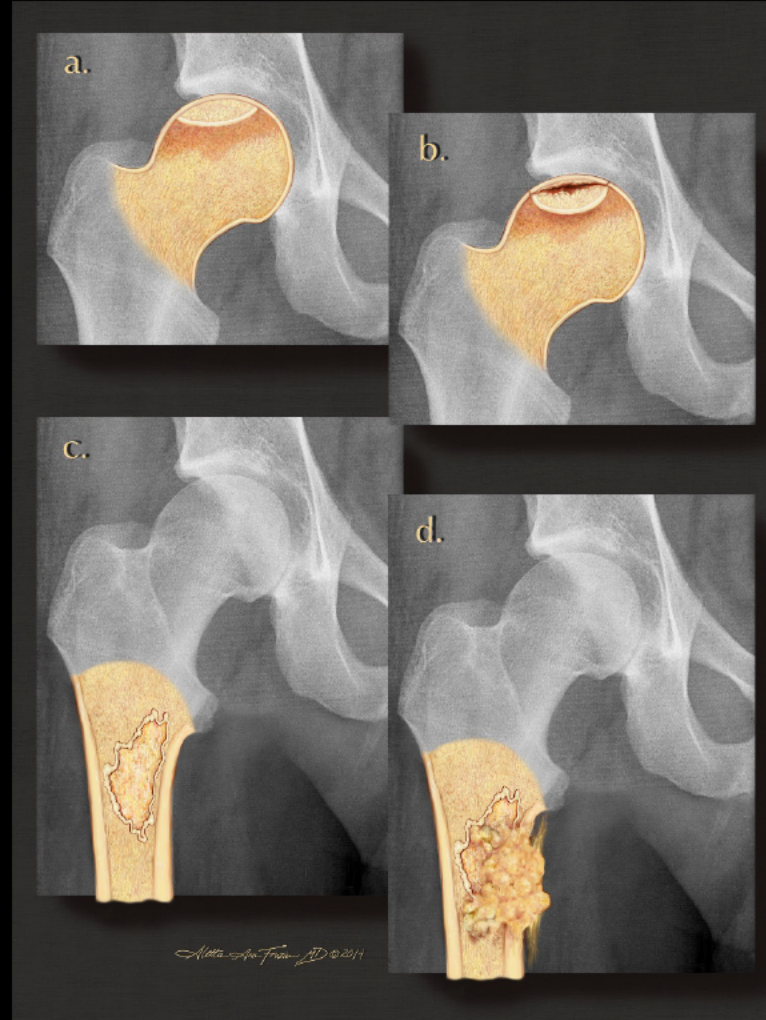


Best Cases of the AIRP

September – October 2021

Musculoskeletal Best Case

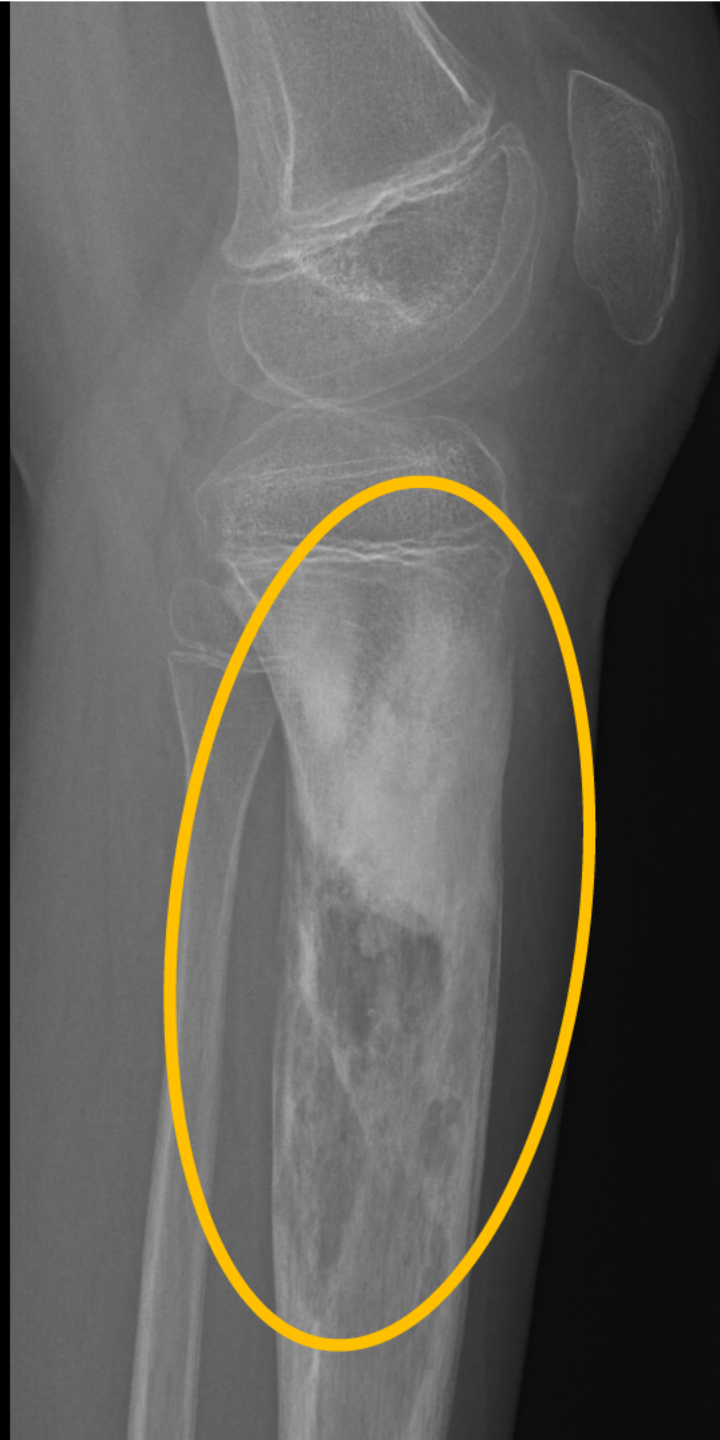


Clinical information

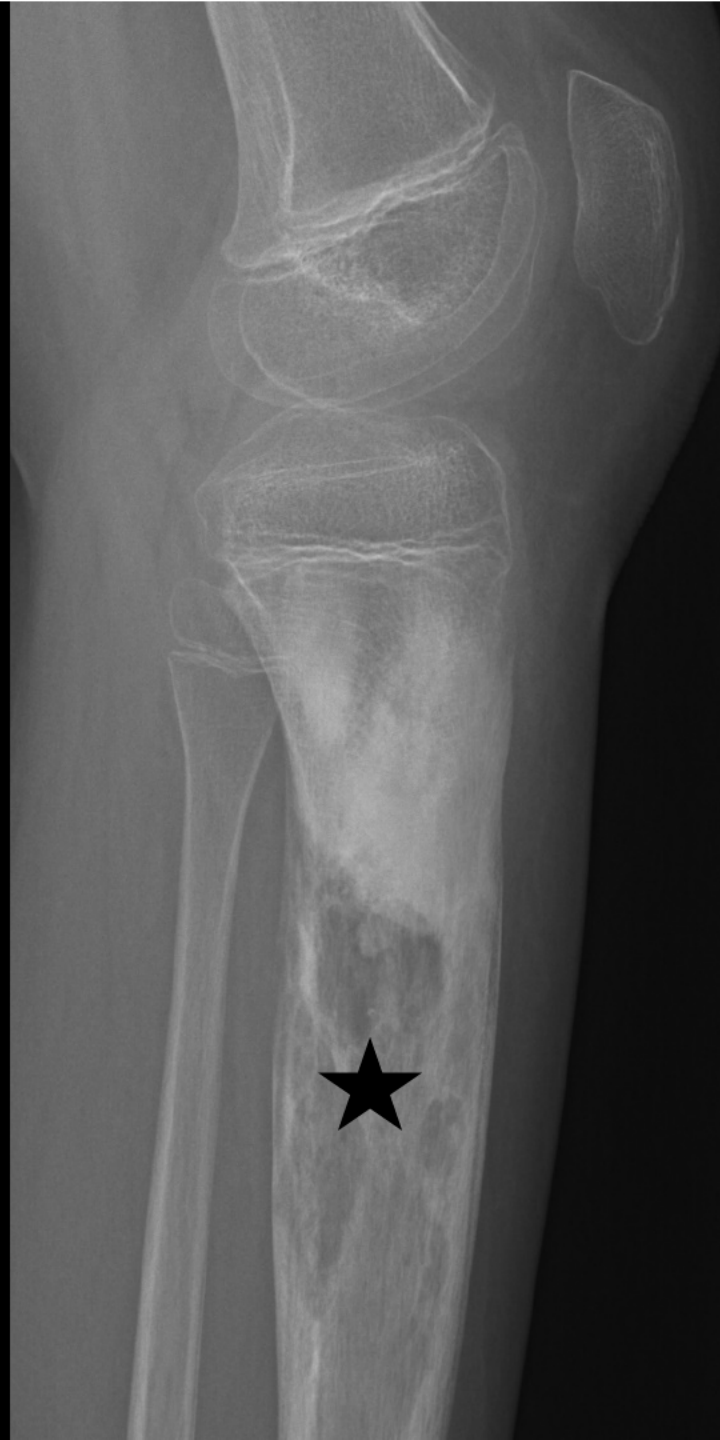
11-year-old male with several weeks of left shin pain that radiated to his foot.

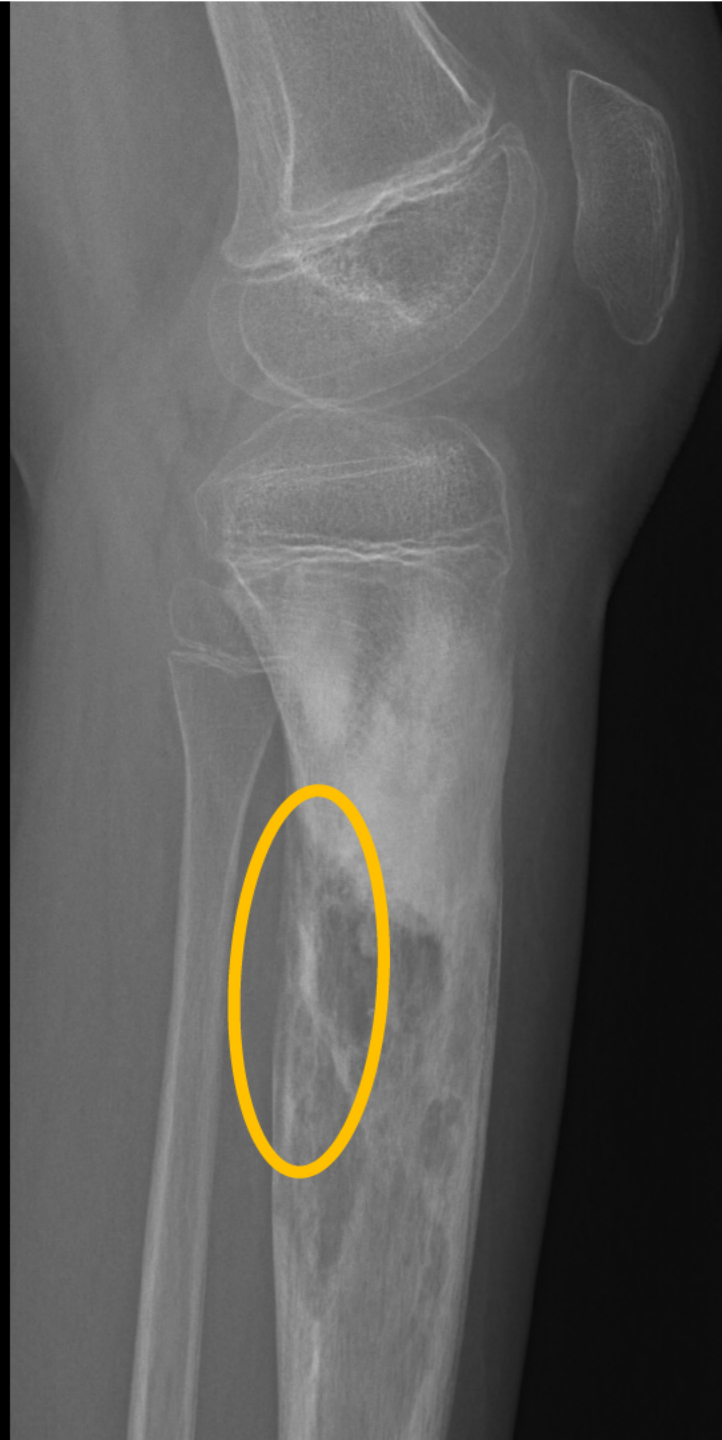
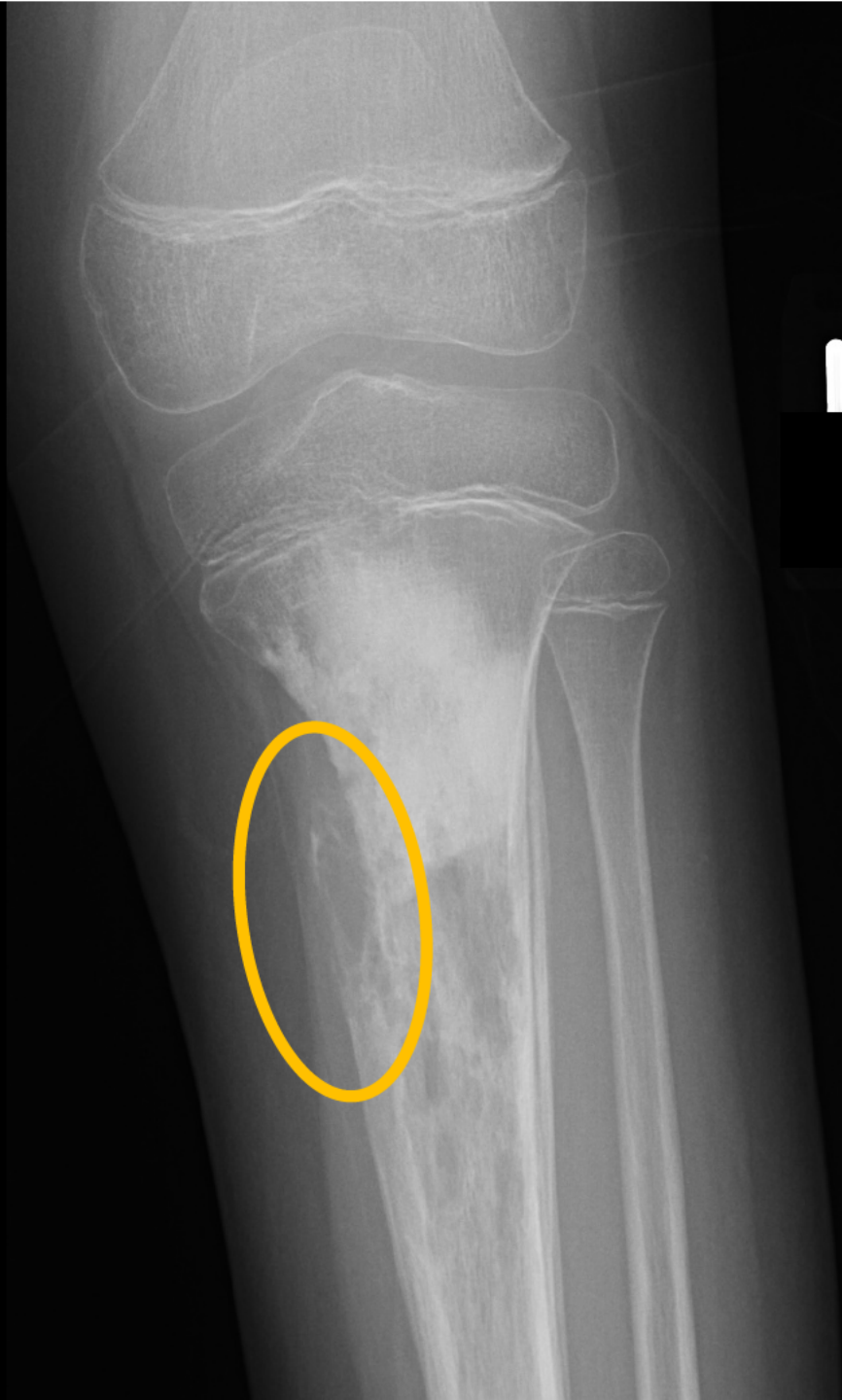


