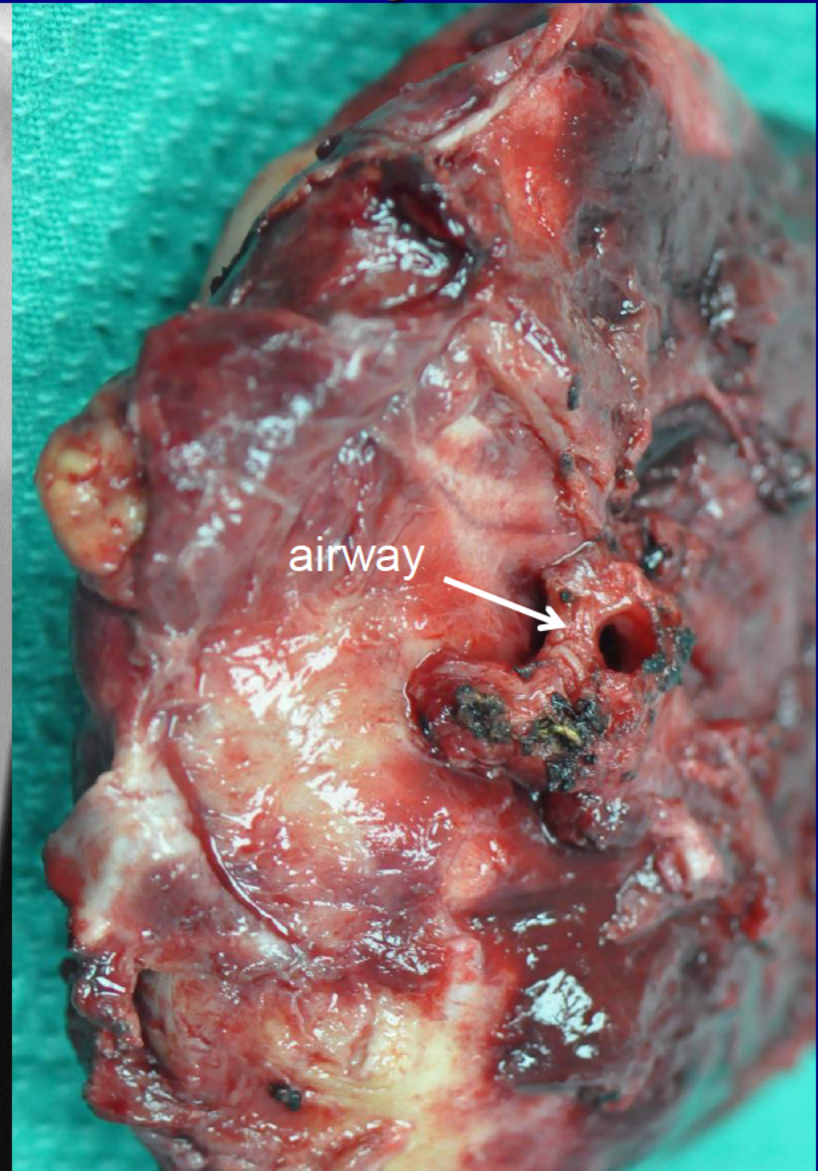
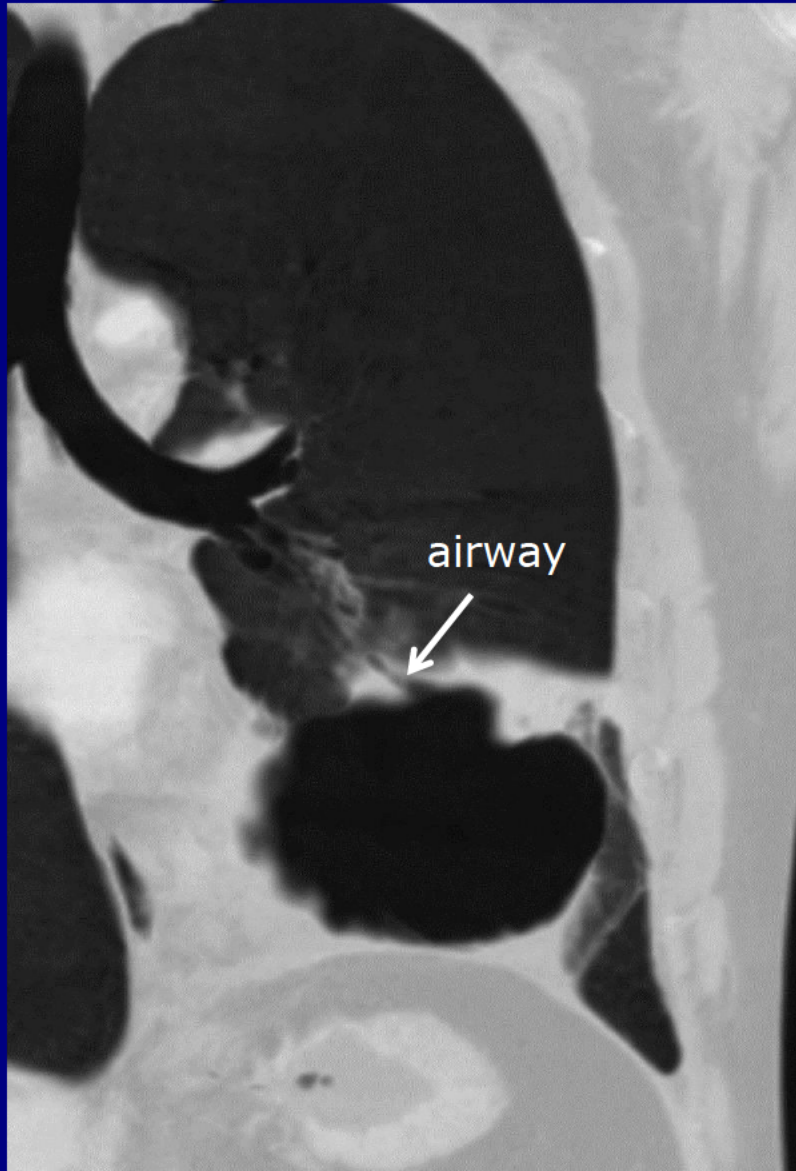
Cavity left lower lobe