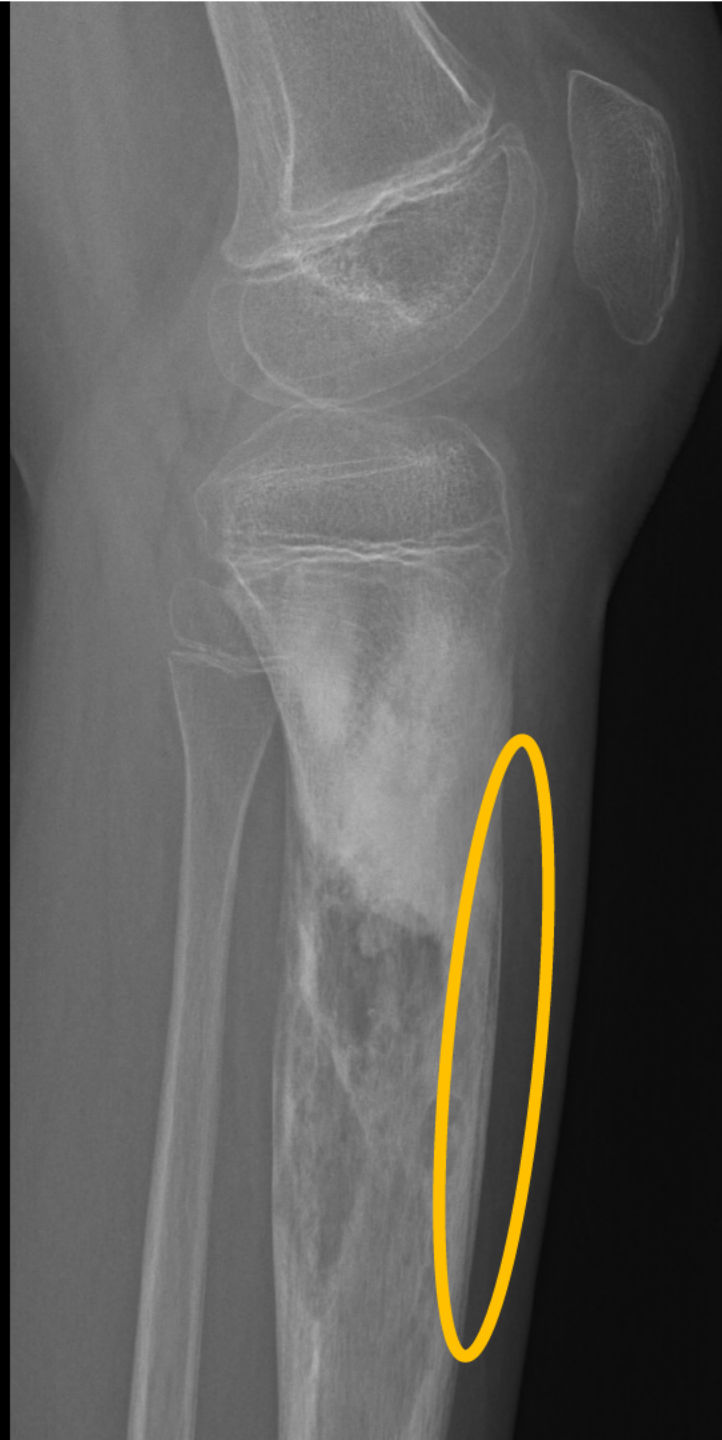


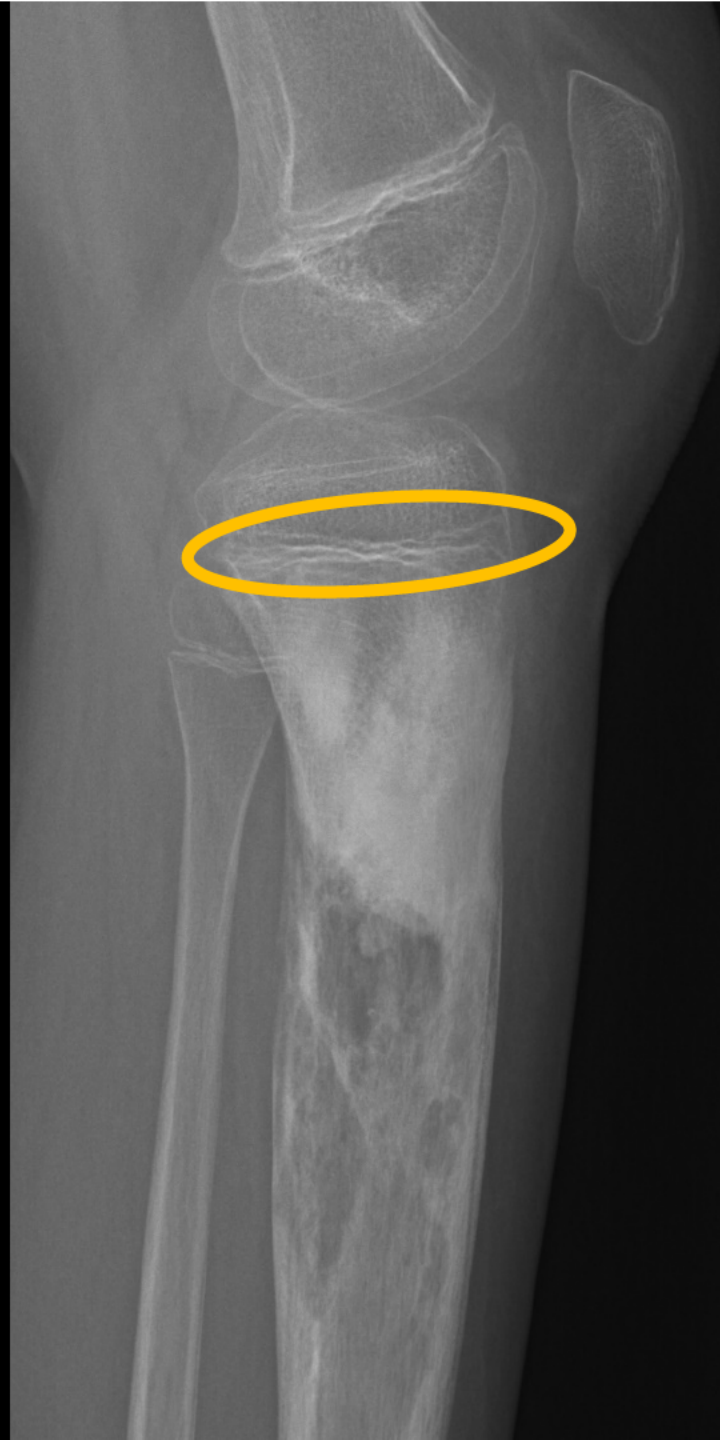
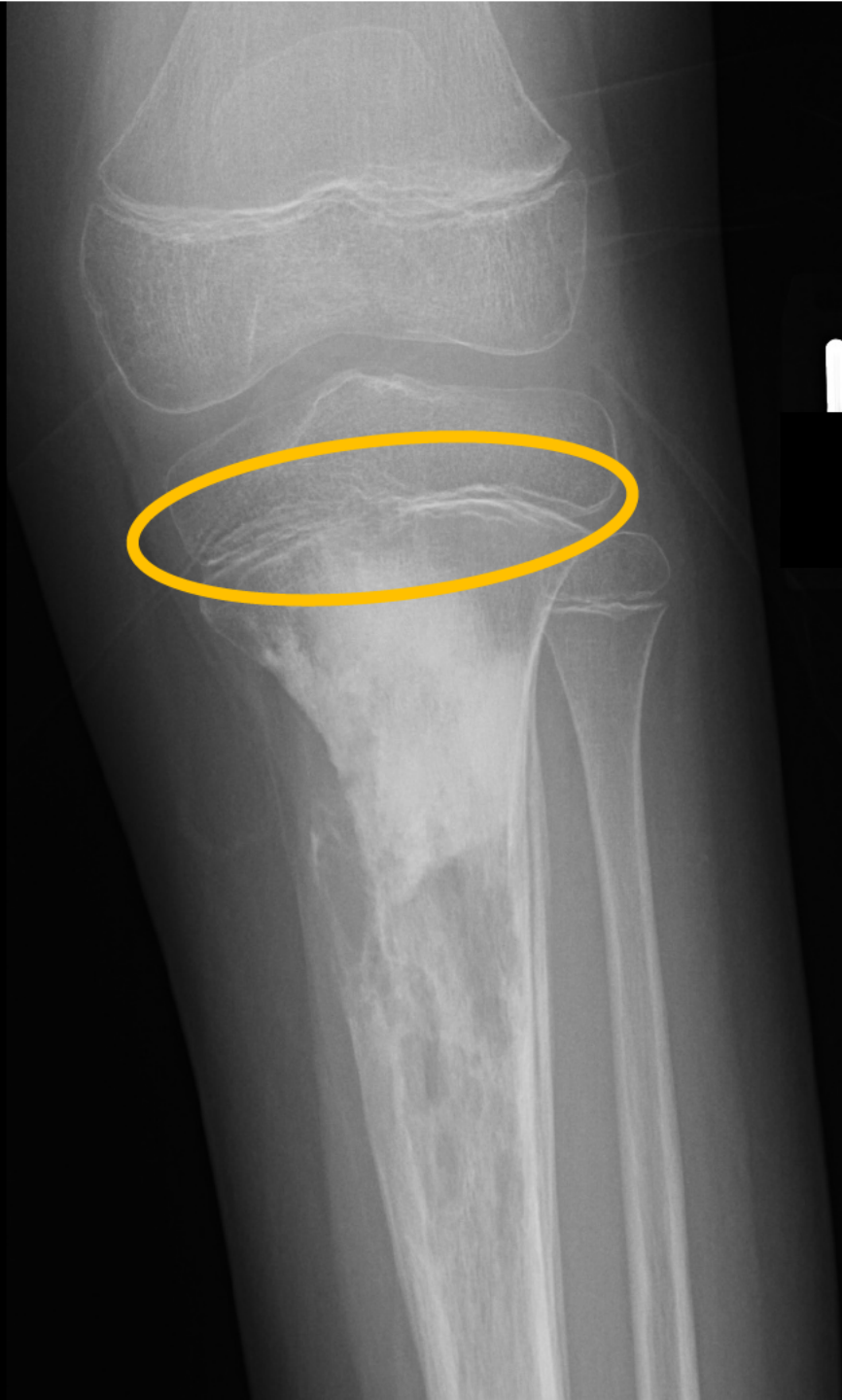






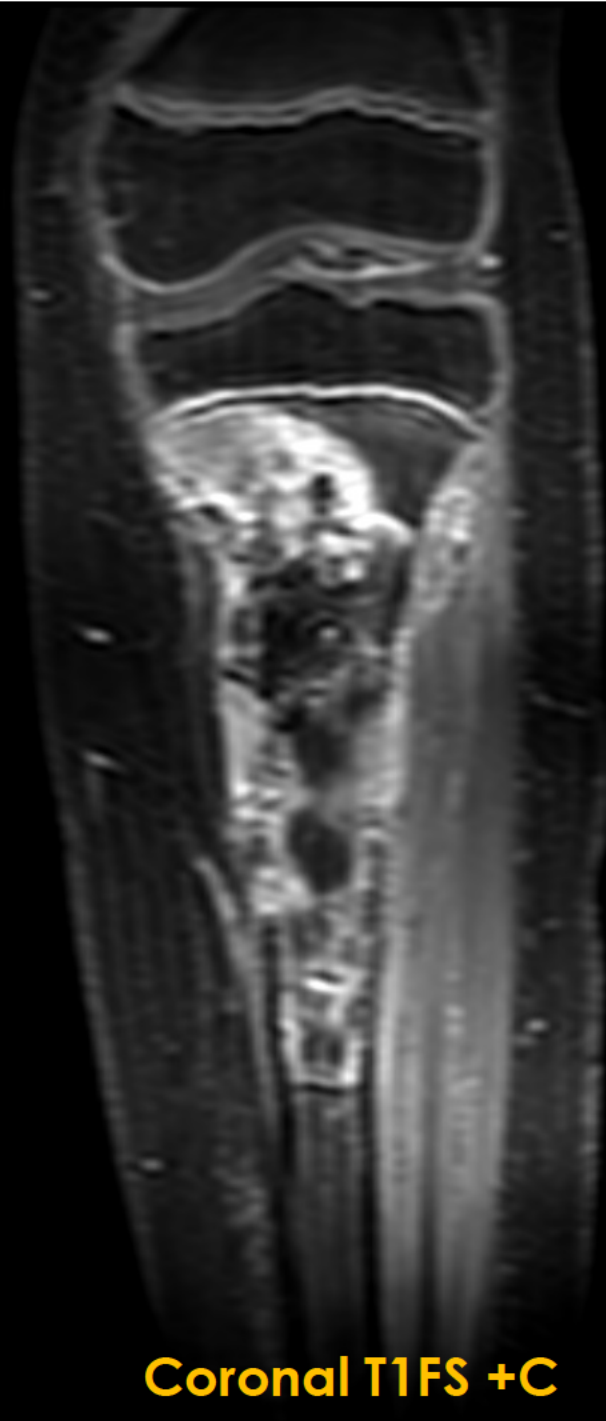




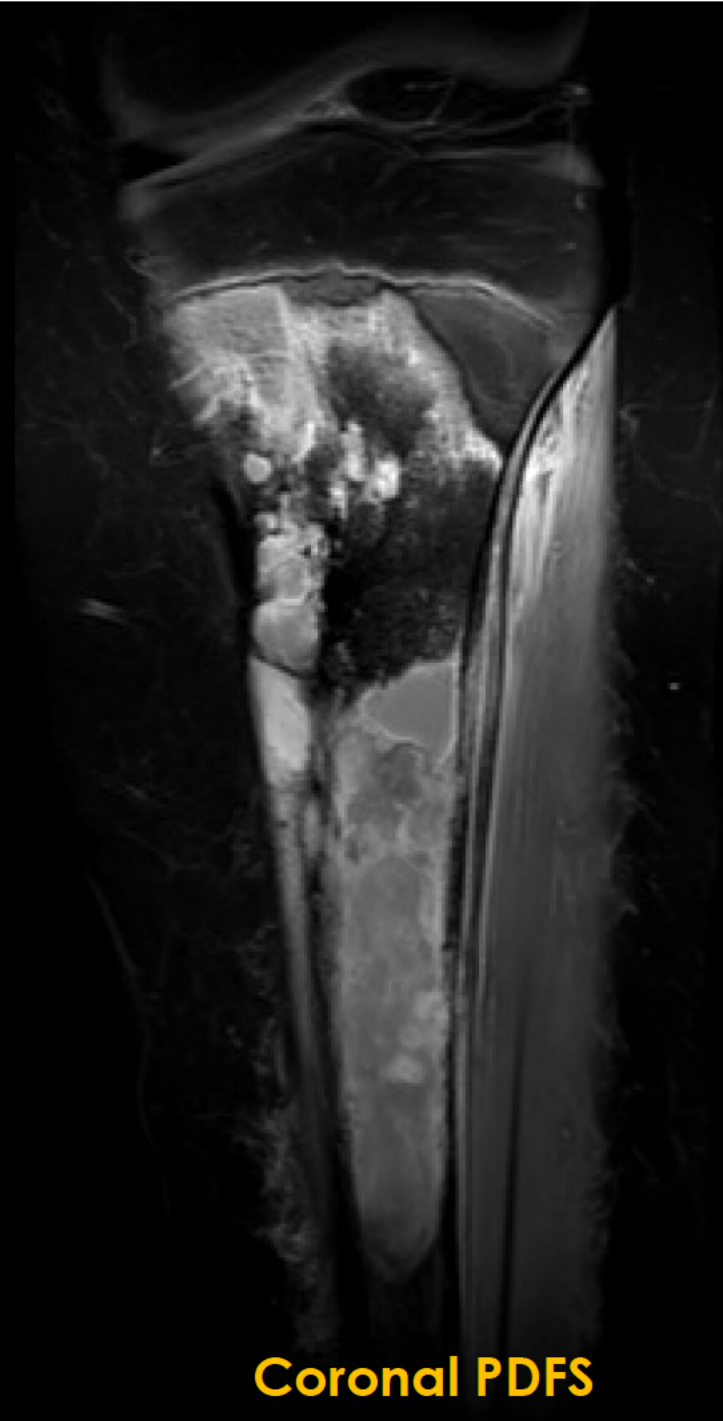




Coronal T1



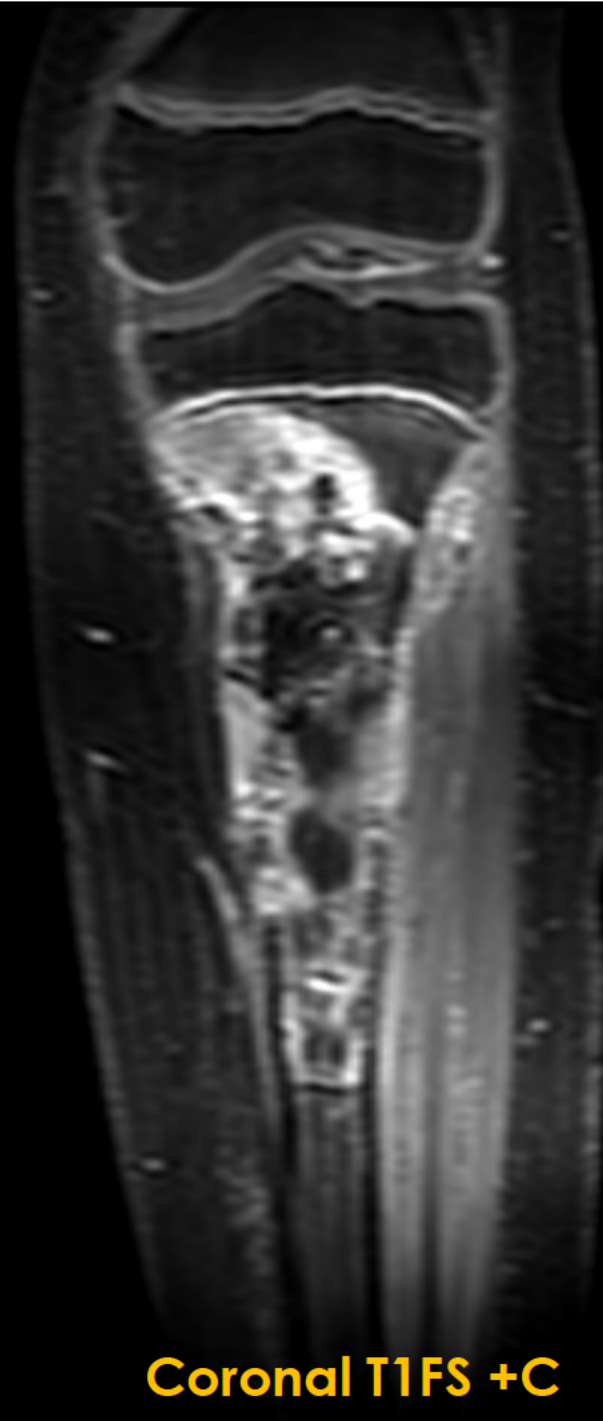
Coronal T1FS +C



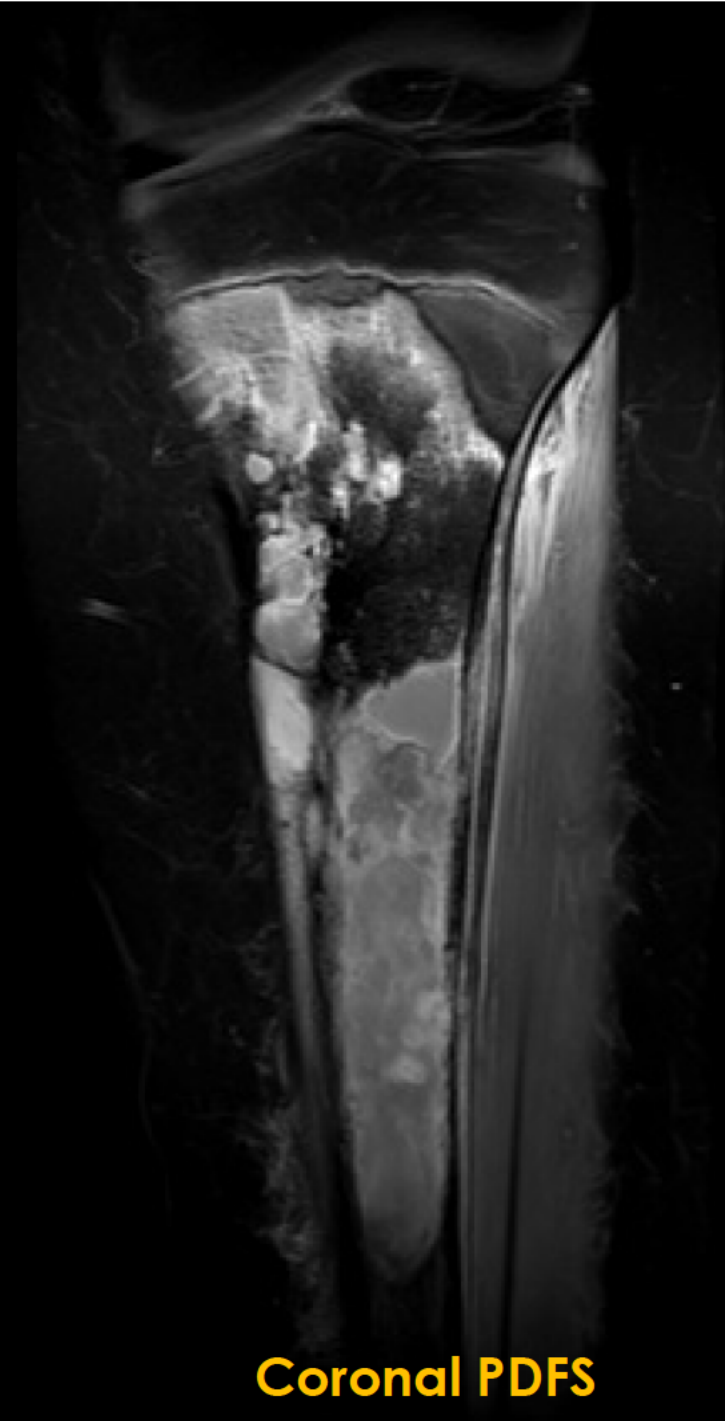
Coronal PDFS



Coronal T1



Coronal T1FS +C



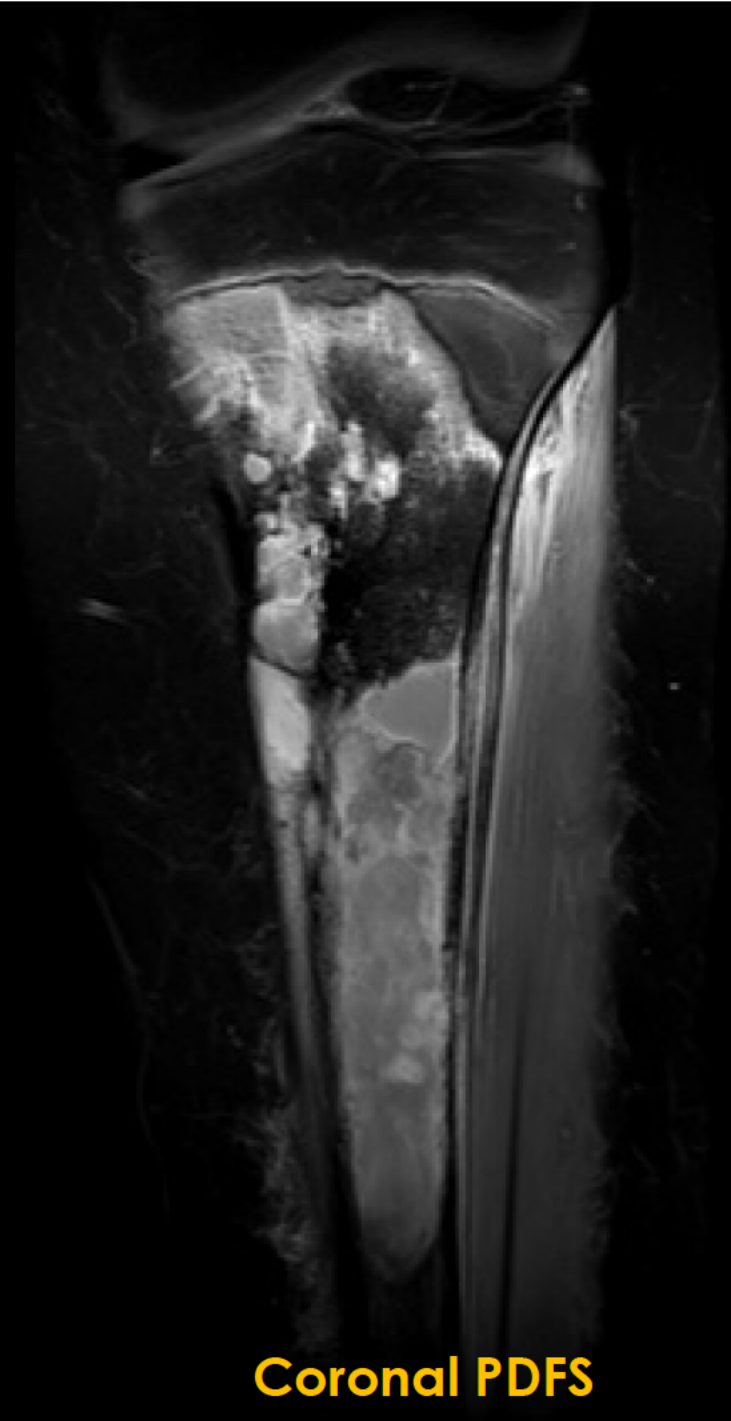
Coronal PDFS



Coronal T1



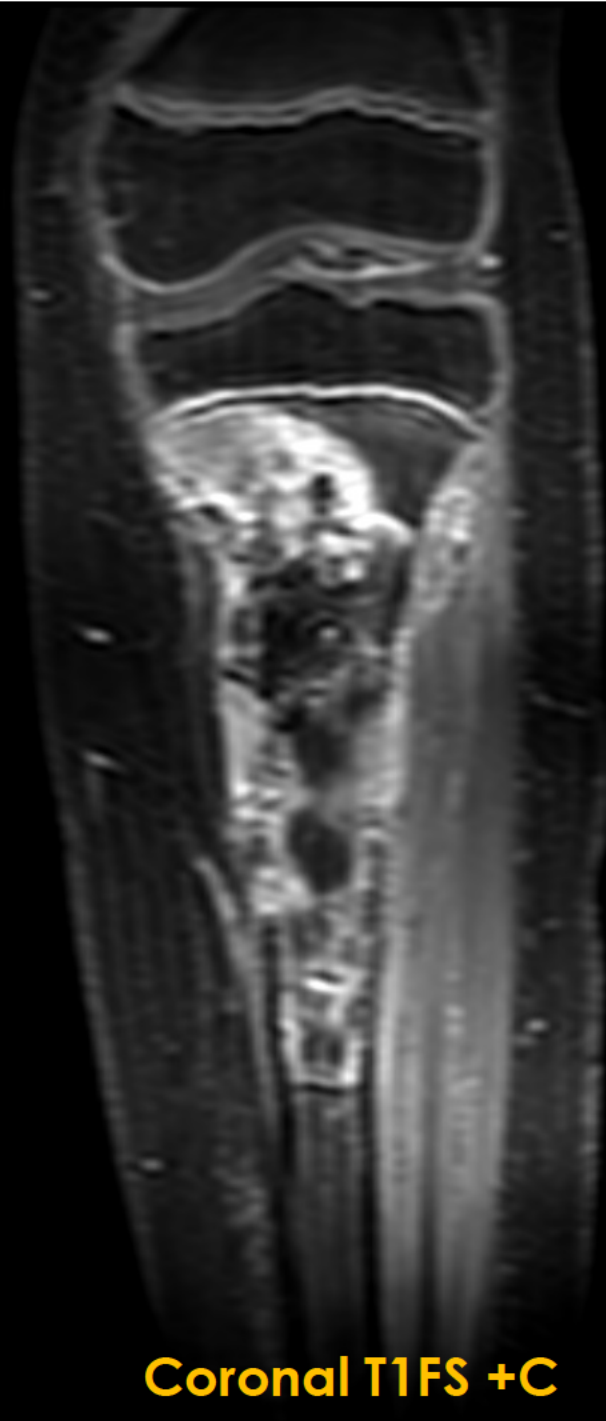
Coronal T1FS +C



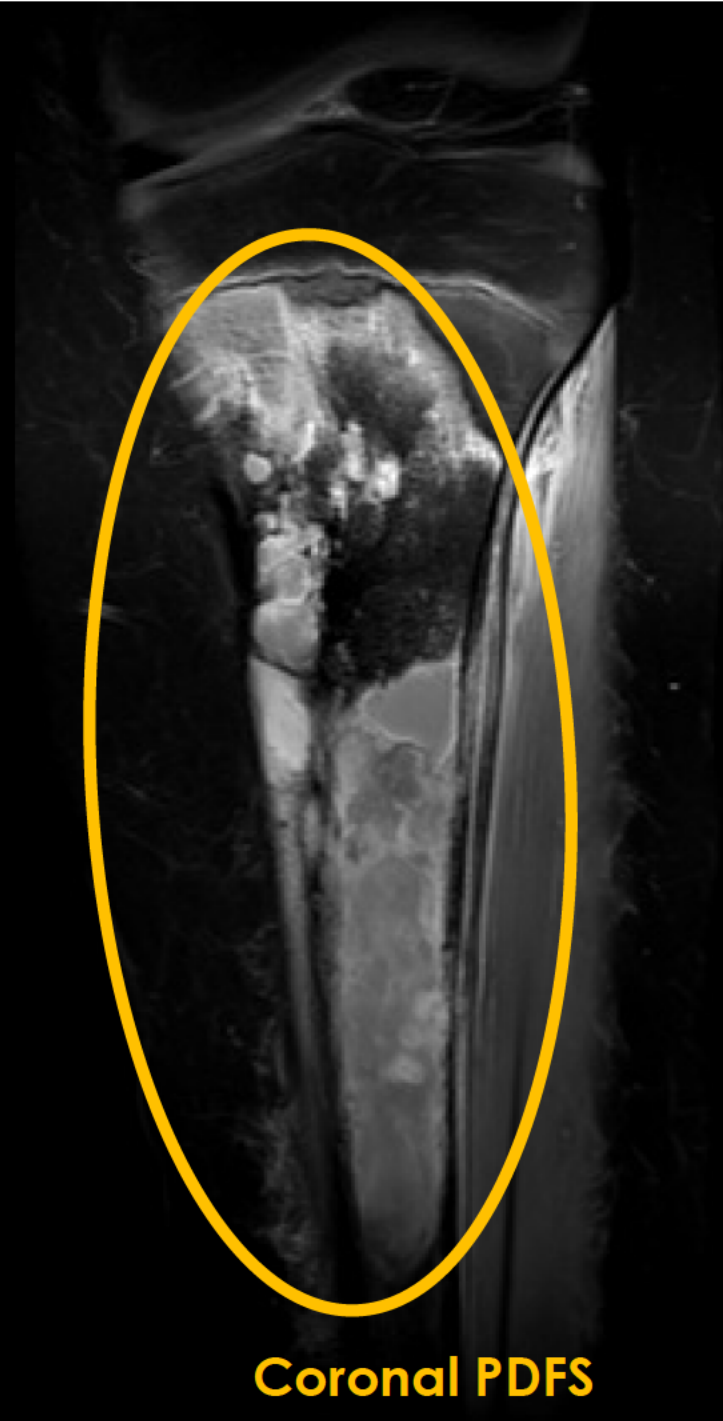
Coronal PDFS



Coronal T1



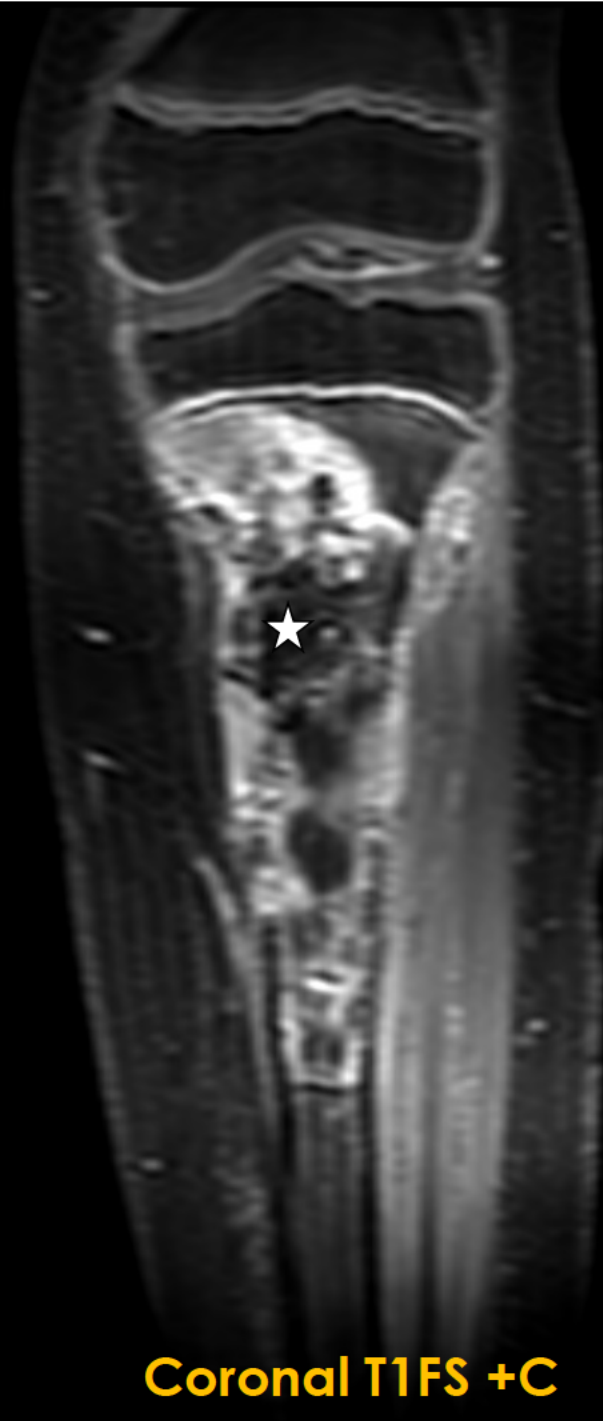
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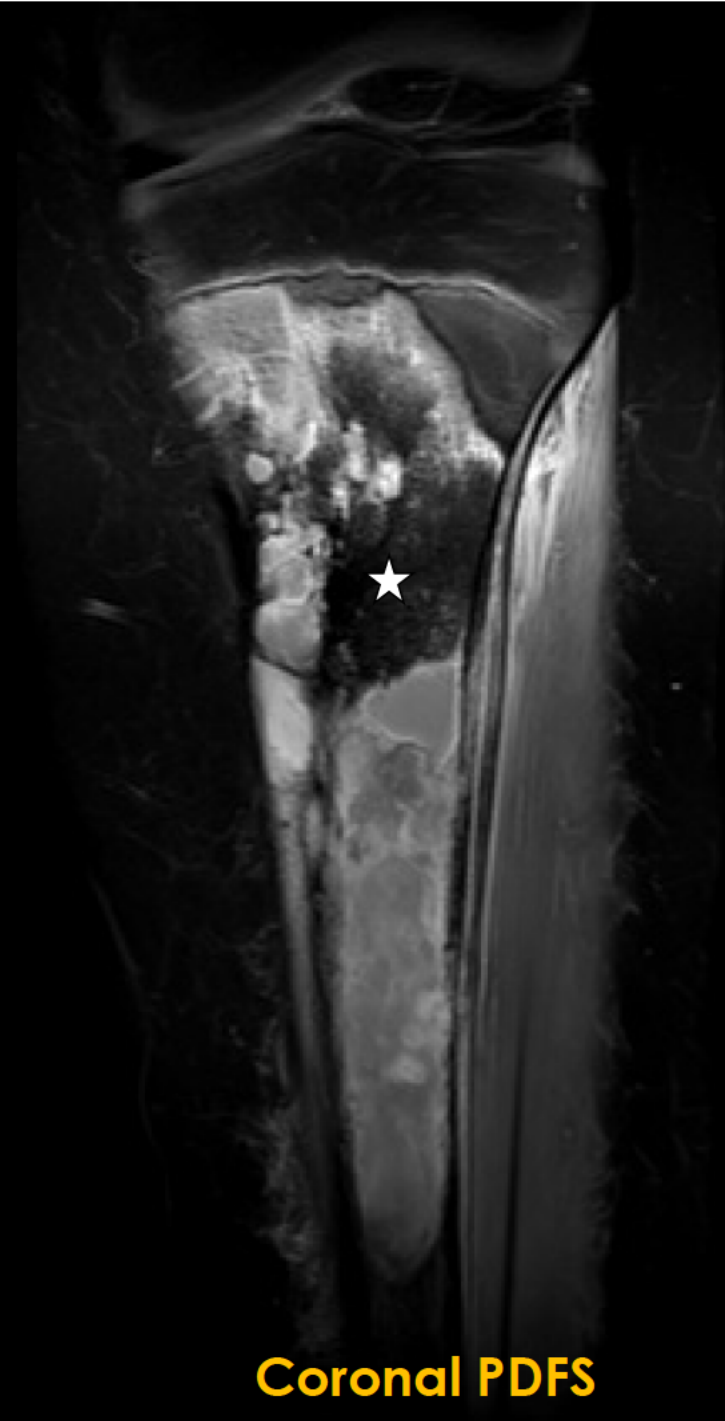
Coronal PDFS