Cavity left lower lobe



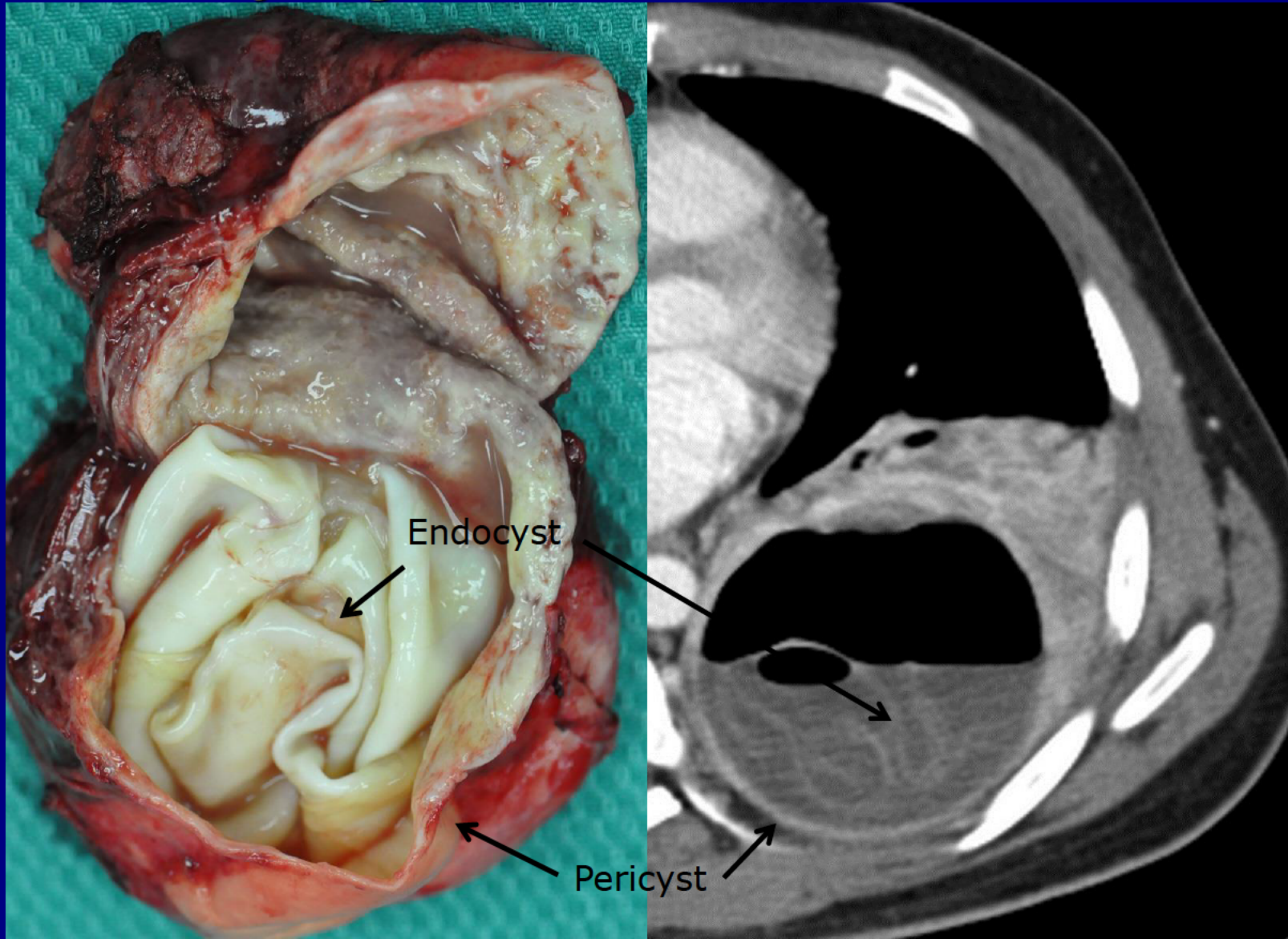
Airway connection to the cavity



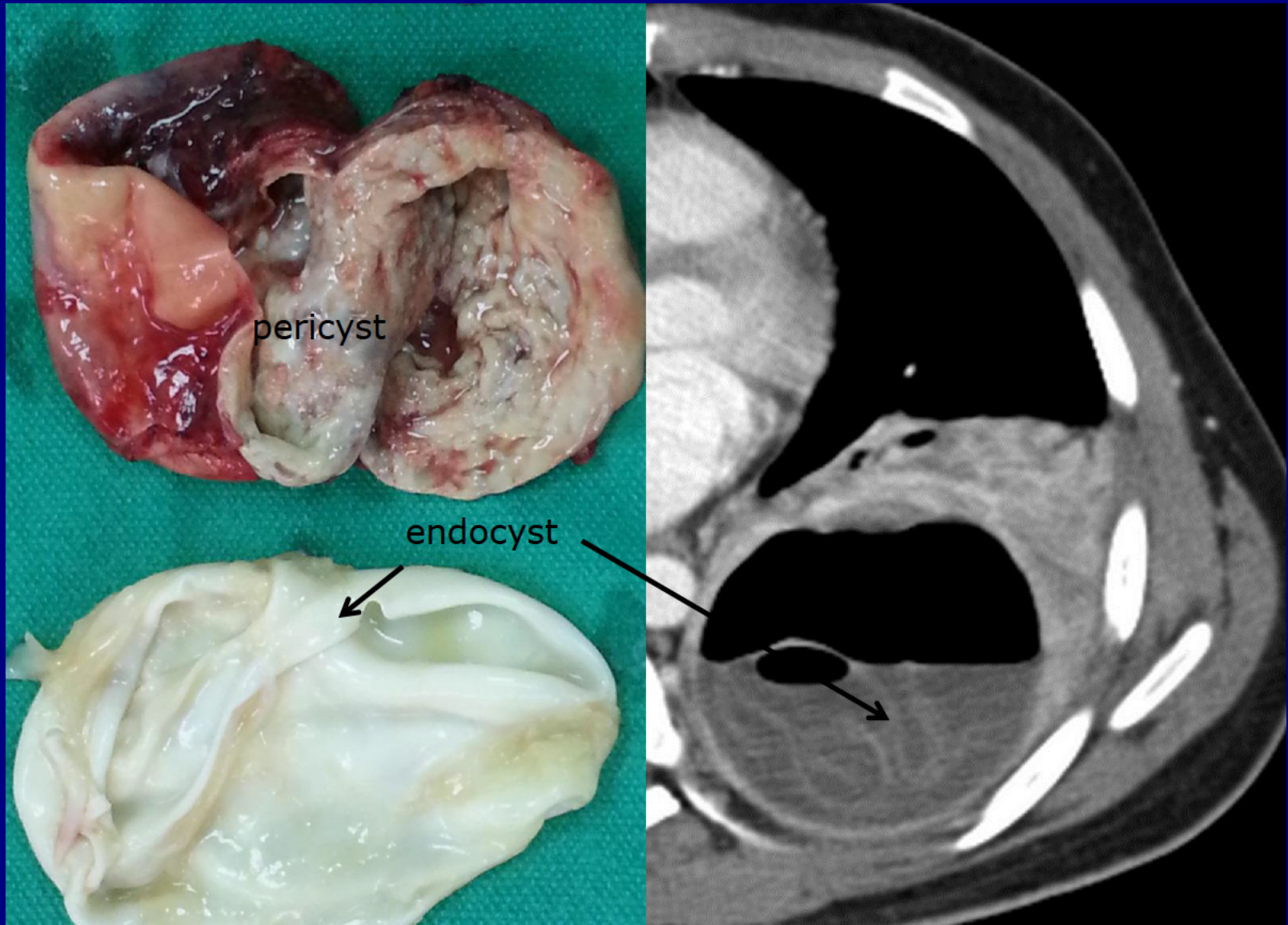
Water-lily sign



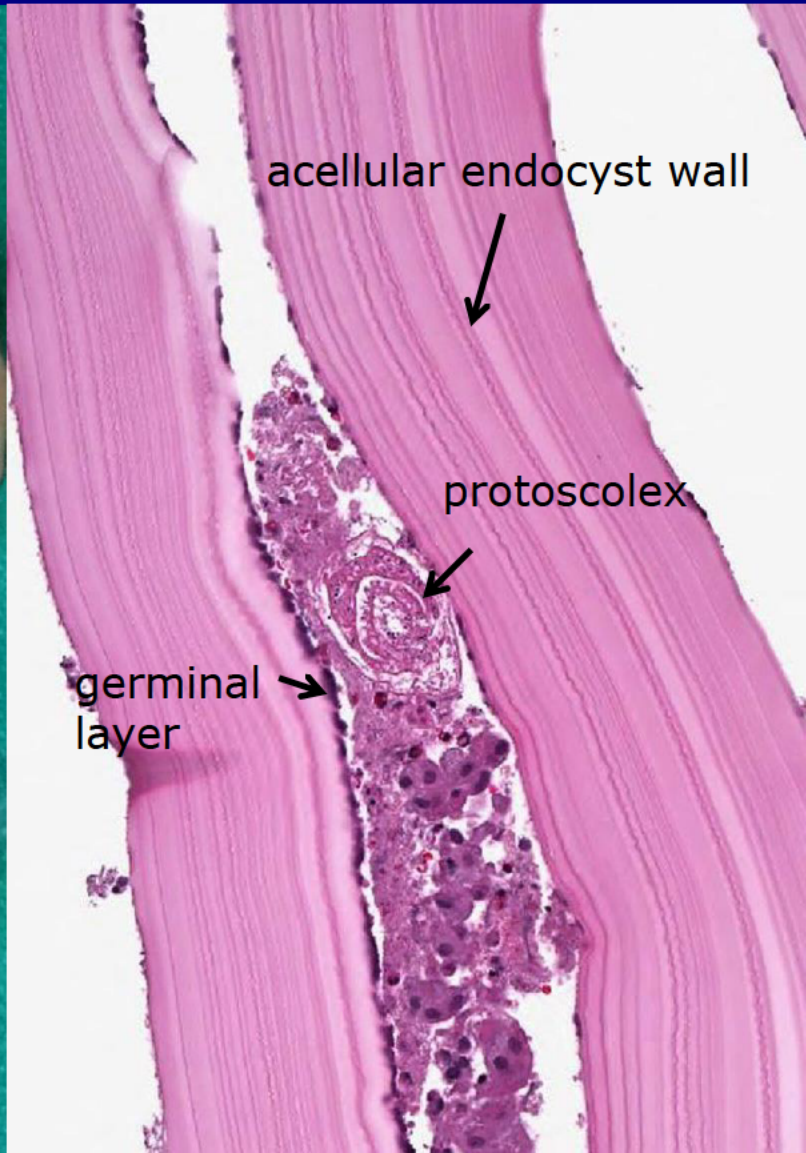
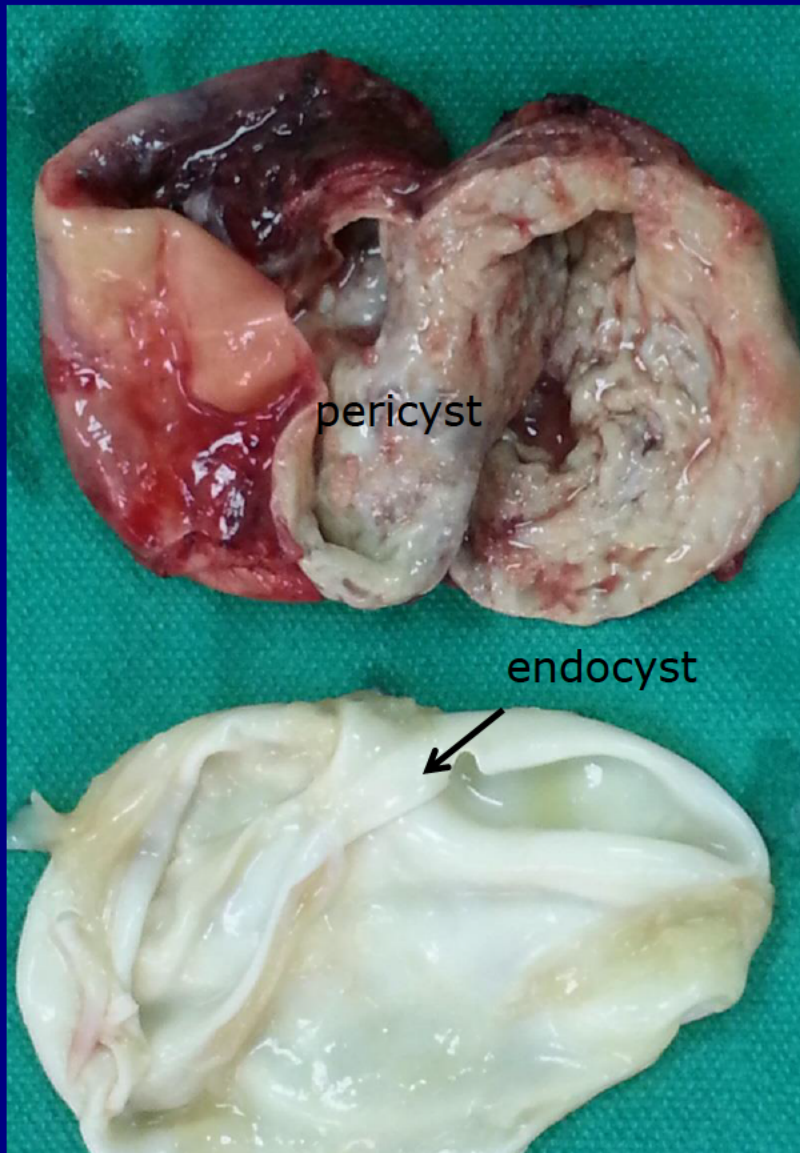
Water-lily sign