Coronal T1



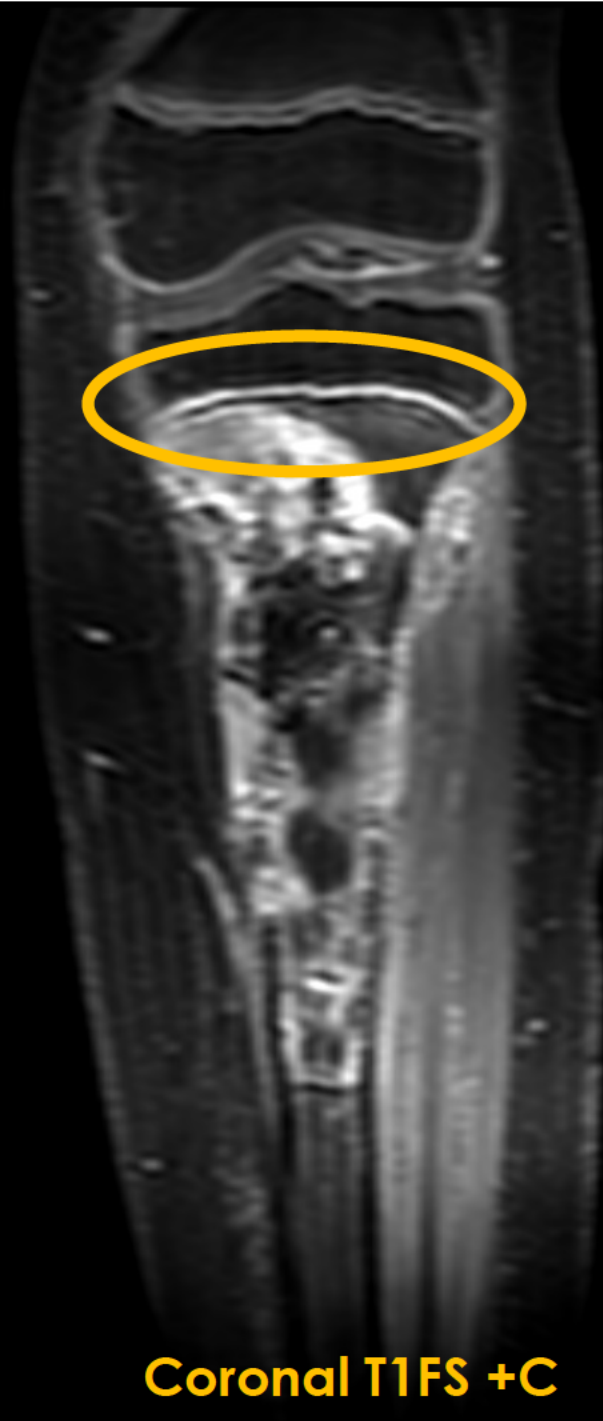
Coronal T1FS +C



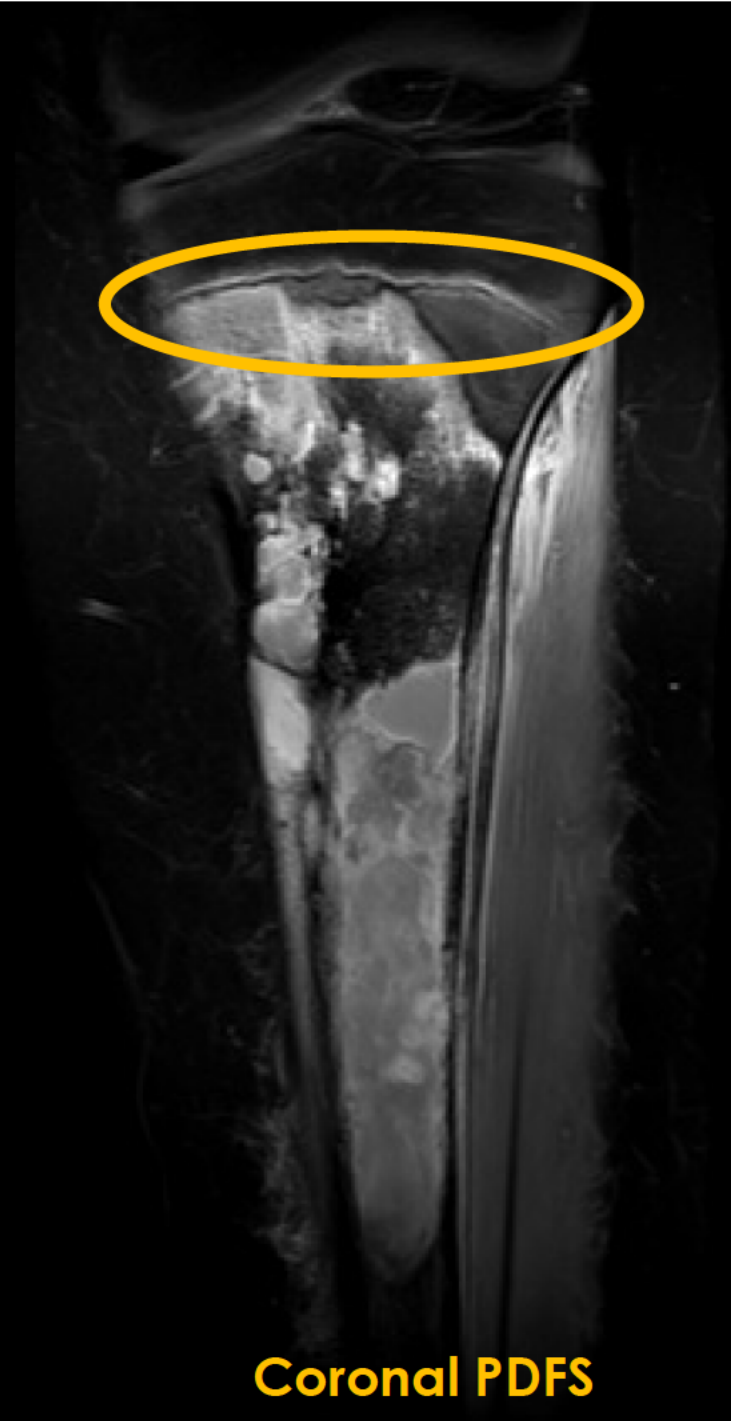
Coronal PDFS



Coronal T1



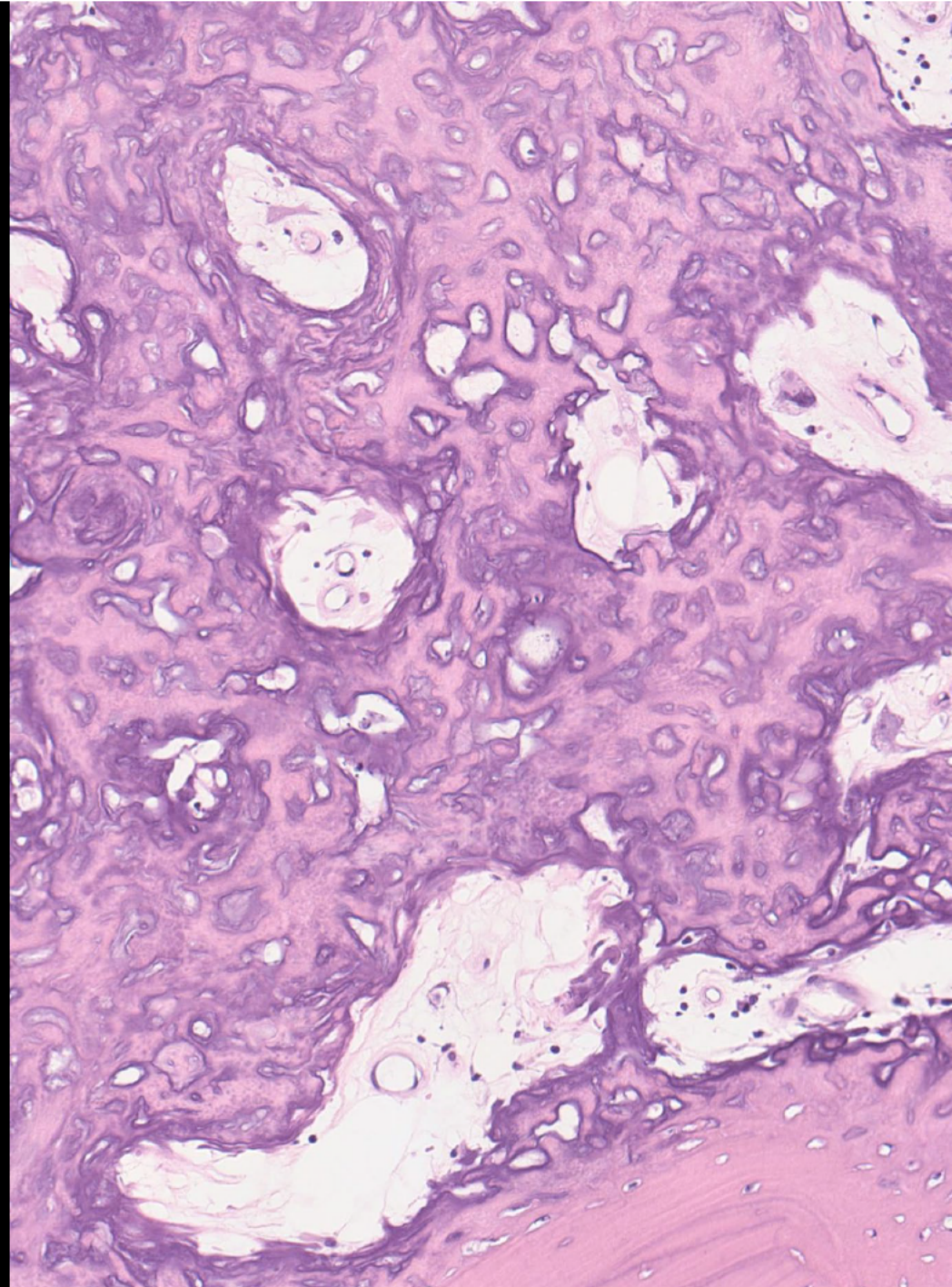
Coronal T1FS +C



Coronal PDFS

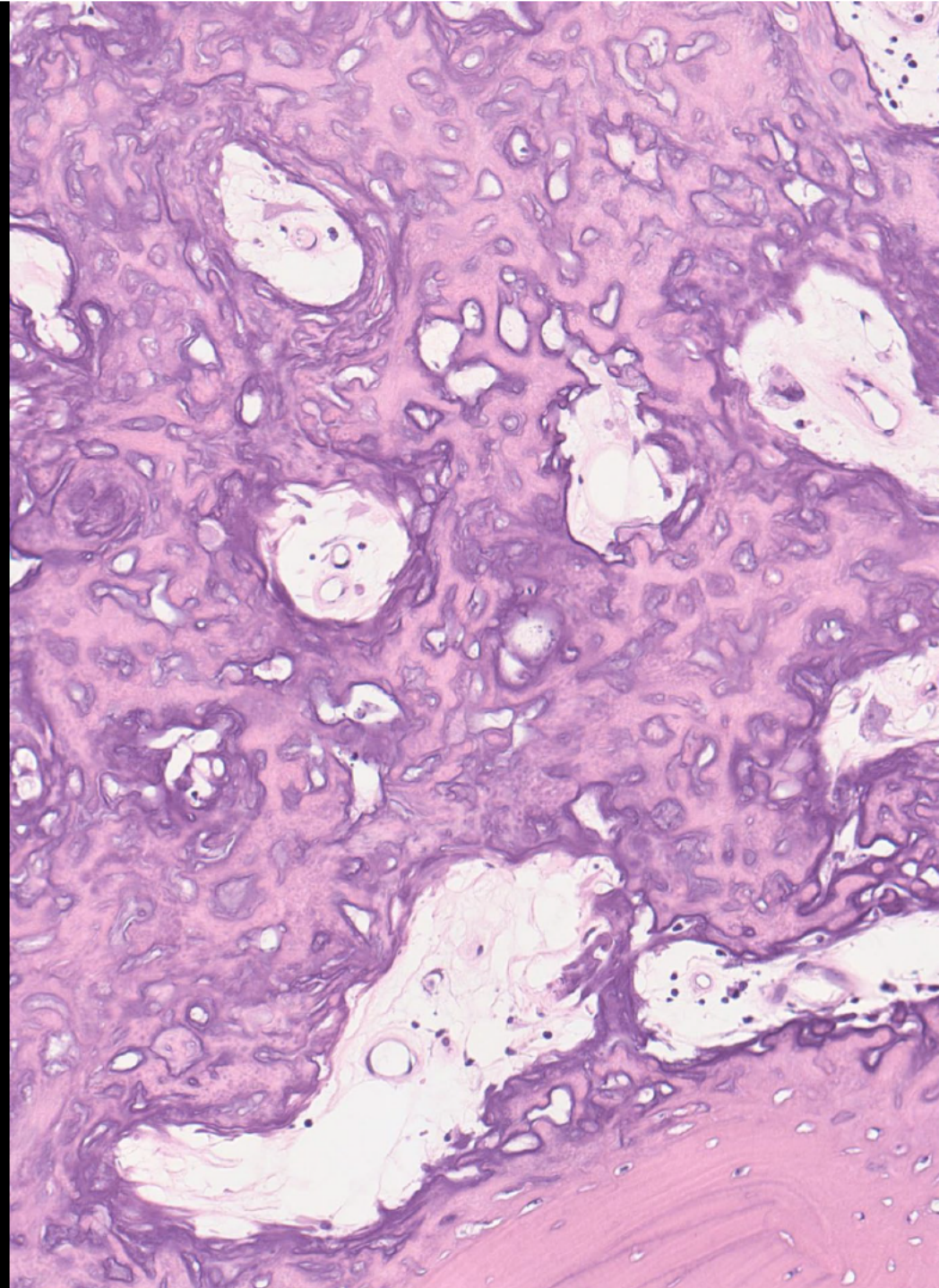


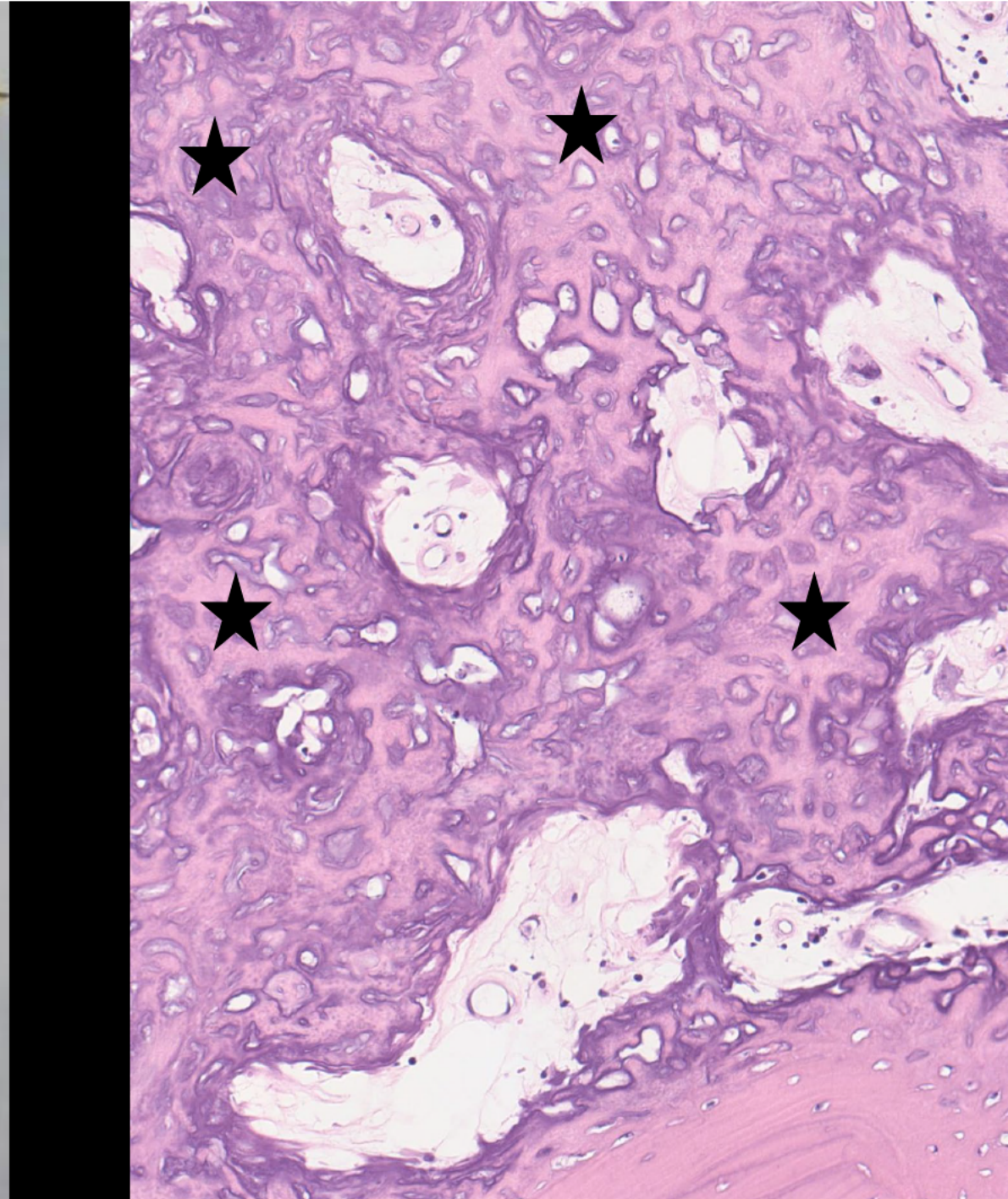
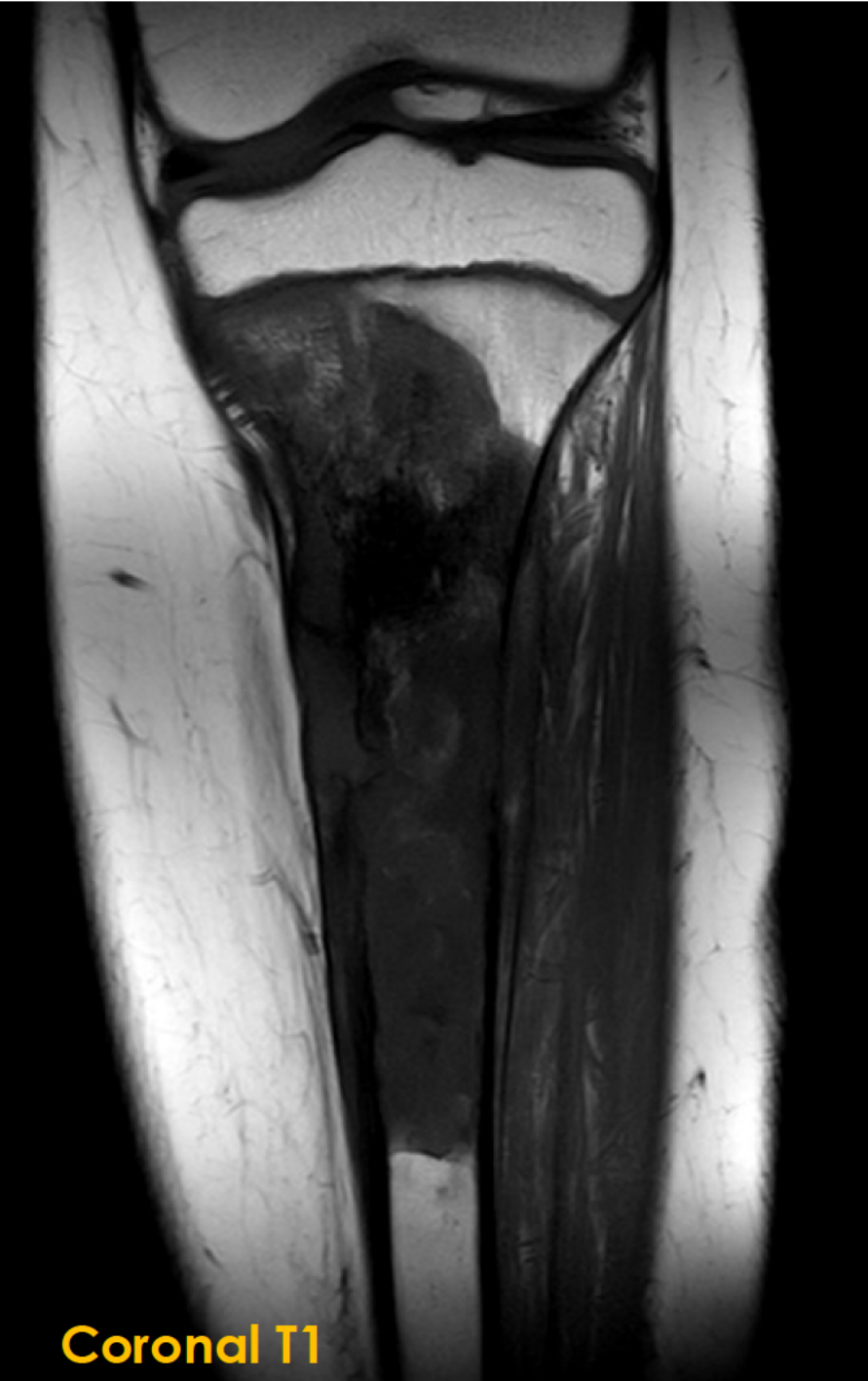
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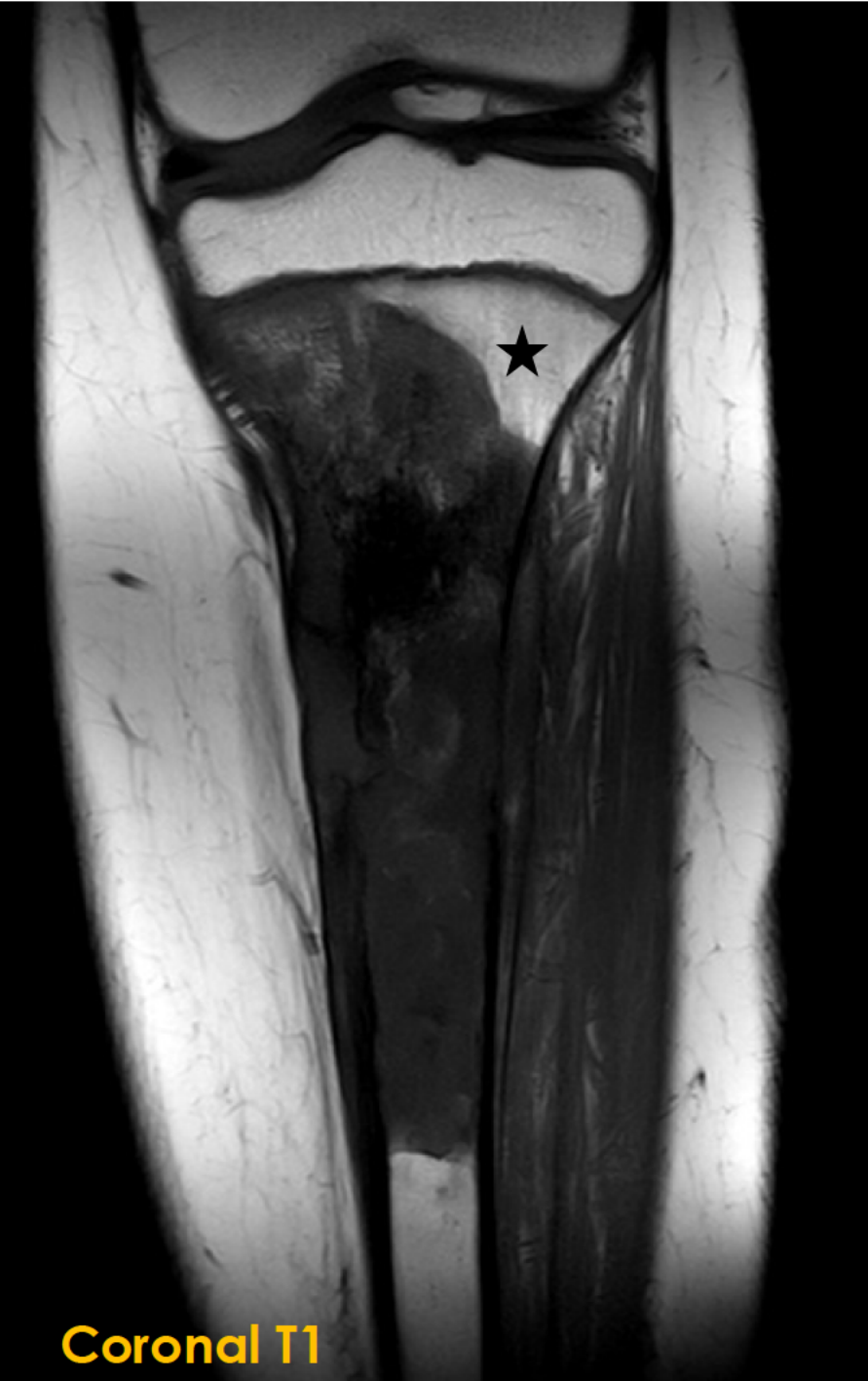




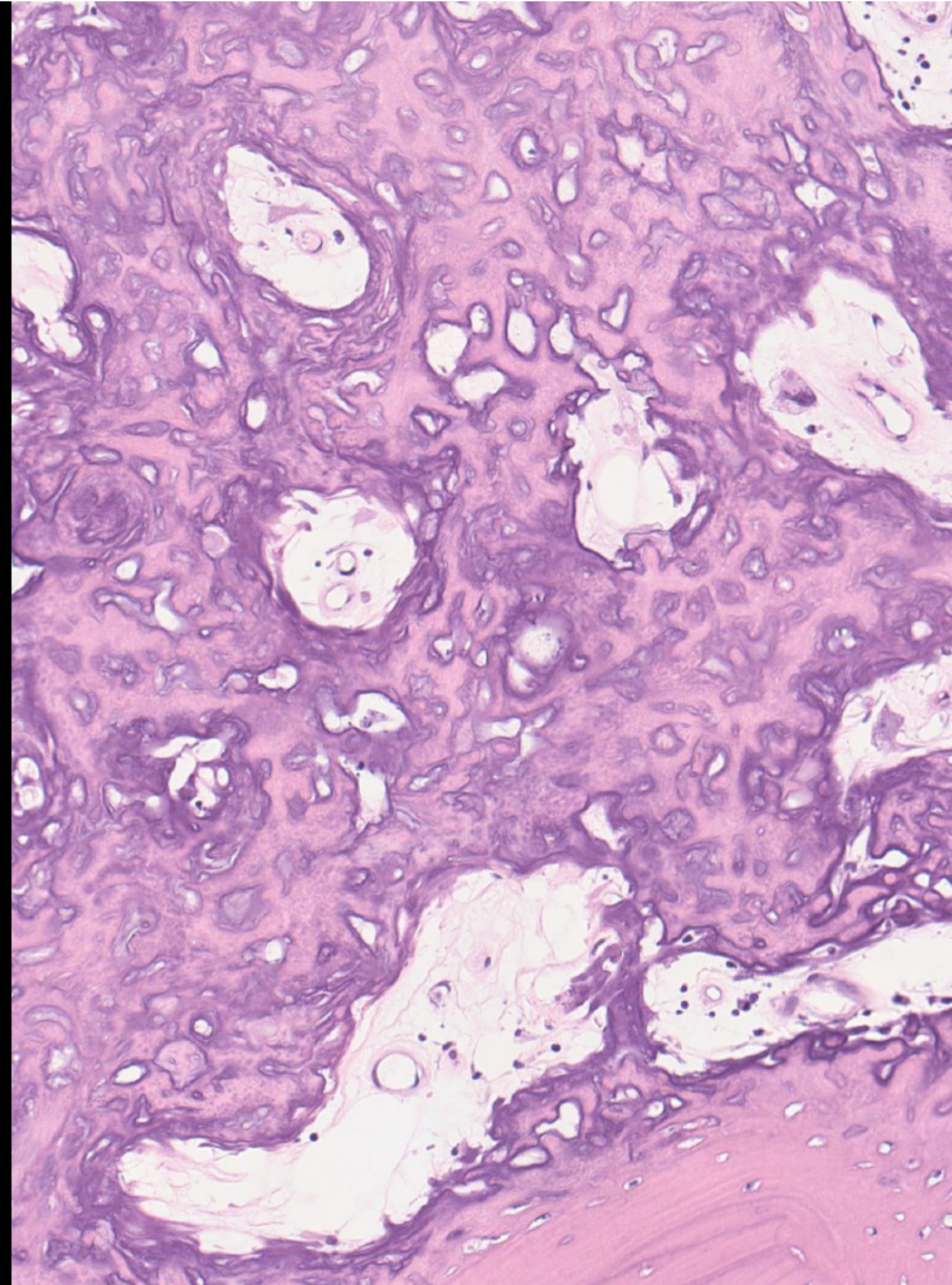
Coronal T1



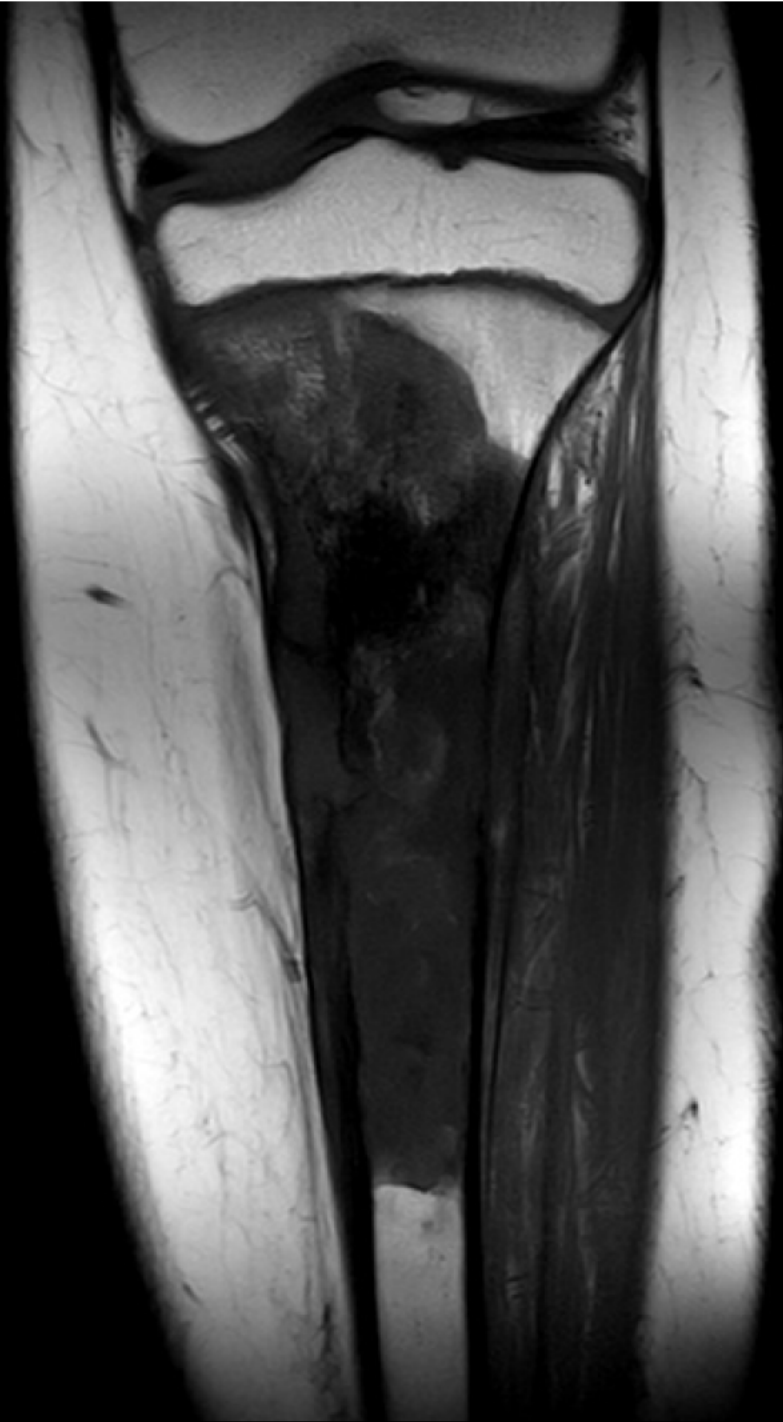


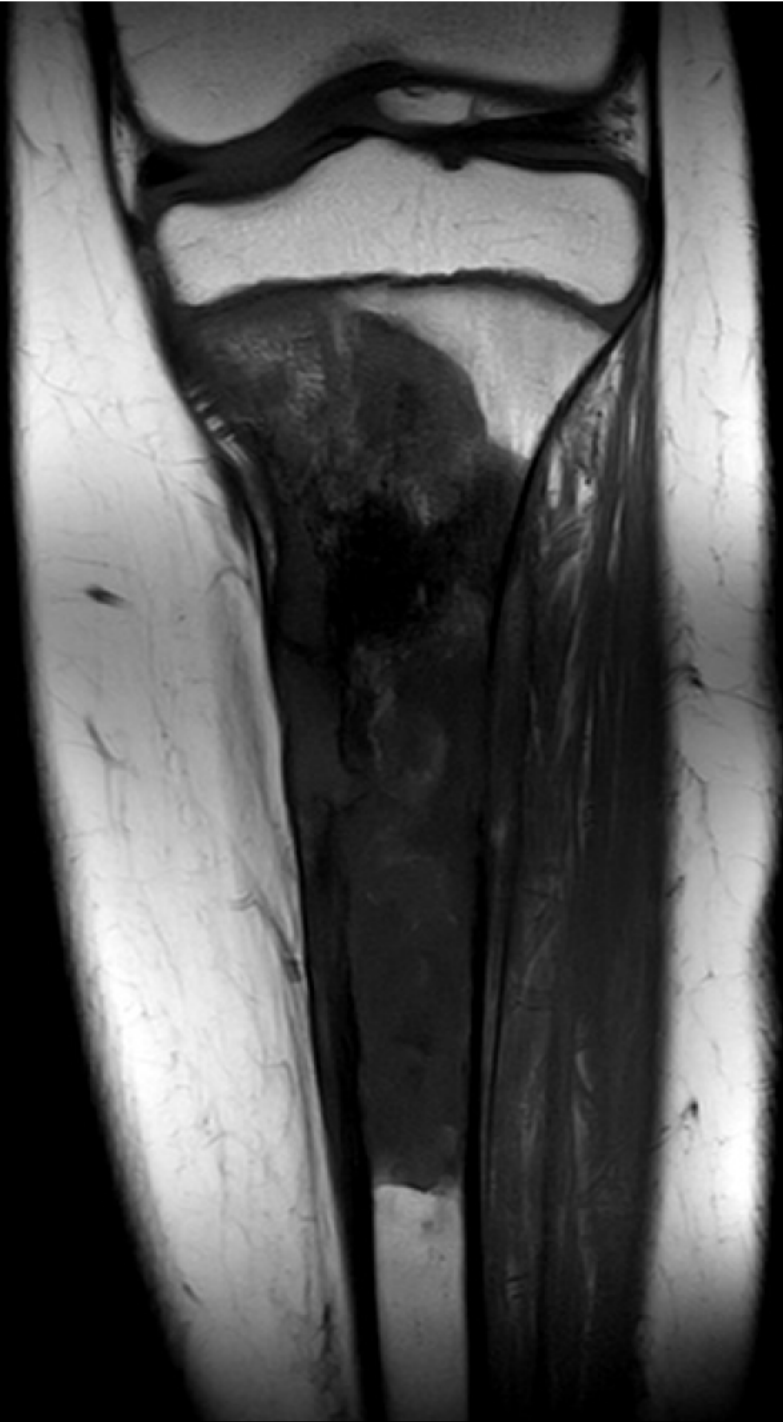


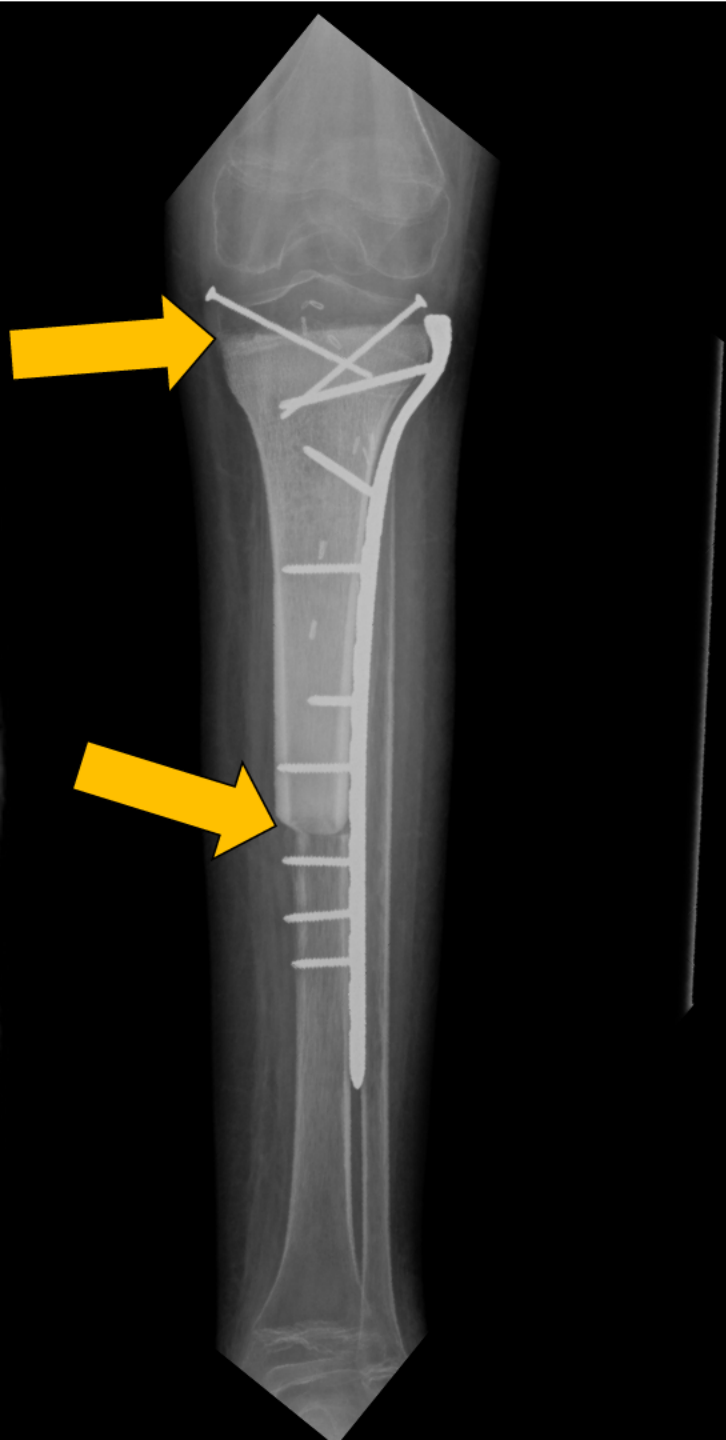
Coronal T1

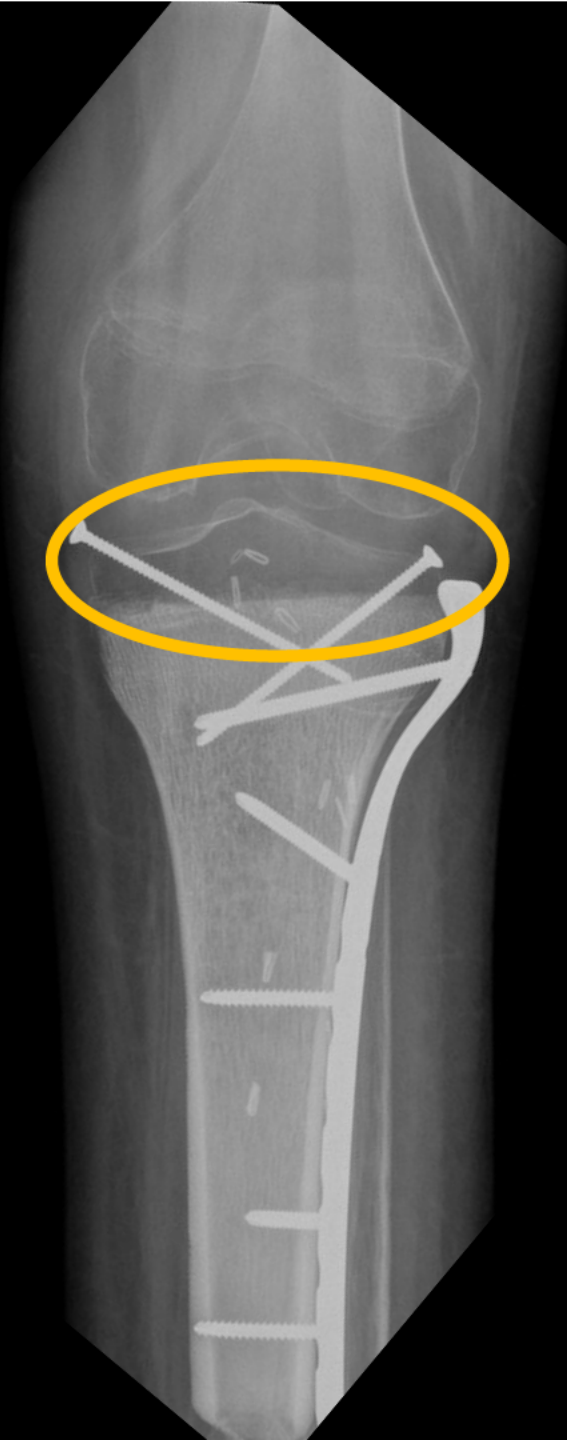
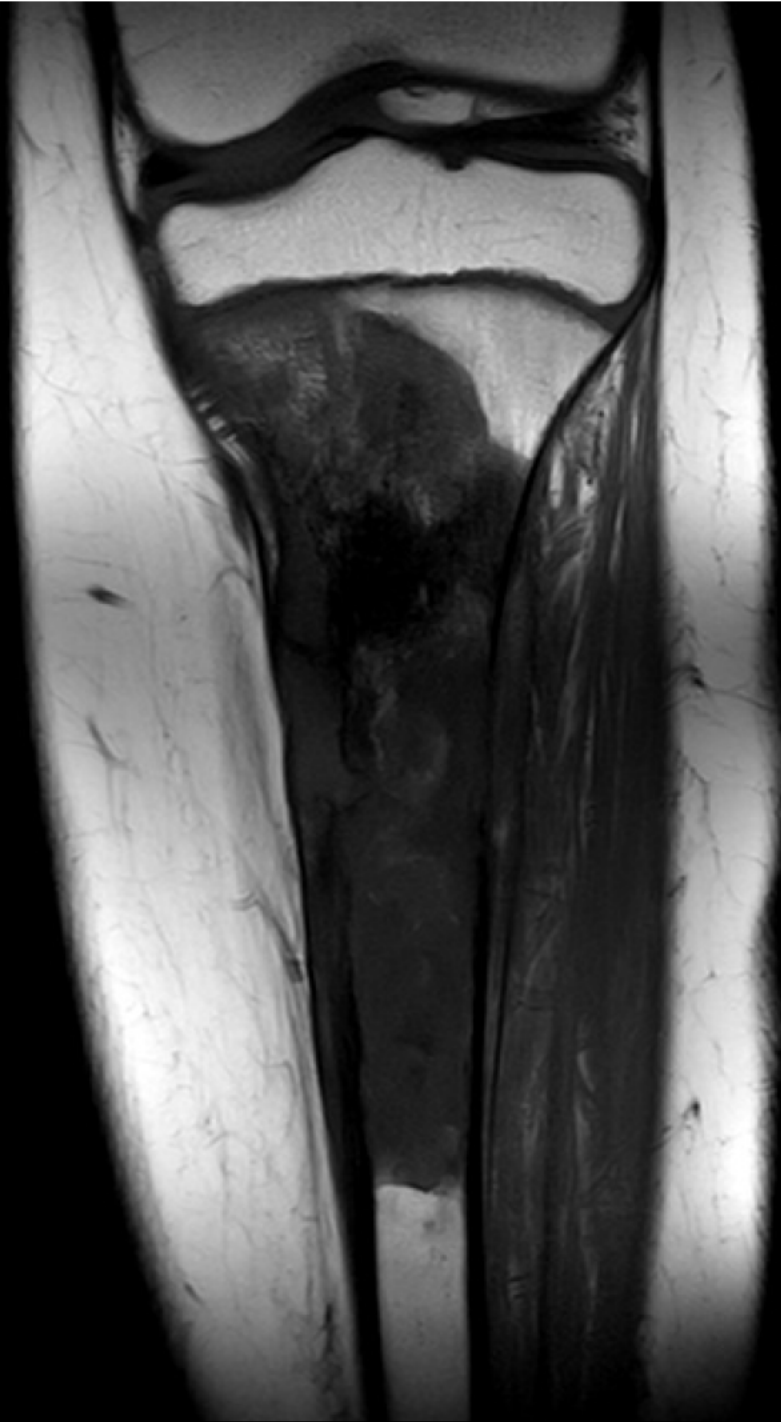