Water-lily sign



Echinococcal Cyst



Ruptured Echinococcal Cyst

Bayan Al-Maghrabi, MD

King Faisal Specialist Hospital & Research
Centre

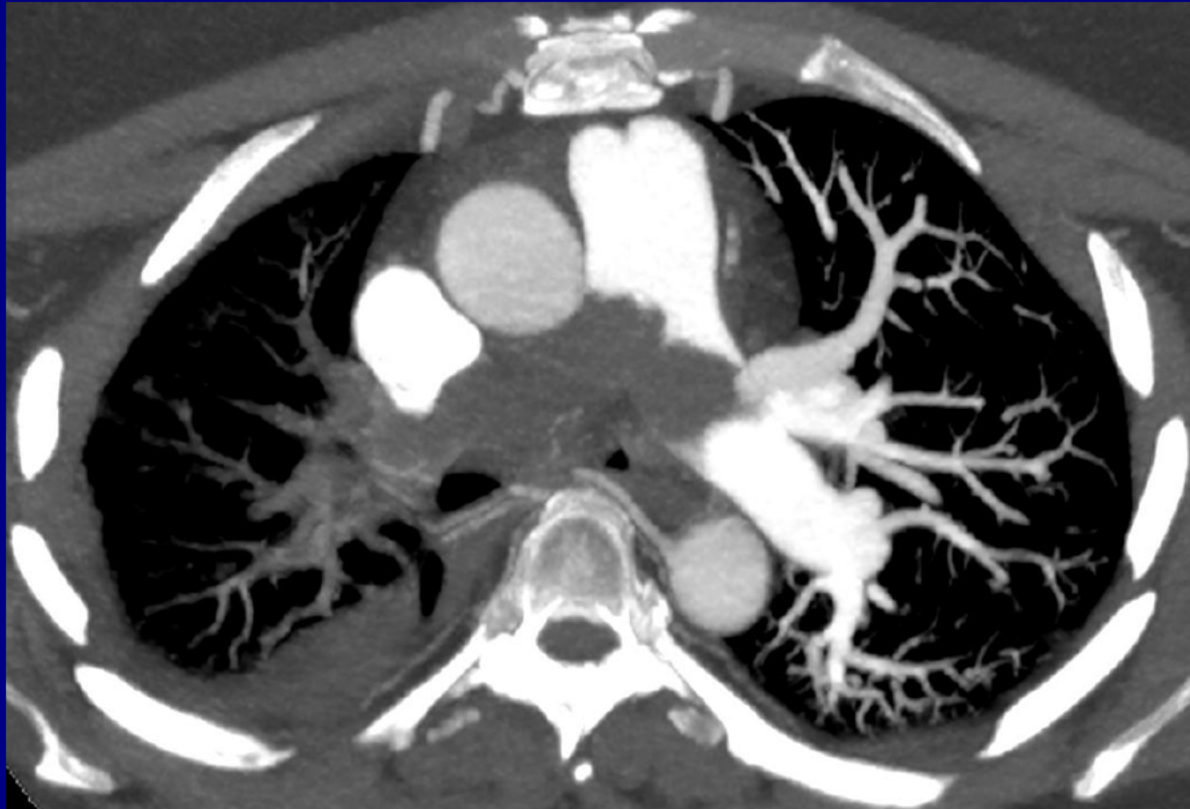
Jeddah, Saudi Arabia

Cardiovascular Imaging

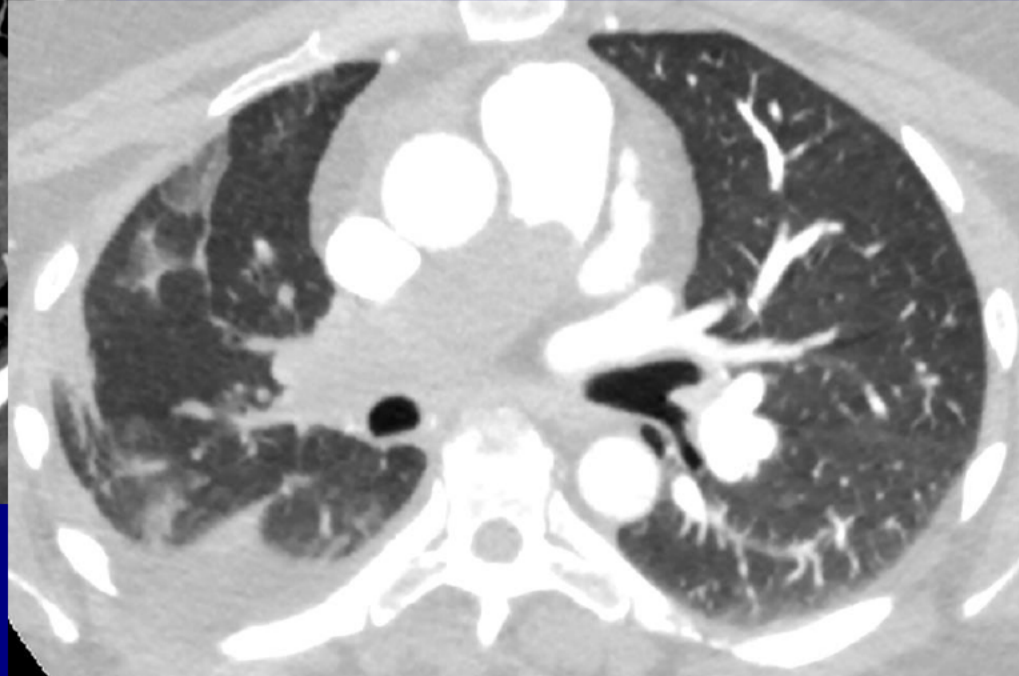
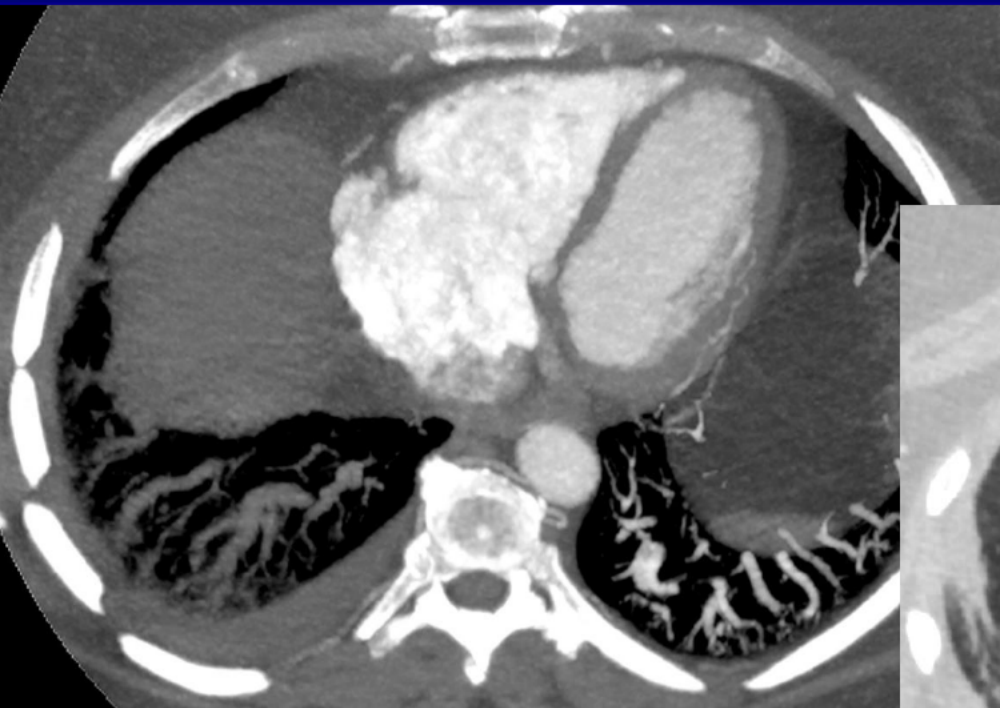


45-year-old woman with diabetes,
diagnosed with pulmonary embolism
approximately 4 months ago.

Anticoagulation therapy was initiated, but
filling defects demonstrated interval
progression rather than resolution.

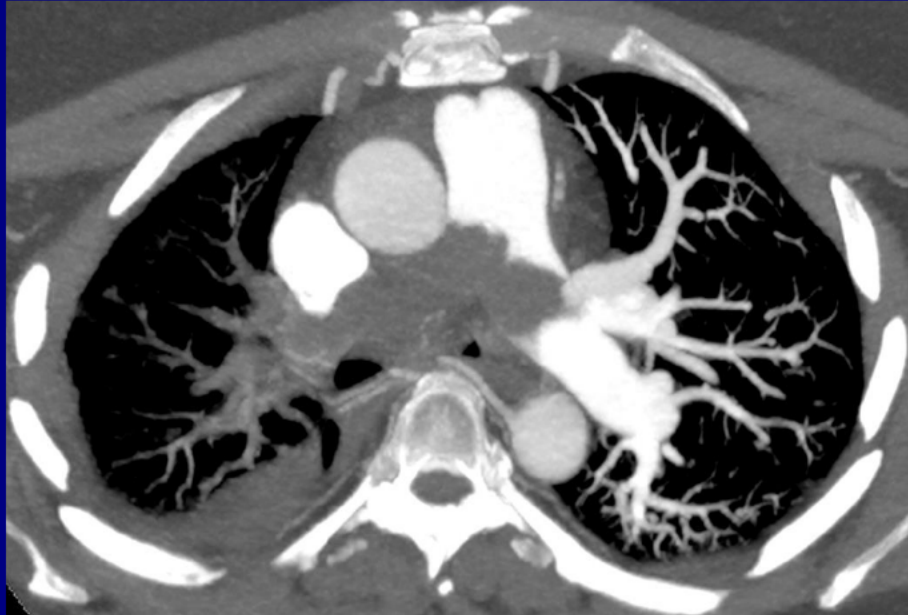


ECG-gated contrast-enhanced CT (MIP reconstruction) shows a filling defect at the pulmonary artery bifurcation, extending throughout all the right-sided branching arterial vessels which also appear expanded in caliber. There are prominent bronchial arterial collateral vessels consistent with chronic vascular compromise.