Conventional Osteosarcoma

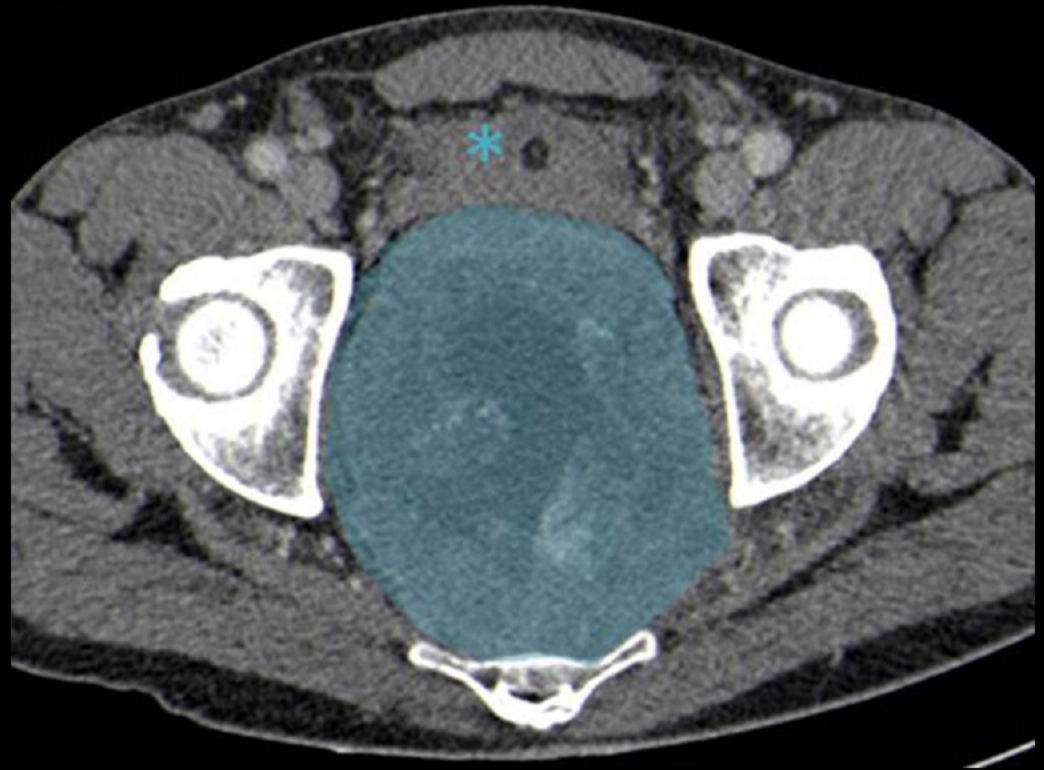
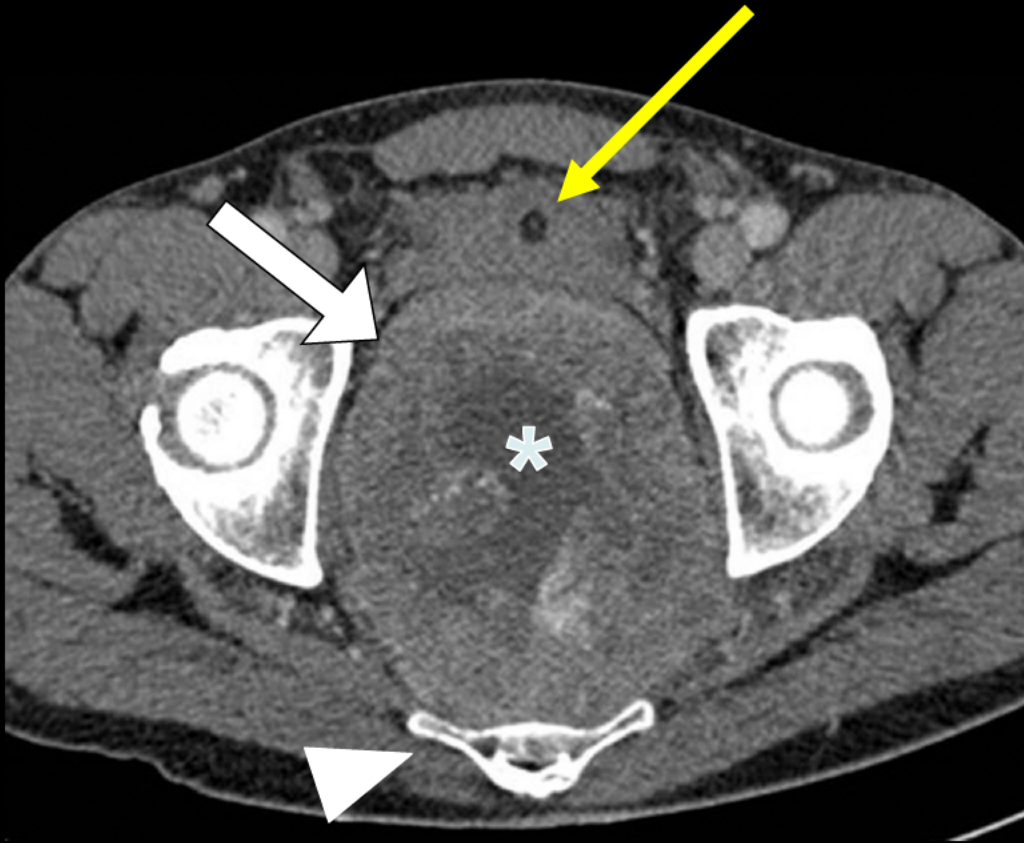
Dr. Justin Hungerford
Albany Medical Center
Albany, NY

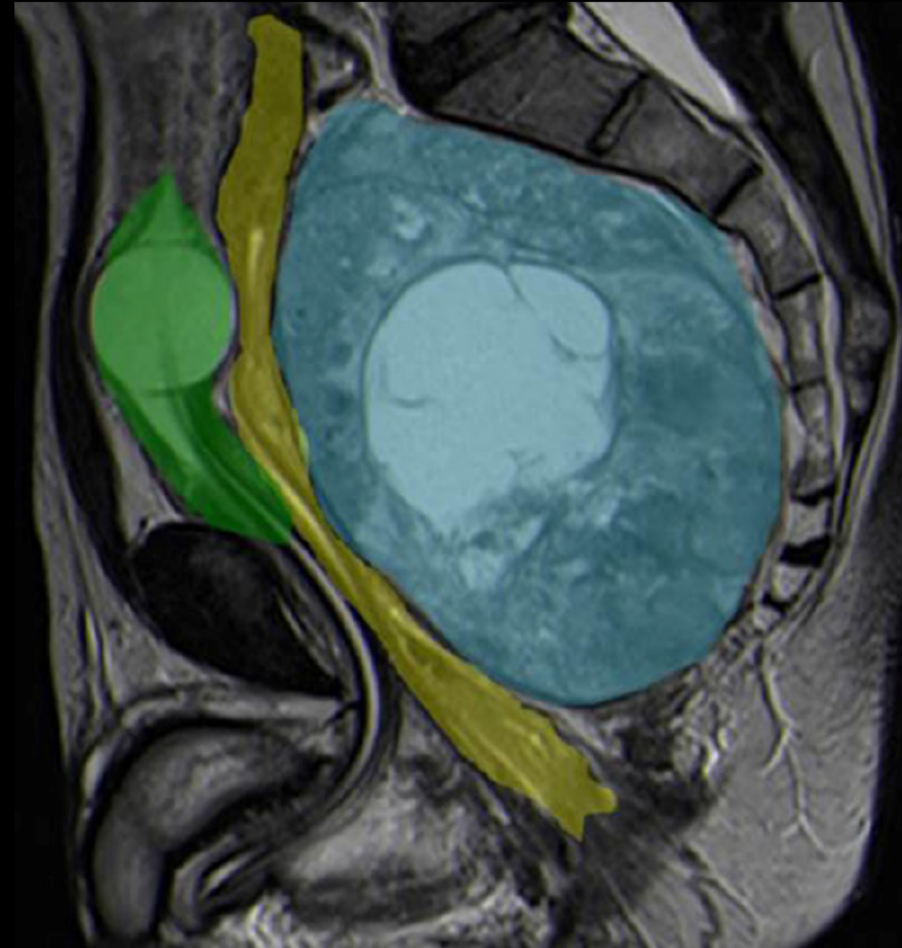
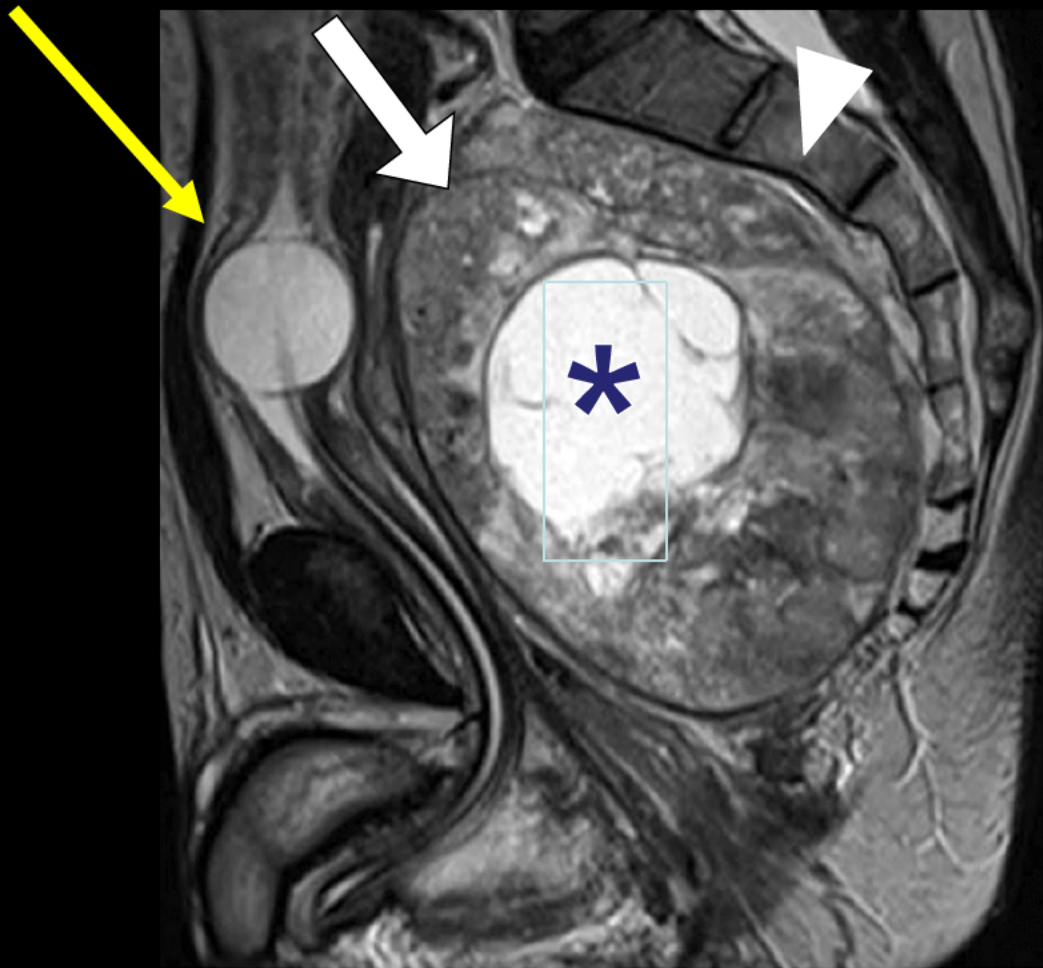
Gastrointestinal Best Case