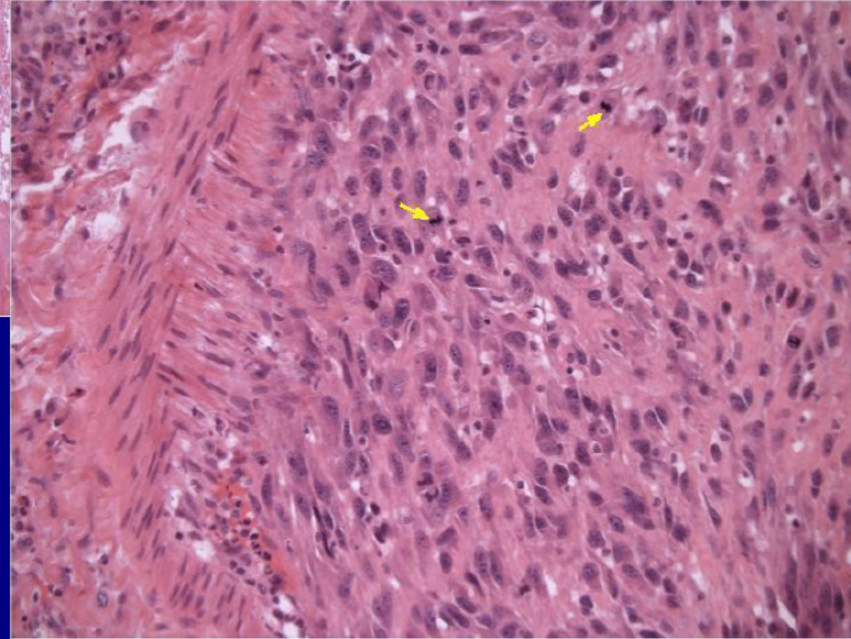
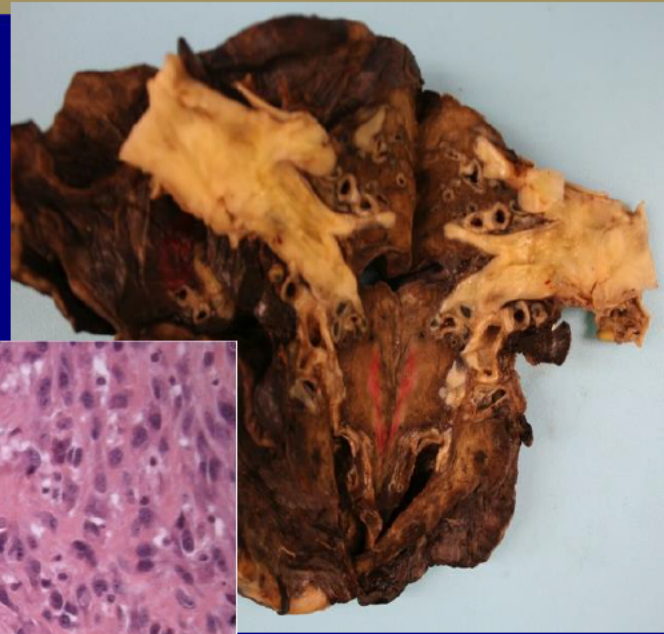
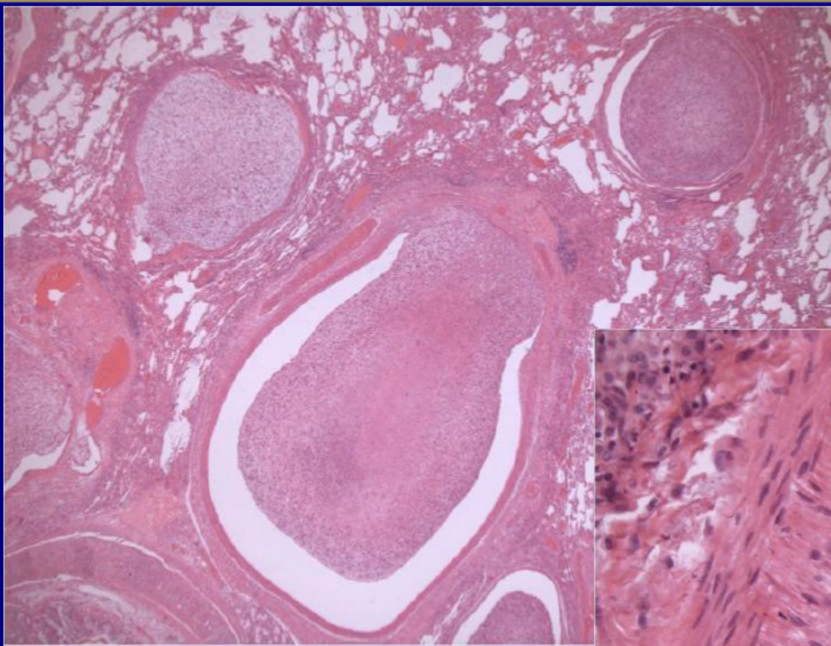


ECG-gated axial CT (top left) shows signs of right heart strain: enlarged right-sided cardiac chambers and interventricular septal reversal.

Axial CT (lung window) shows peripheral wedge-shaped consolidations in the right lung suspicious for evolving pulmonary infarctions.

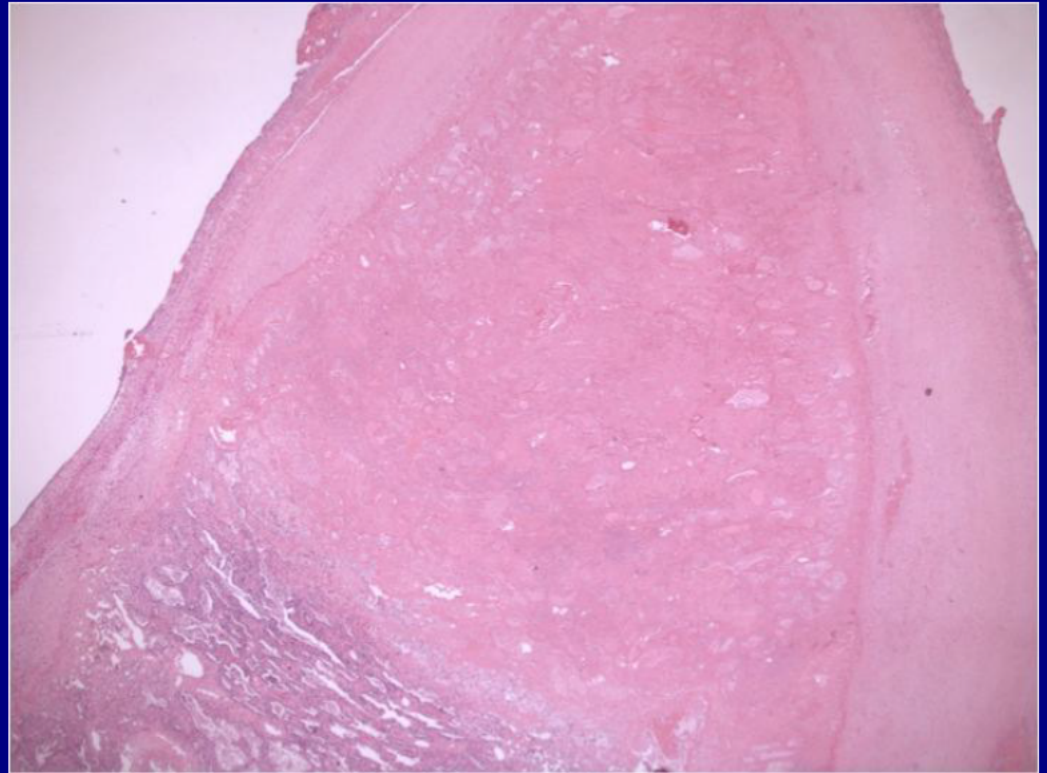
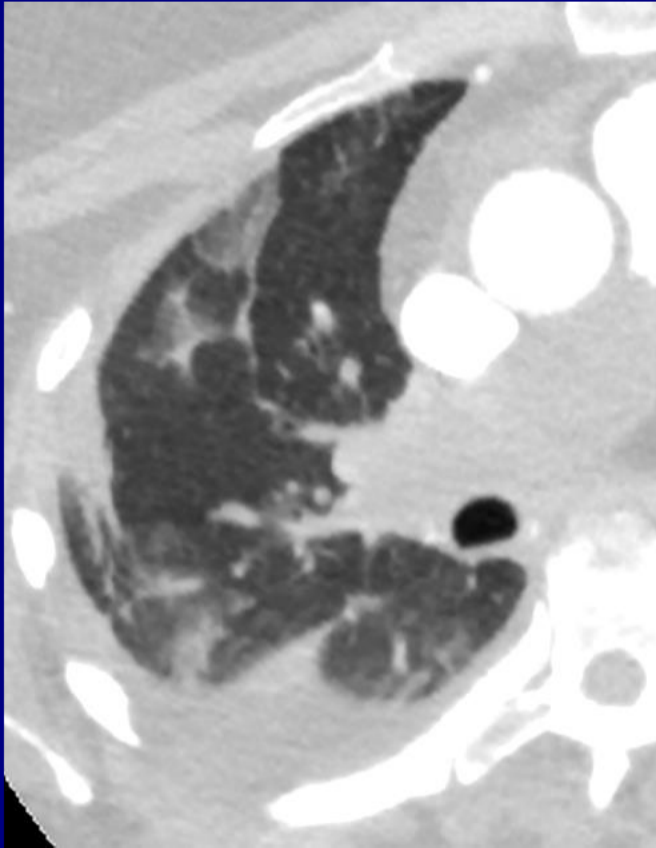


Post-mortem right lung specimen, cut open, shows whitish soft tissue filling up the right main pulmonary artery as well as all proximal branching arterial vessels ramifying into the right lung parenchyma.



TOP LEFT: Low power H&E photomicrograph shows cellular tissue filling multiple pulmonary arteries.

CENTER RIGHT: High power H&E photomicrograph reveals tumor cells with pleomorphic features (arrows) on a stromal background.



Low power H&E photomicrograph shows parenchymal infarction (subpleural triangular-shaped pink zone).

Pulmonary Artery Sarcoma

Ivan Diamond, MD
University of Toronto
Toronto, Ontario, Canada

Pediatric Best Case

41-year-old woman of Jamaican descent
presented for routine anatomic ultrasound
at 20 weeks gestation.