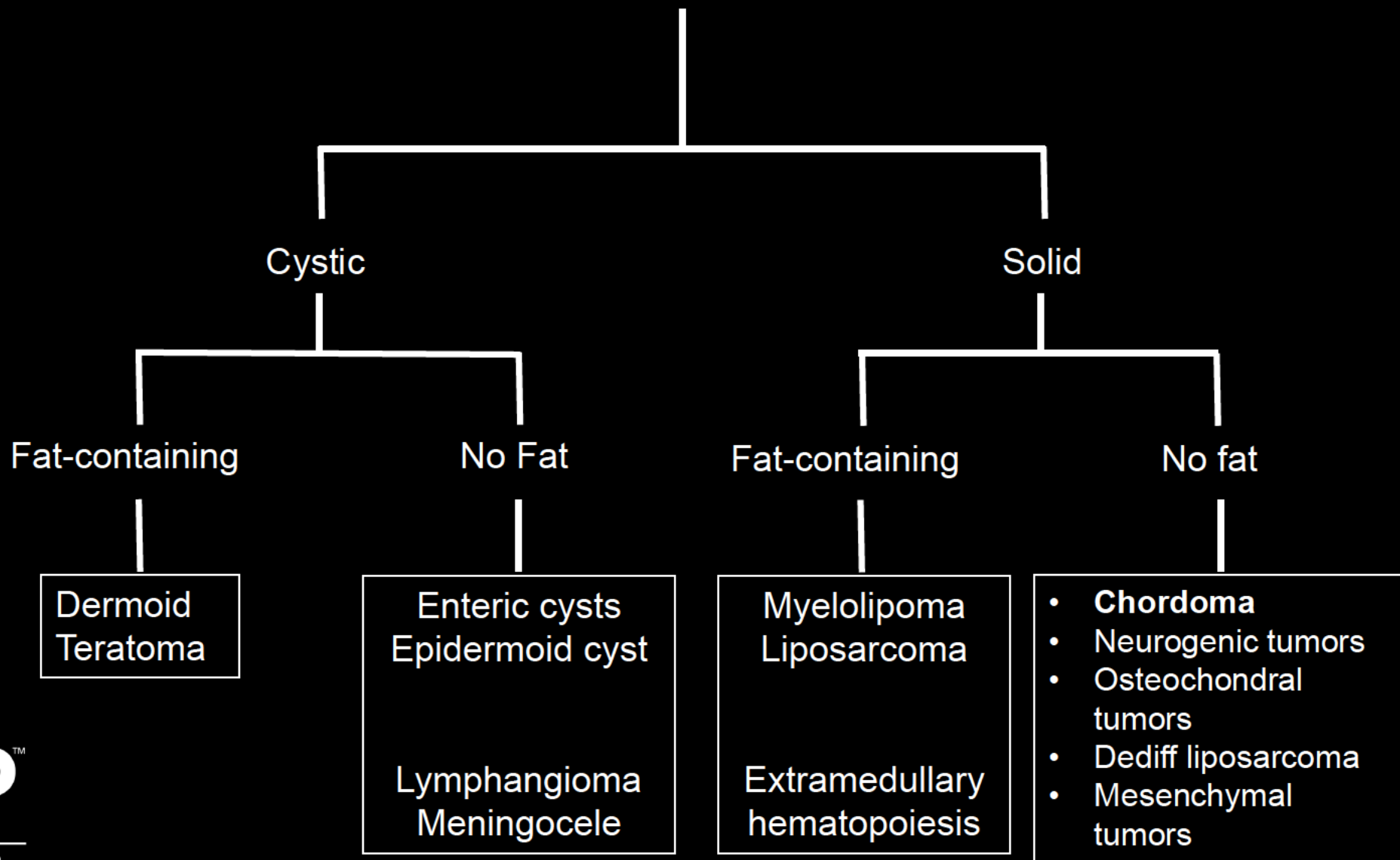
Clinical information

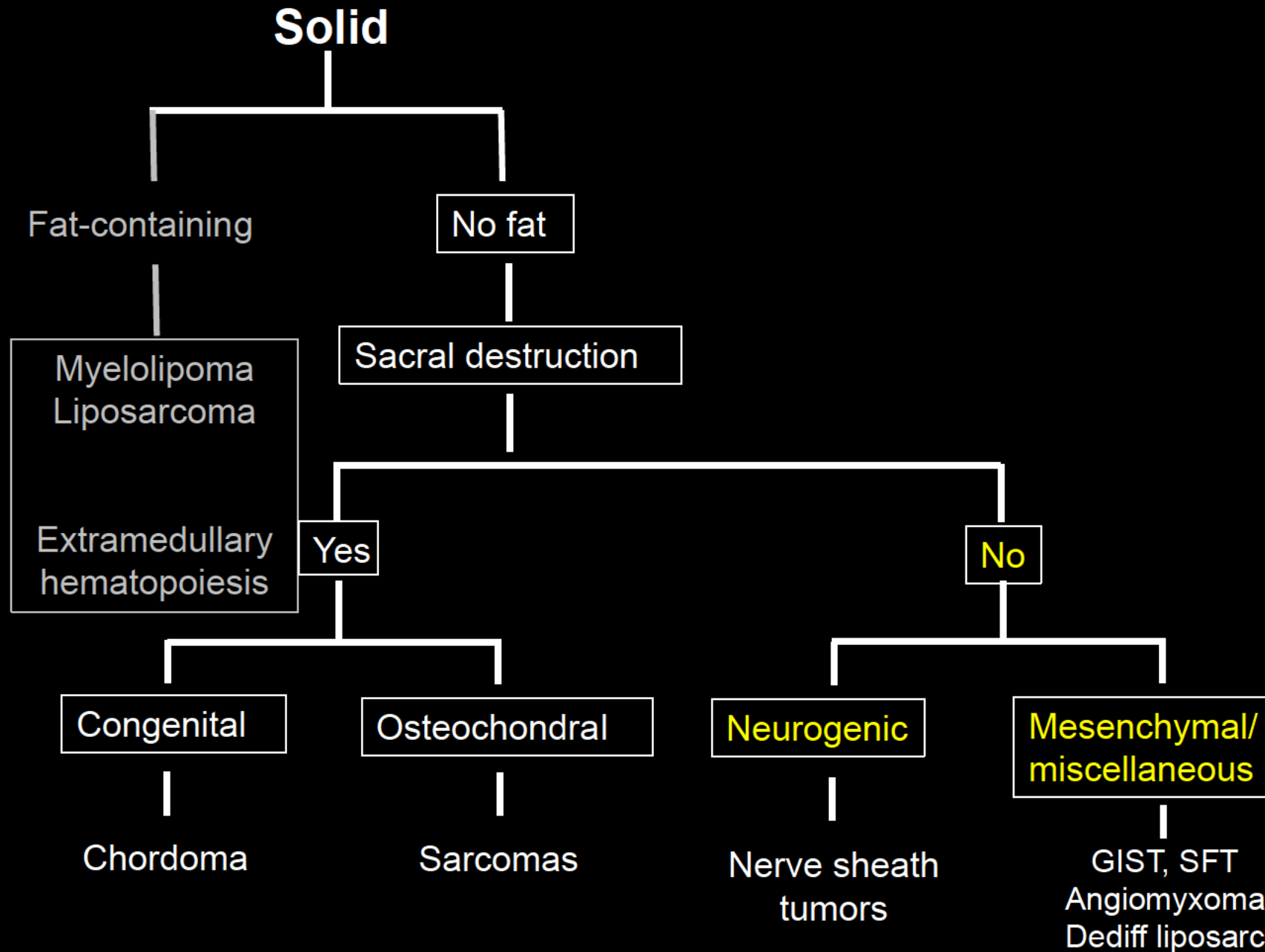
54-year-old white male with urinary retention, constipation, and lower abdominal pain, with unexpected weight-loss over 6 months.

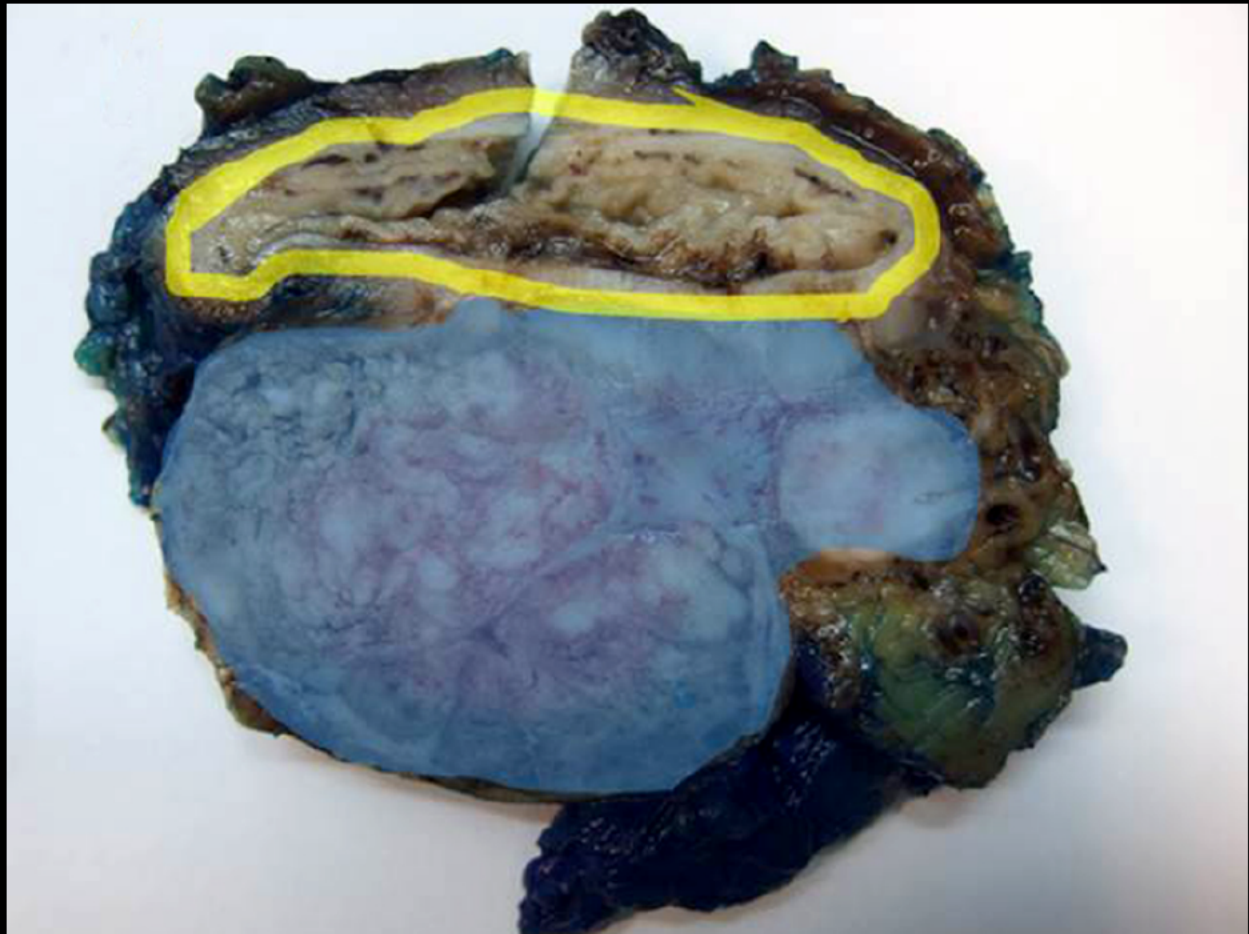
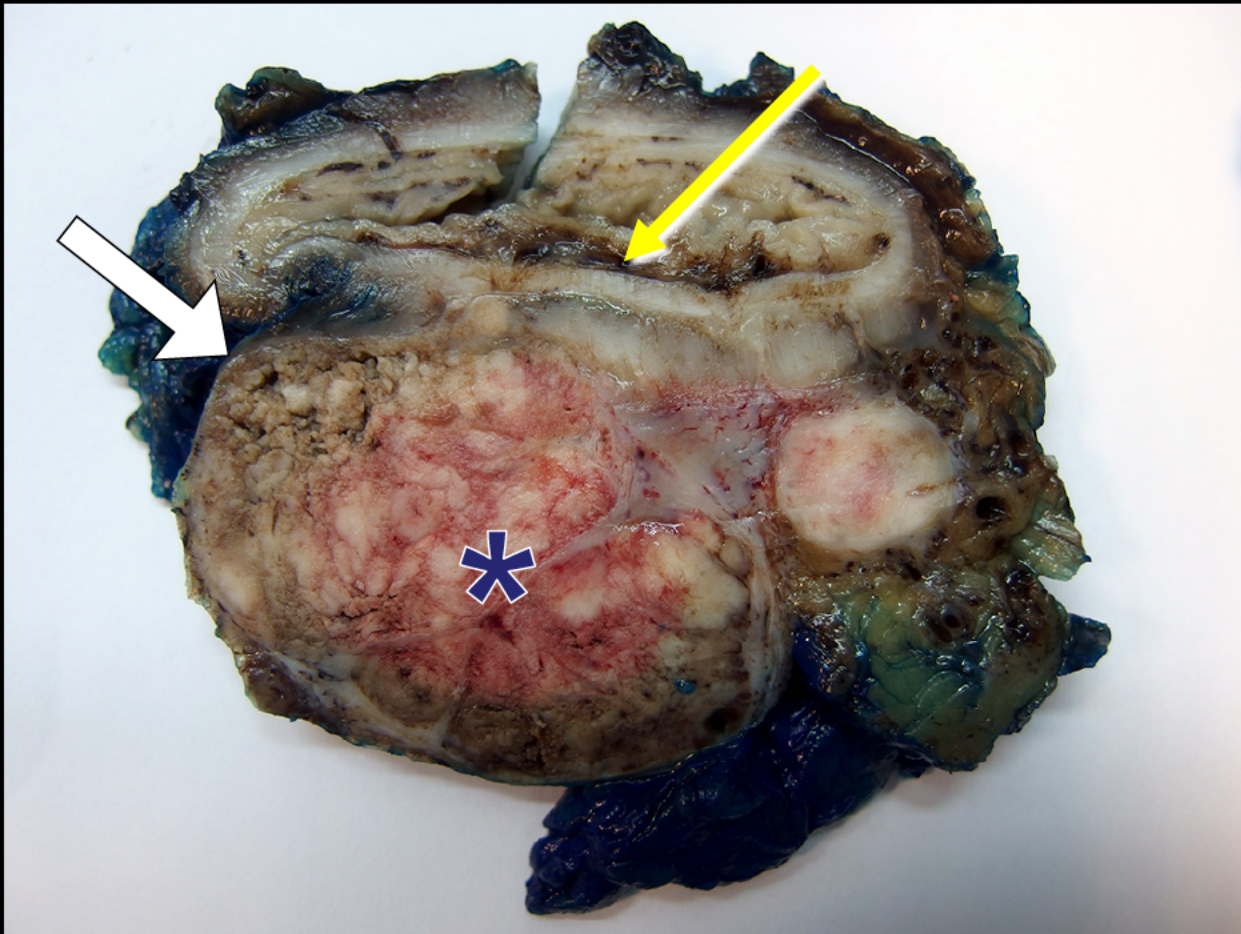