FR 28Hz
RS

2D
47%
C 58
P Med
HRes

P

M3

16



FR 35Hz
RS
Z 0.9
2D
47%
C 58
P Med
HRes



RT RAD

12

M FR 40Hz
RS
Z 0.9
2D
44%
C 58
P Med
HRes



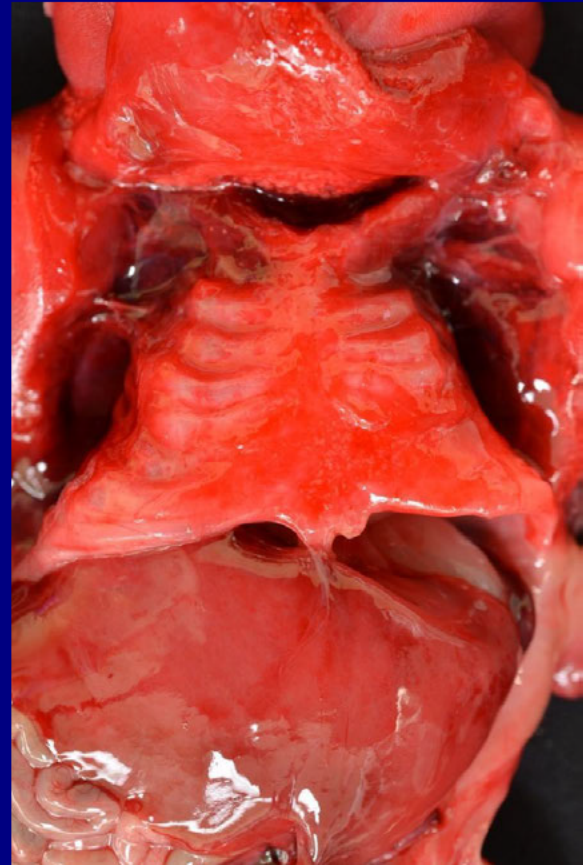
RT LOWER LEG

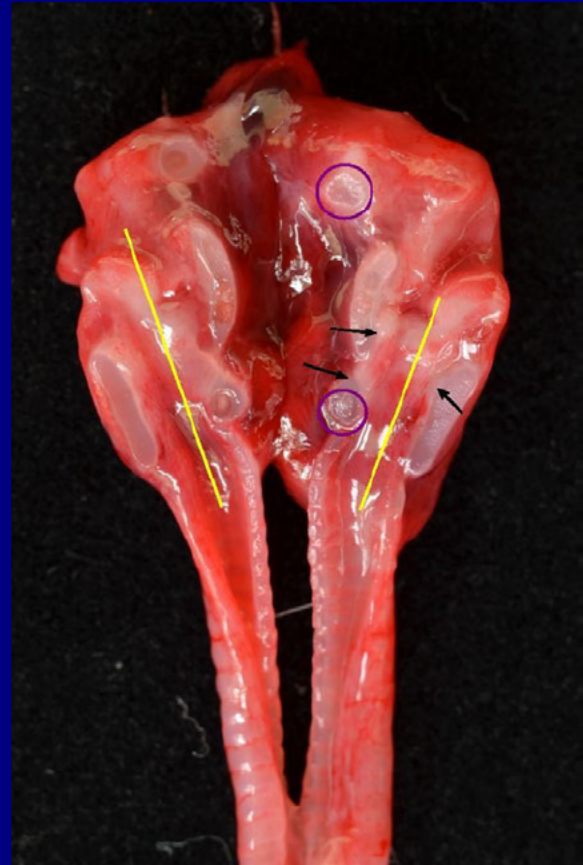
10

M3

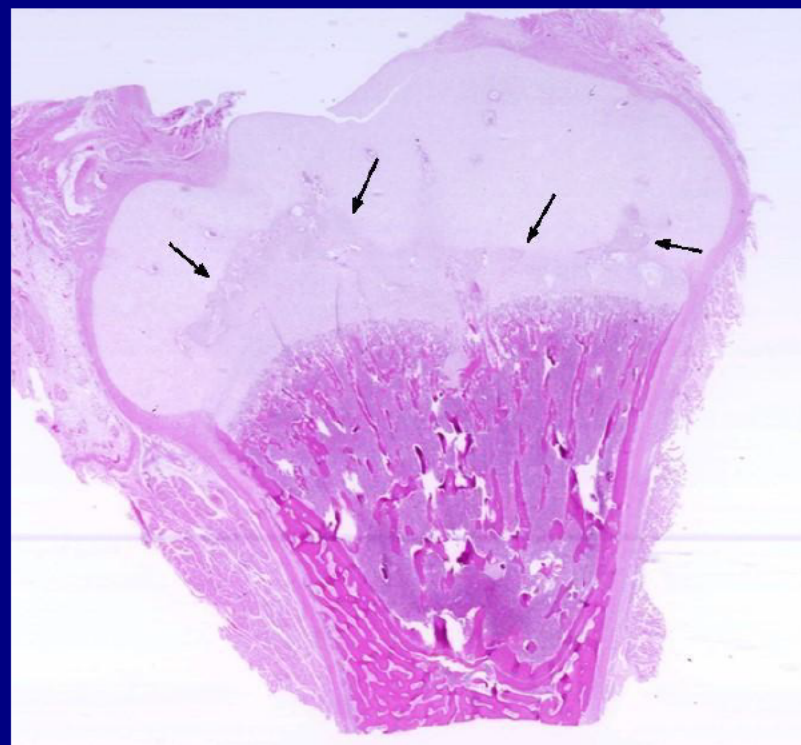












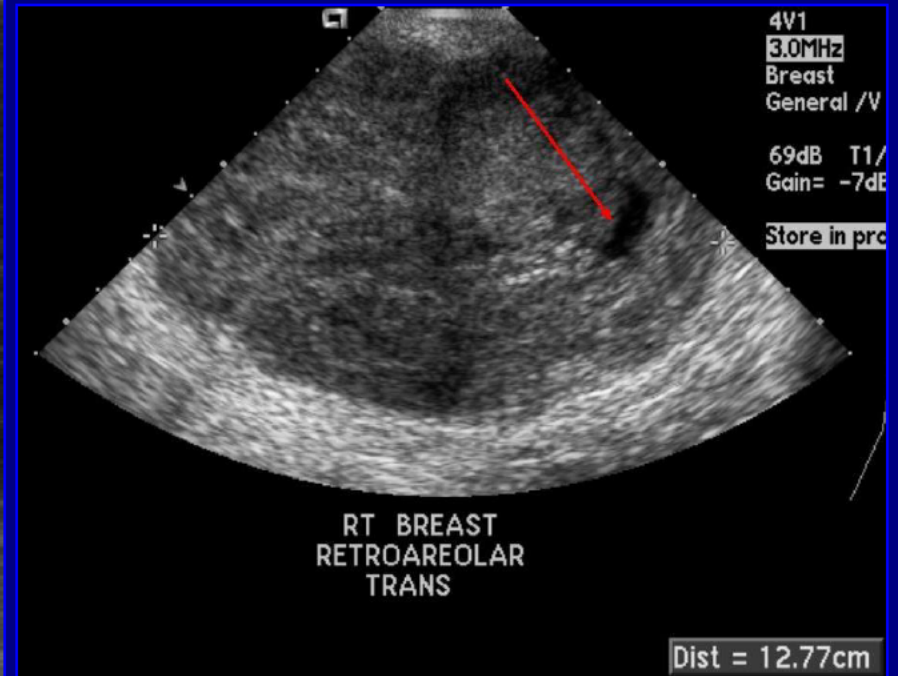
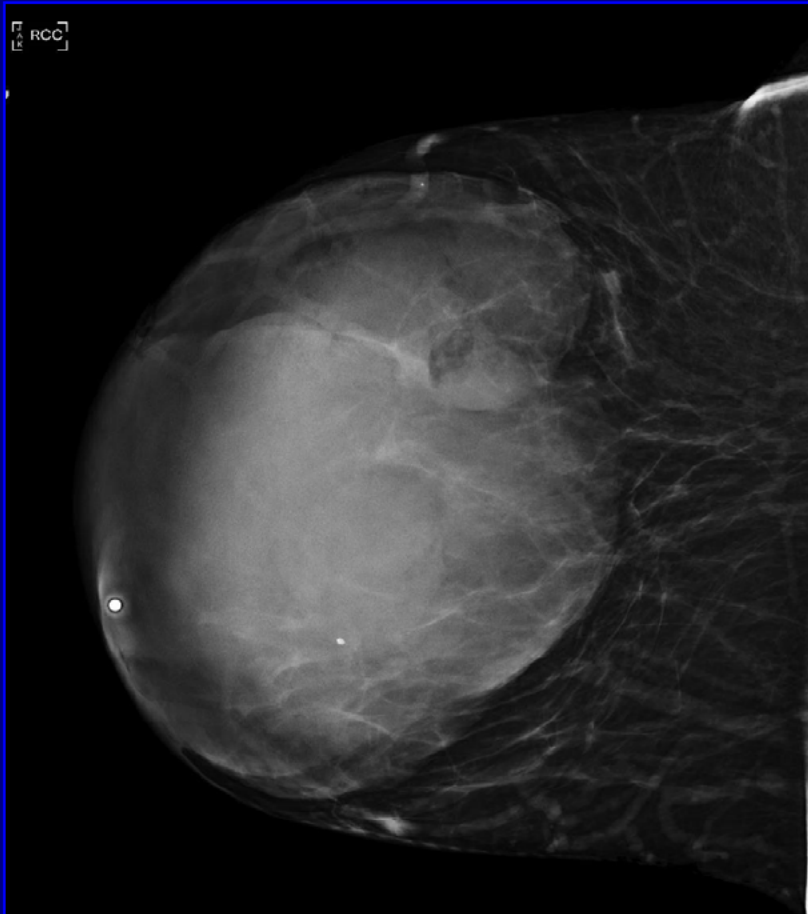
Chondrodysplasia Punctata

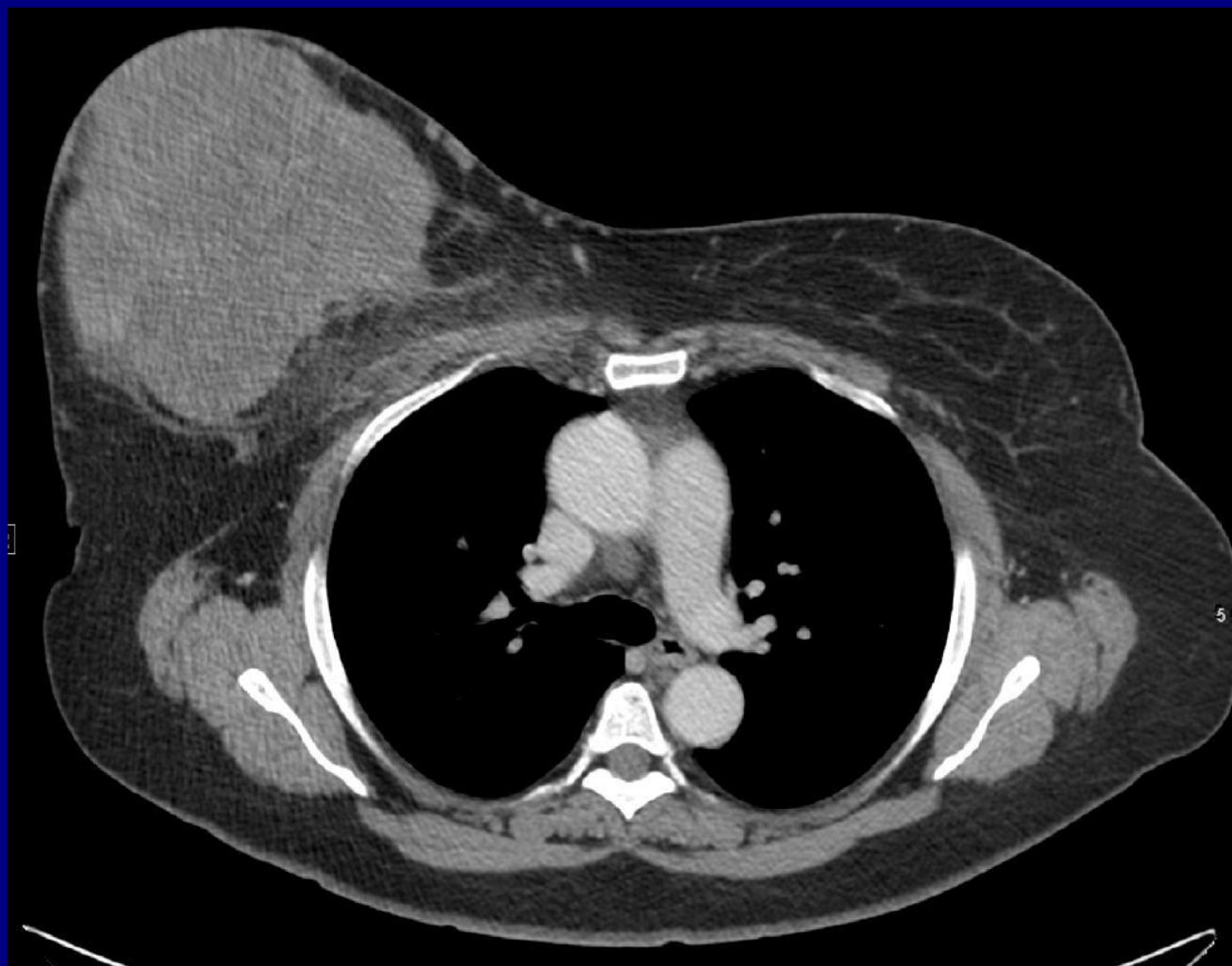
Ben Fine, MD
University of Toronto
Toronto, Ontario, Canada

Breast Best Case

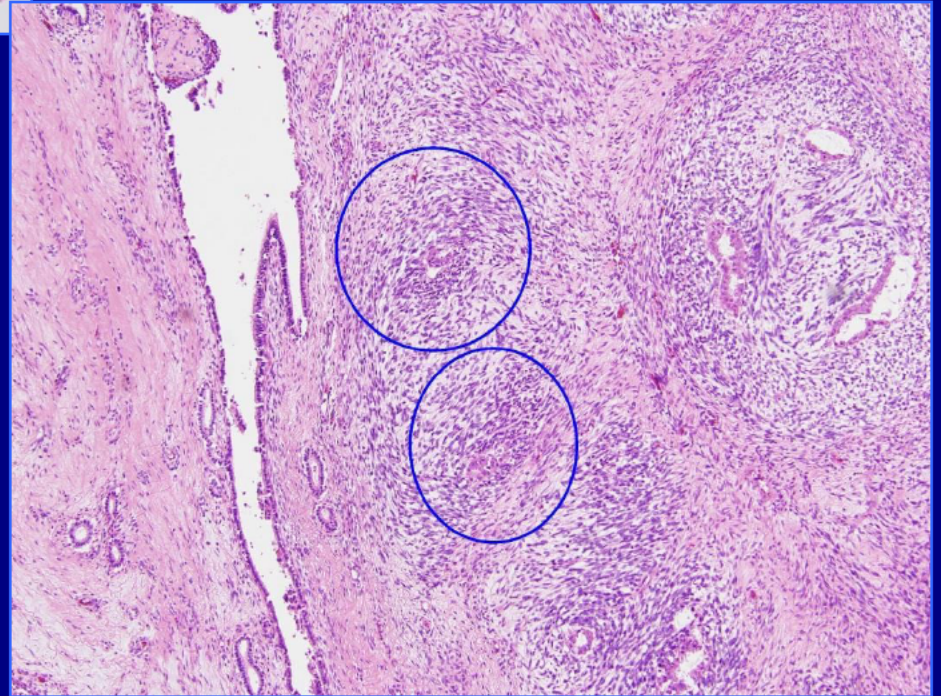
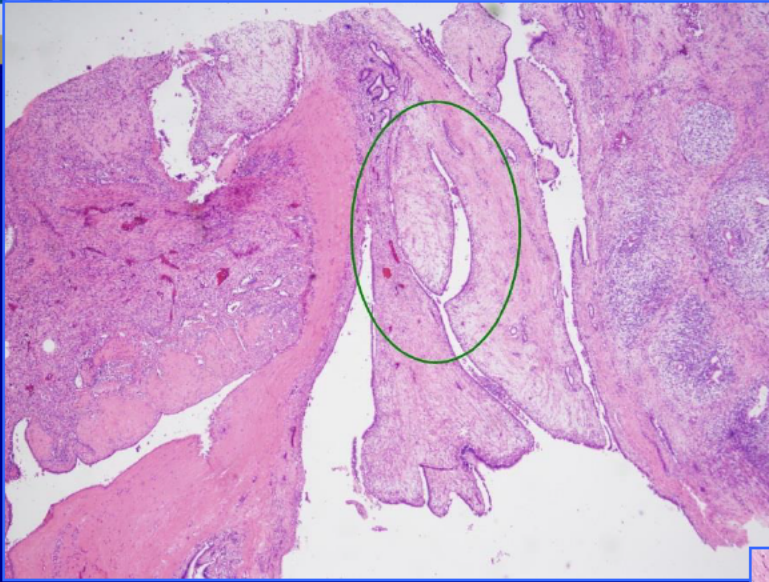
56-year-old African American woman presented with swelling and pain in the right breast. The mass had been present for 2 months.

Diagnostic Right Mammogram







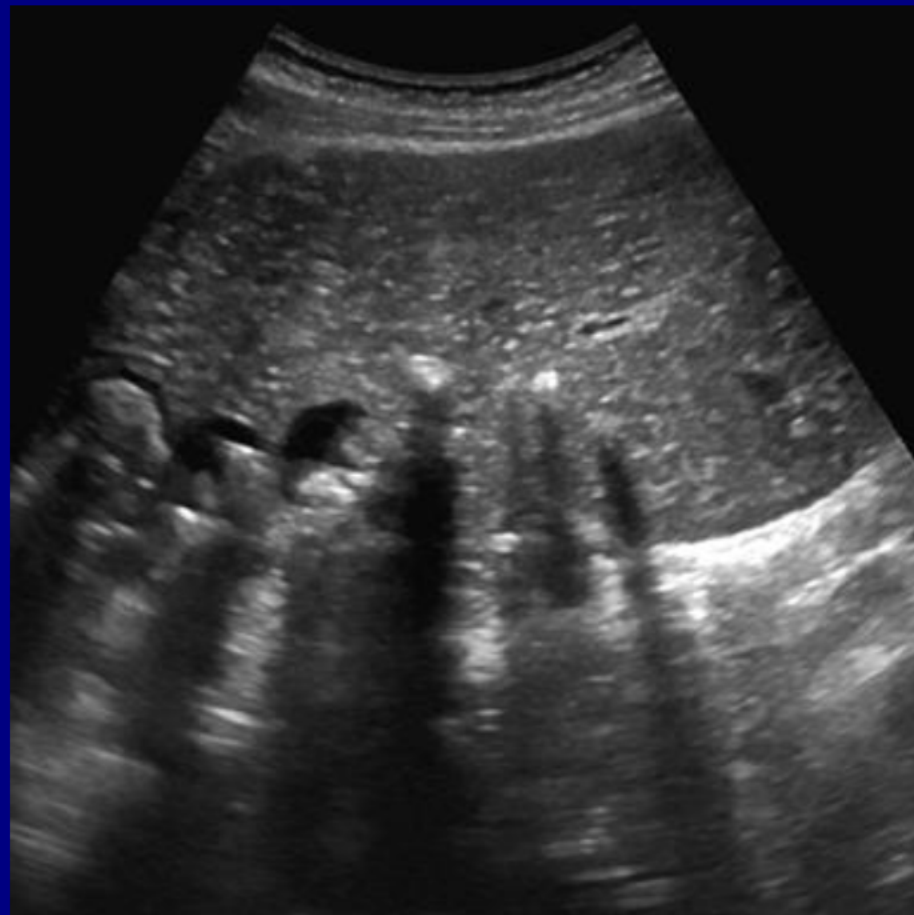
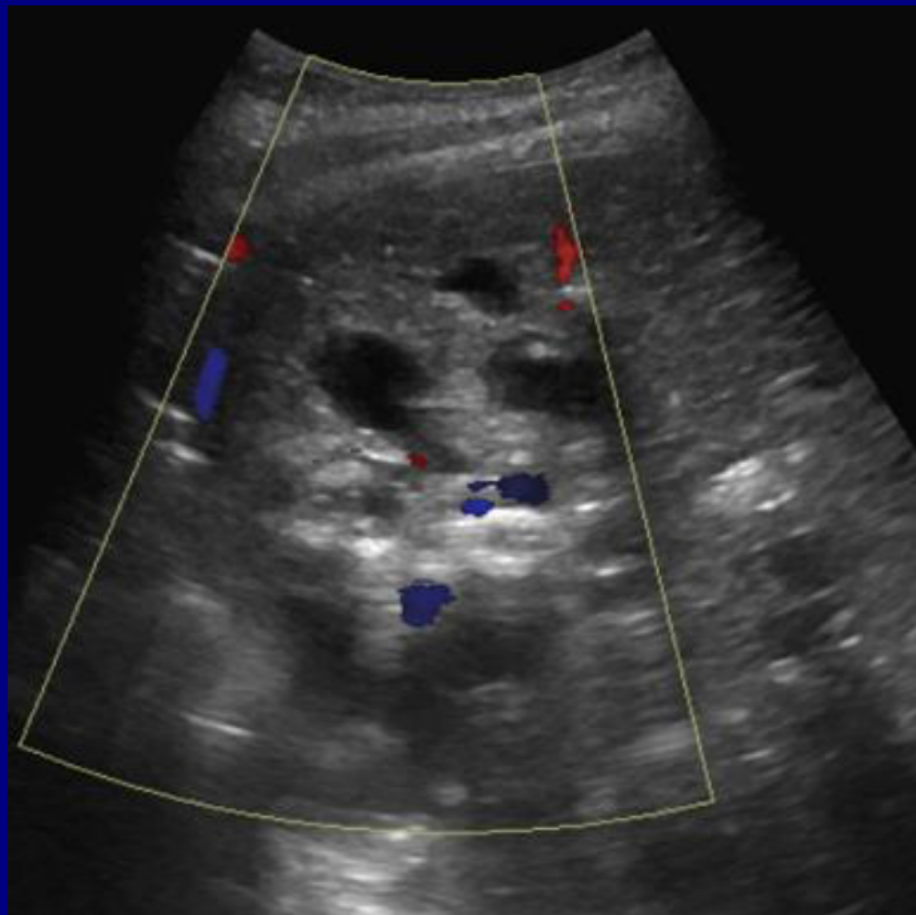


Malignant Phyllodes Tumor

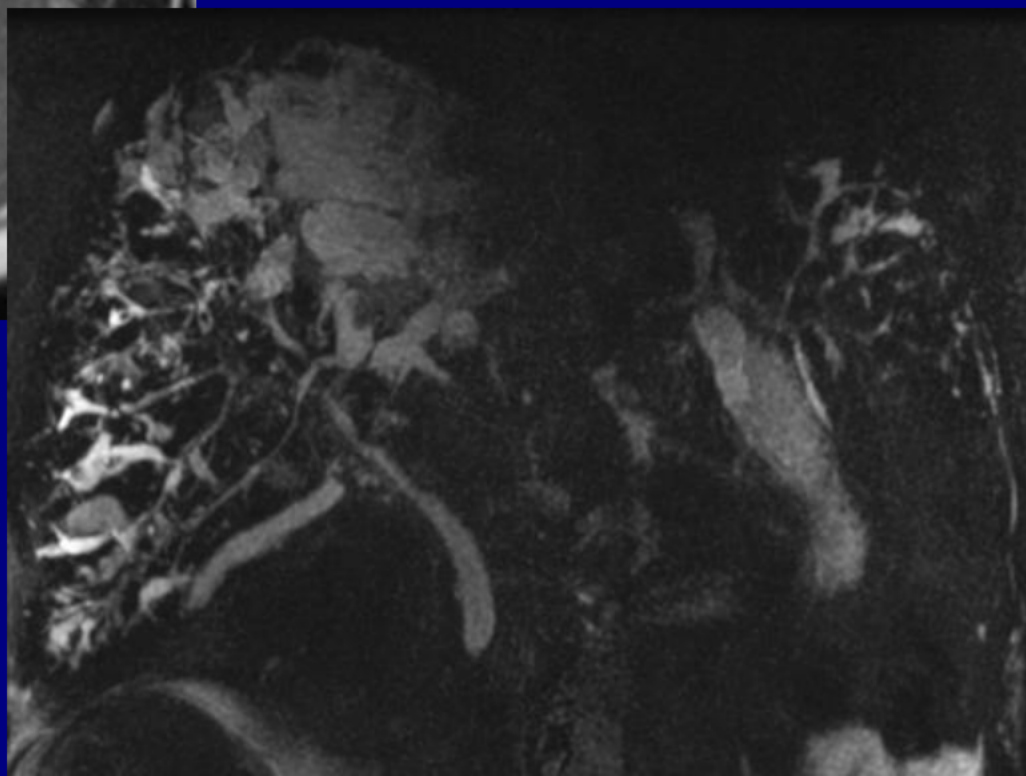
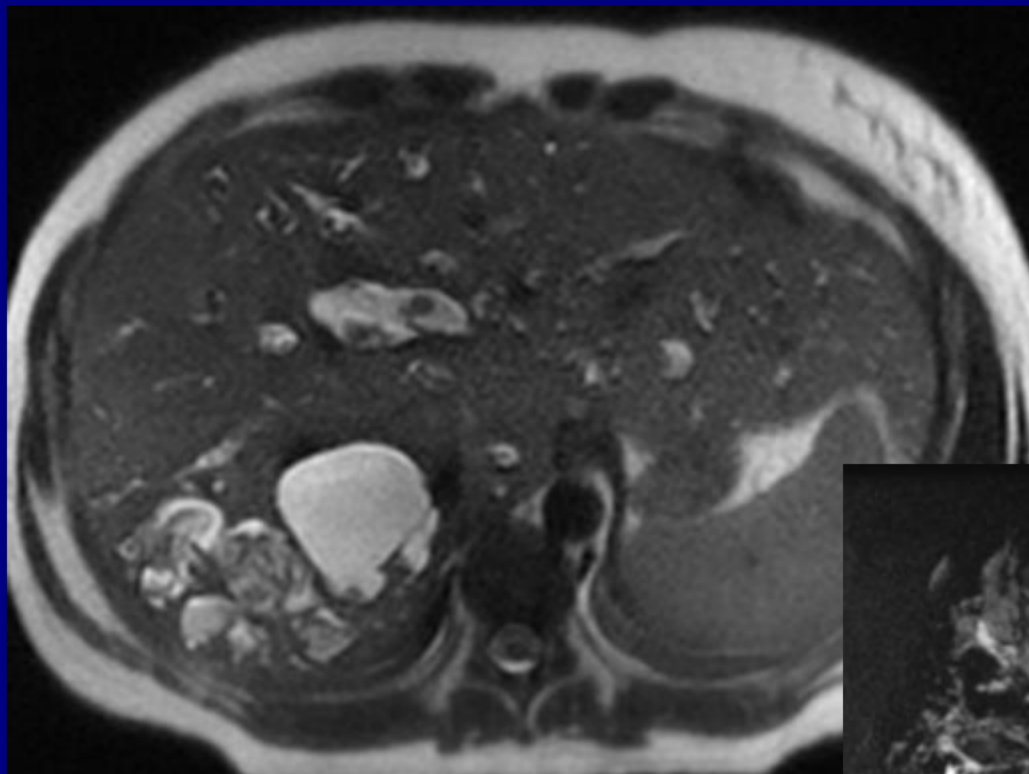
Baldaassare Daniel Pipitone, MD
MetroHealth Medical Center
Cincinnati, Ohio

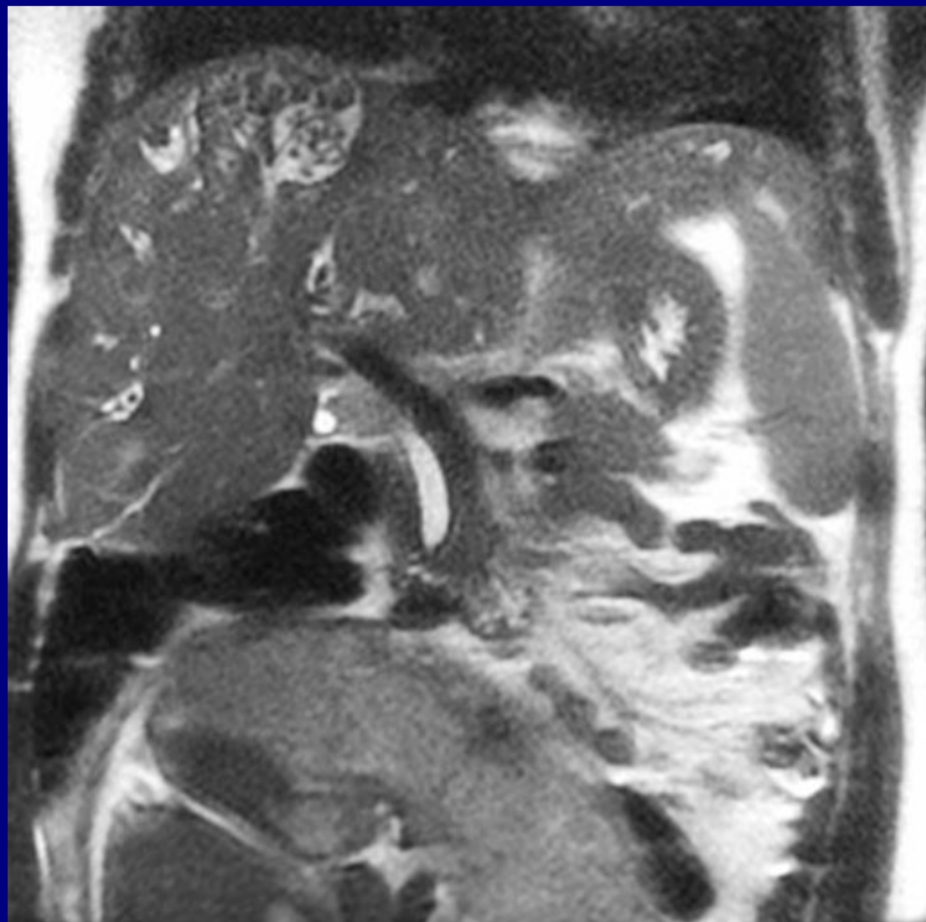
Gastrointestinal Best Case

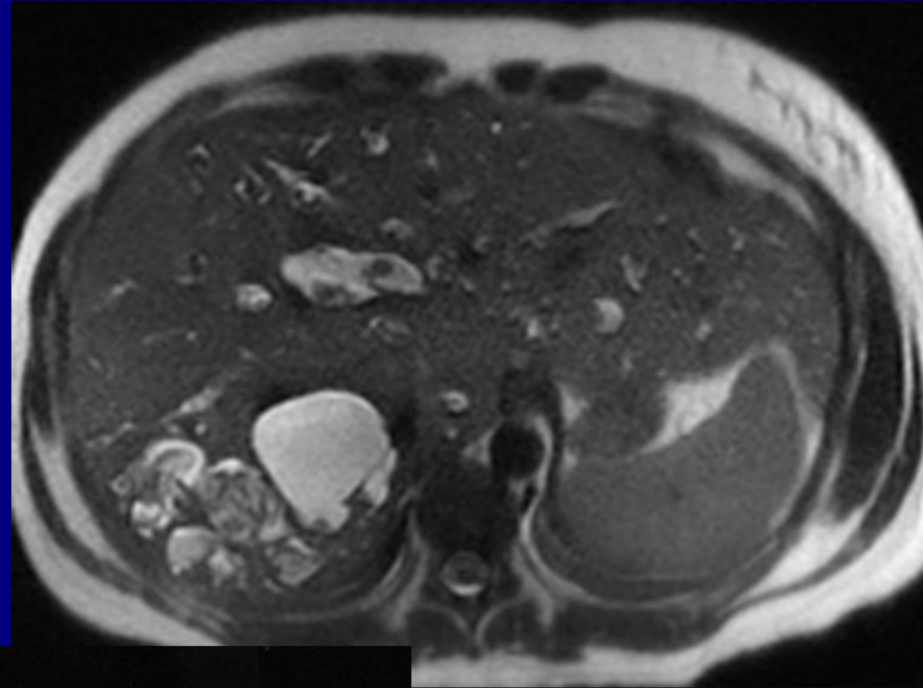
37-year-old pregnant woman with multiple episodes of abdominal pain, fever, and shortness of breath.



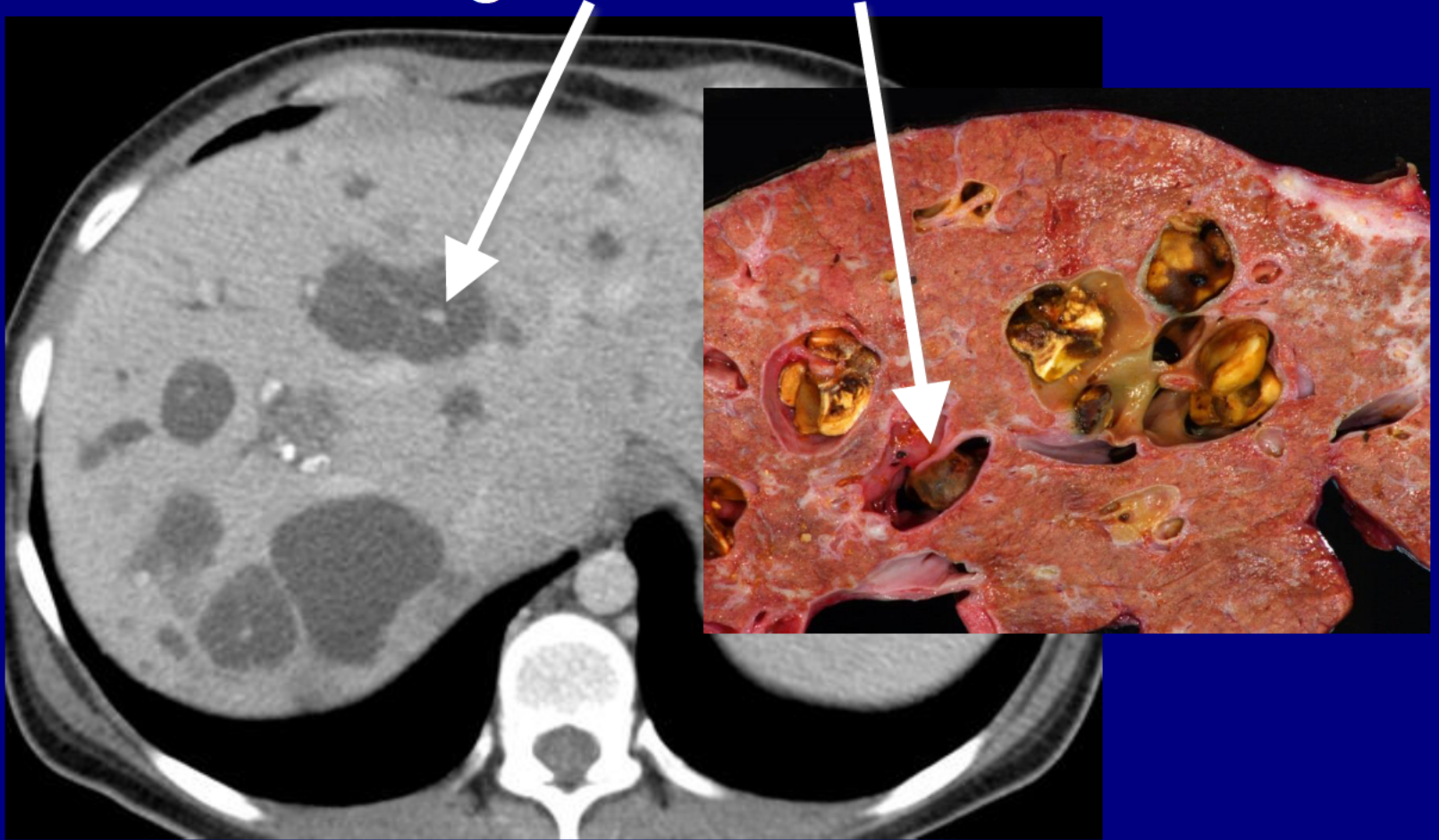


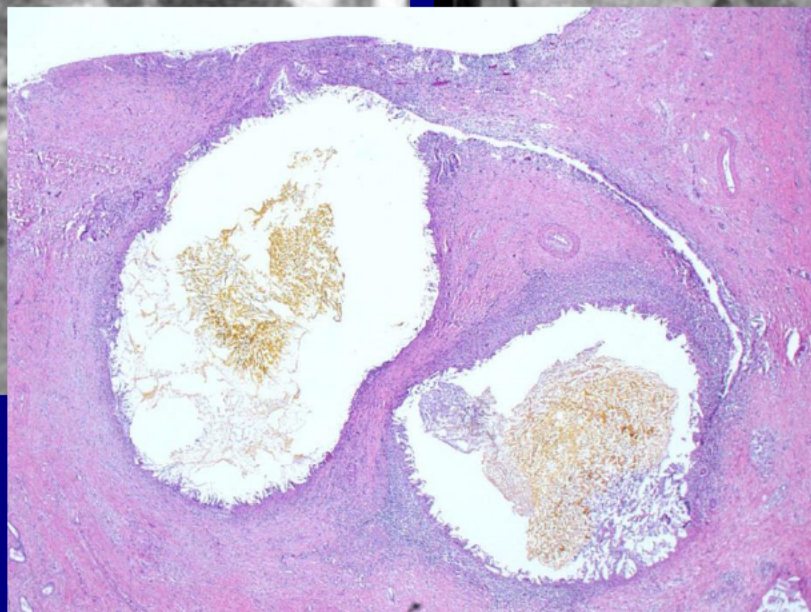
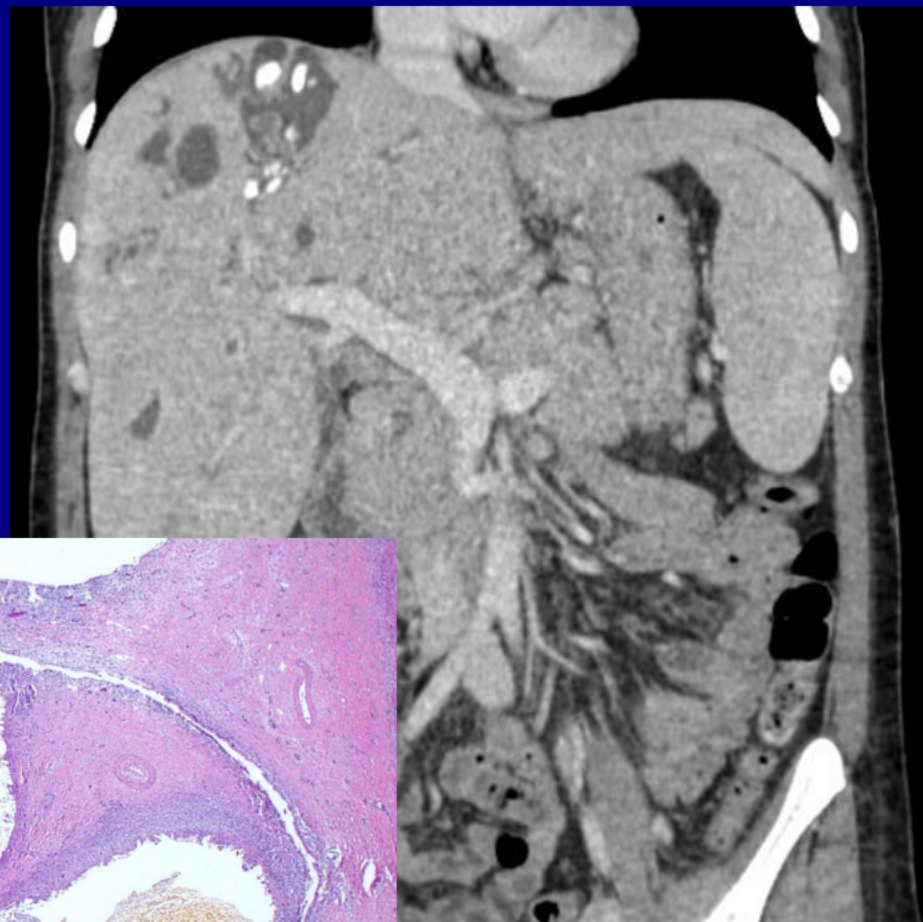
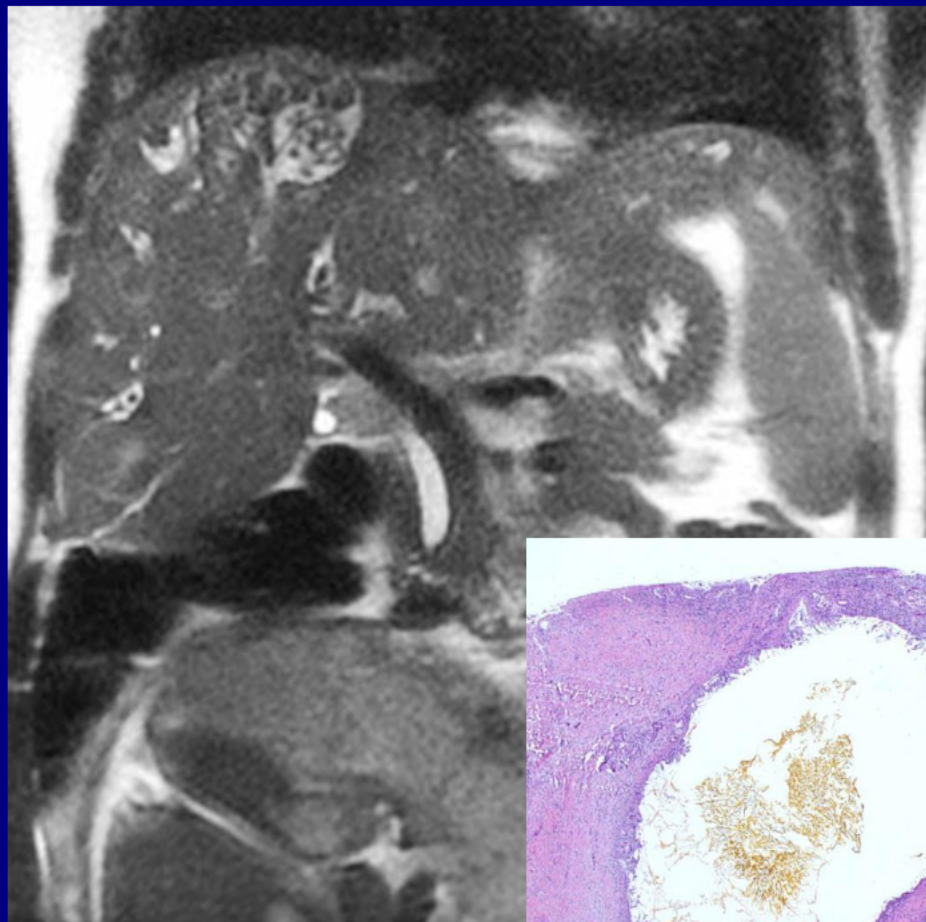






Central dot sign





Caroli Disease

Shannon Tocchio, MD
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

Many thanks to all of you for submitting
such great cases!
Have a safe trip home –

From the staff of the
American Institute for Radiologic Pathology