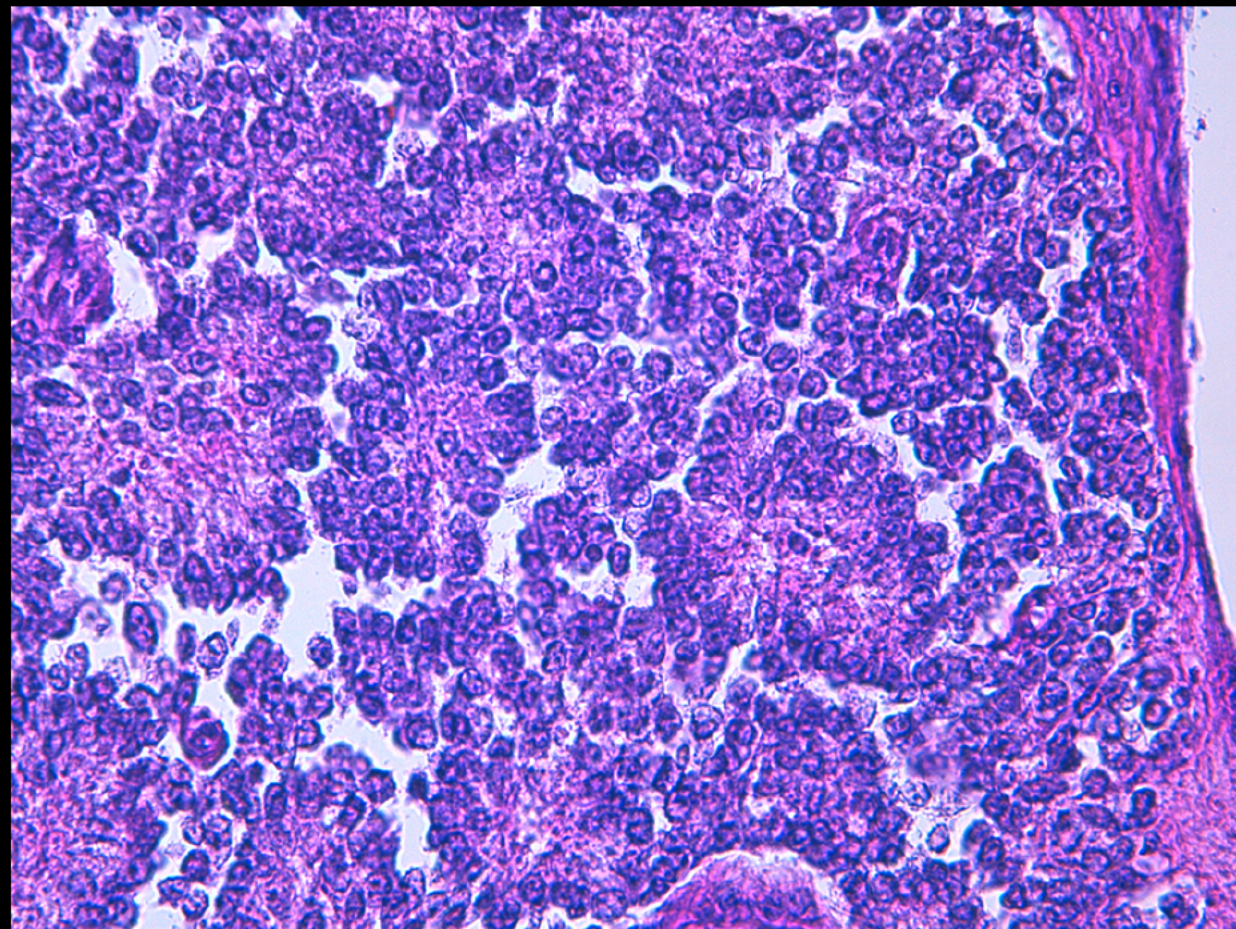
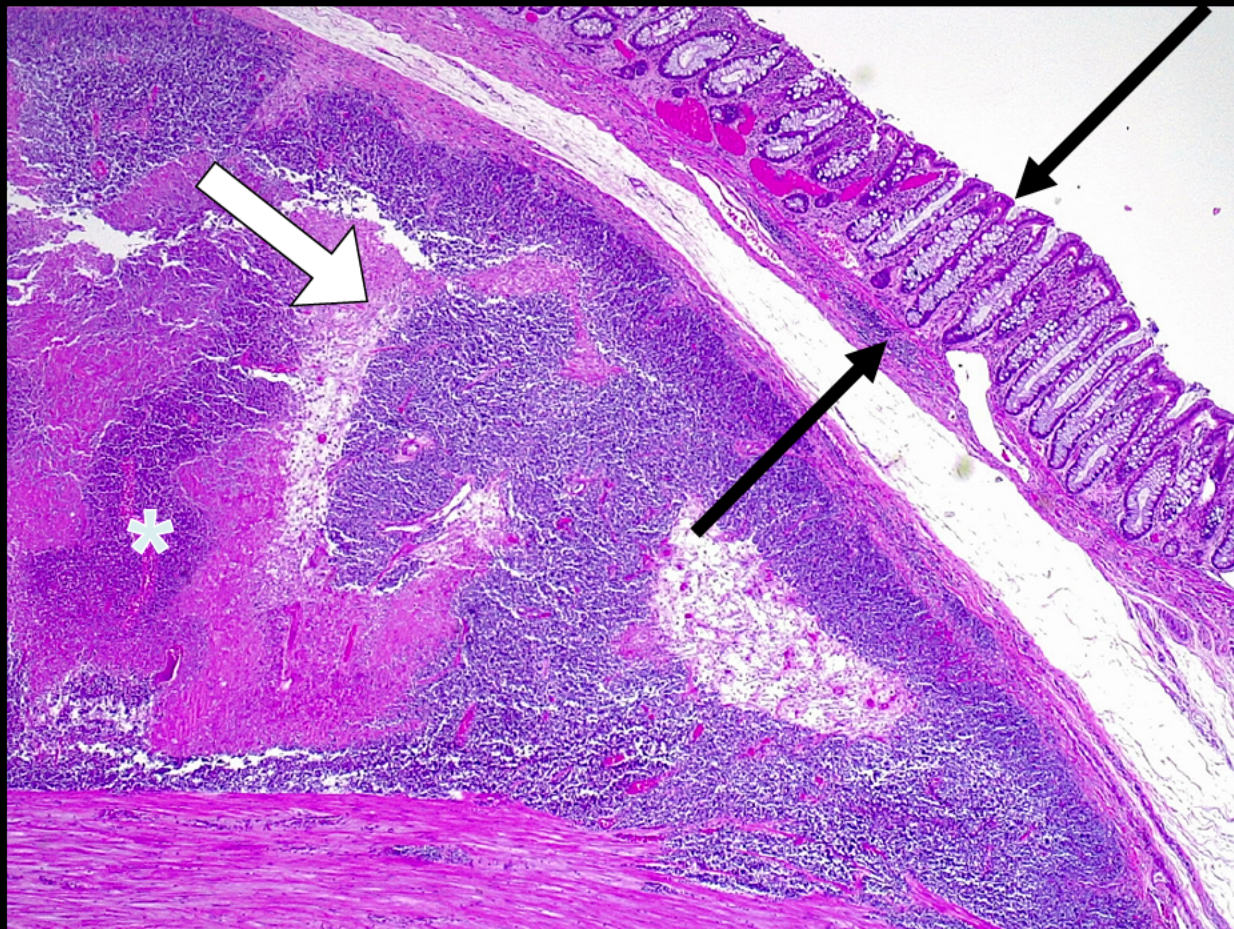


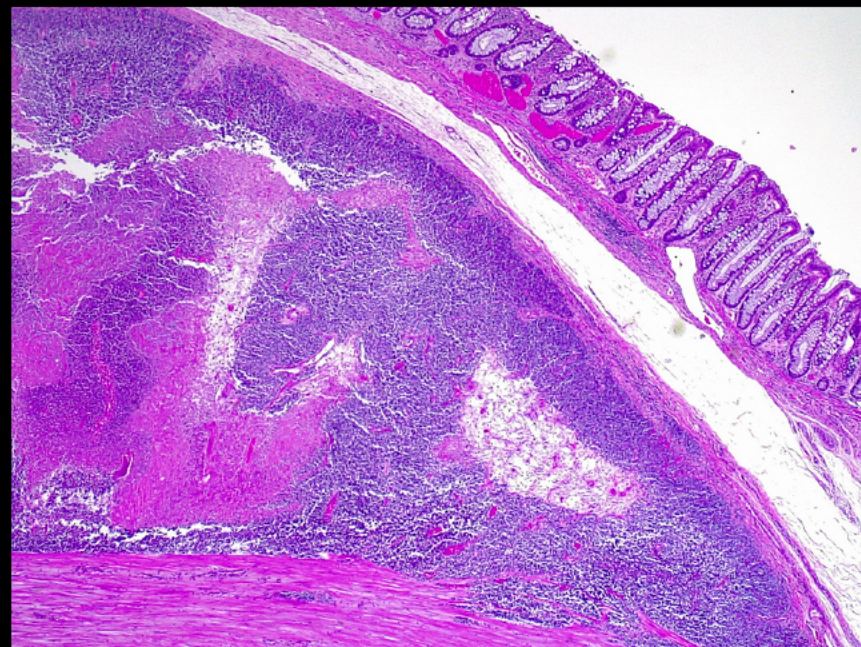
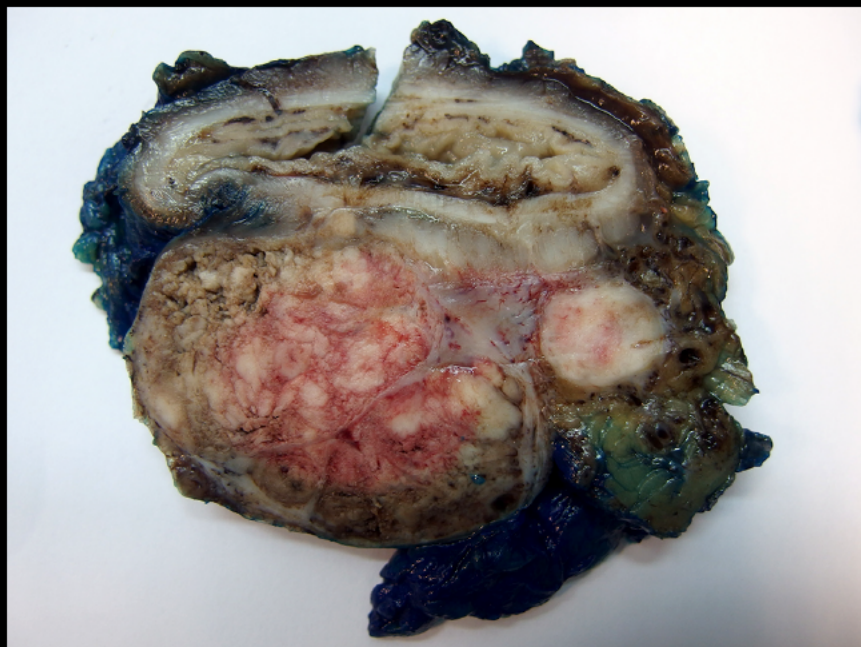
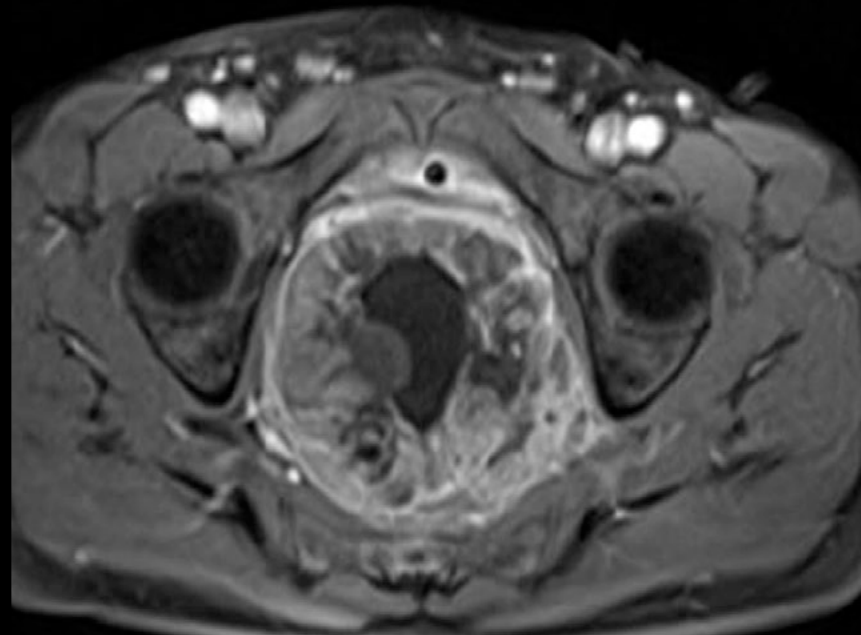
Tumor in the retrorectal space











Peripheral Primitive Neuroectodermal Tumor of the Rectum

Gonçalo Freire
Hospital Beatriz Ângelo
Loures, Lisboa, Portugal

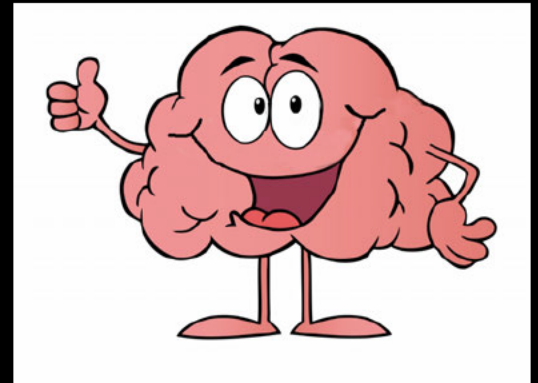
Neuroradiology Best Case



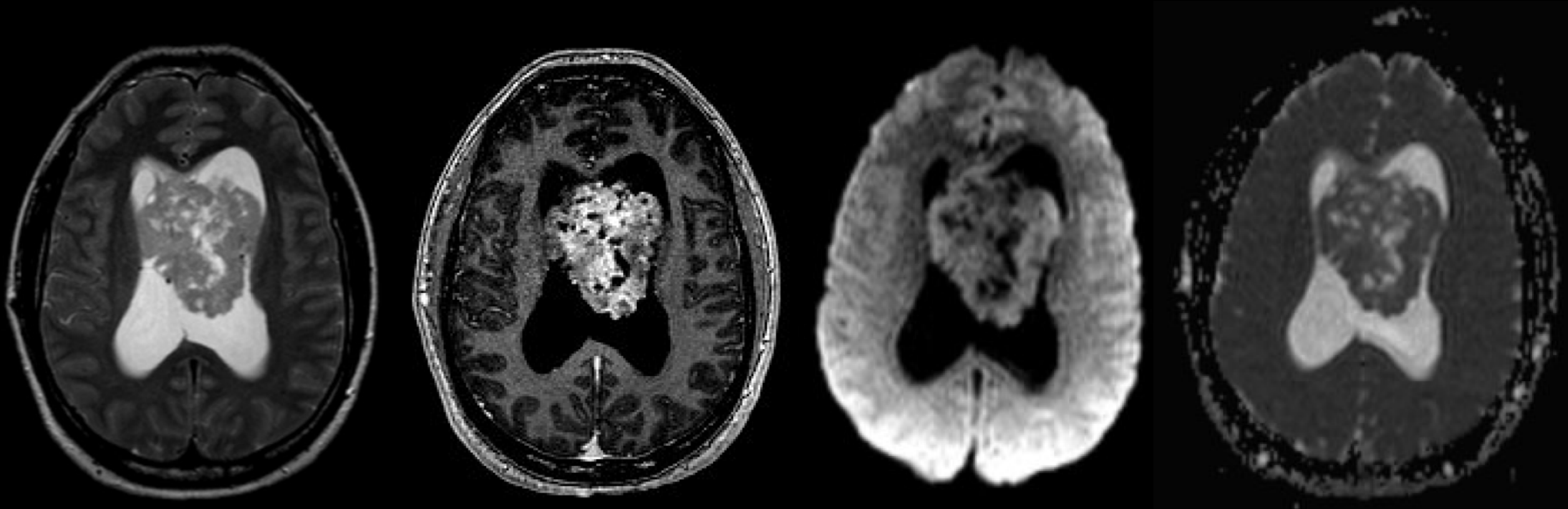
Best Case Presentation: Neuroradiology

AIRP Rad-Path Course

September 13 - October 8, 2021

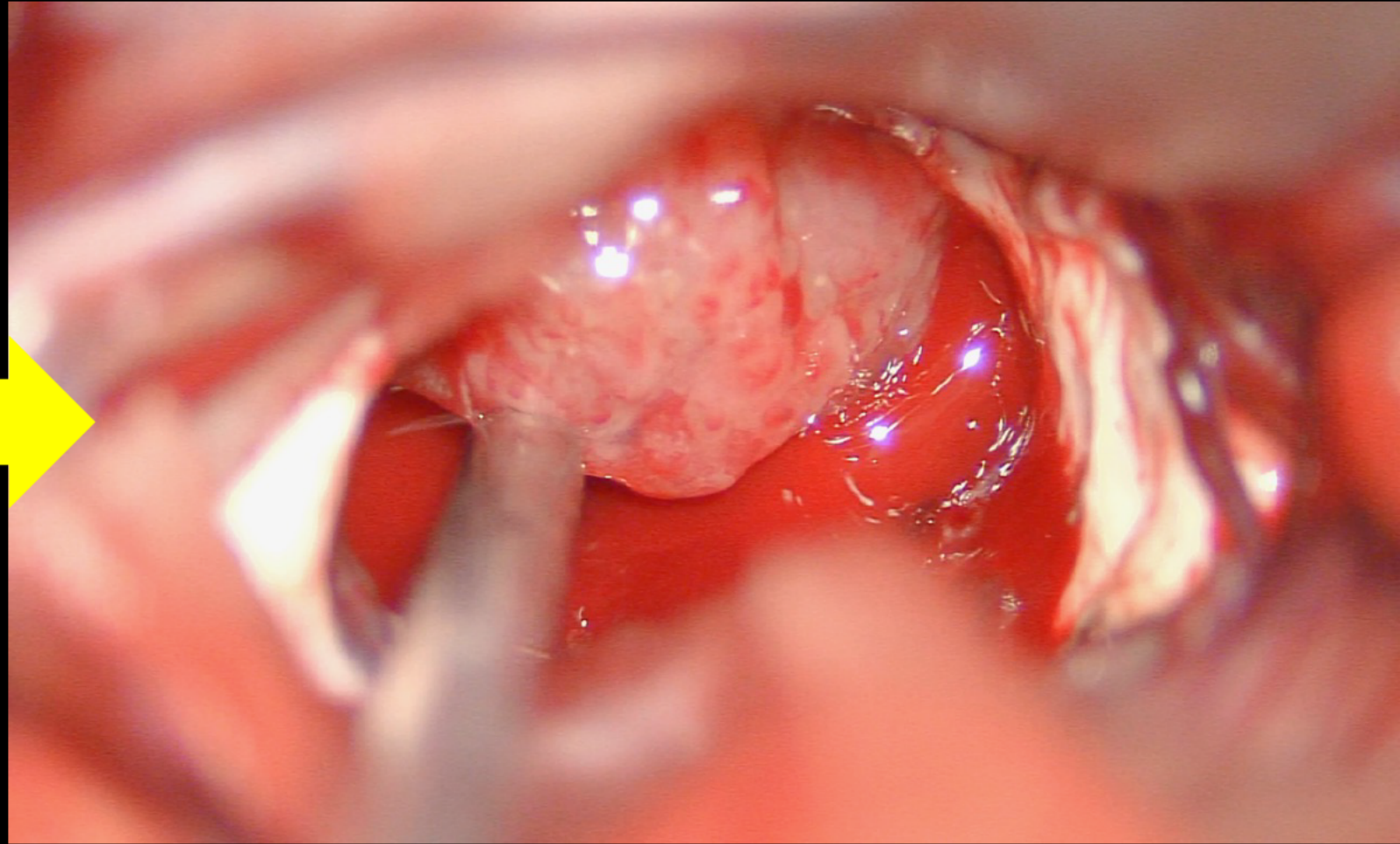
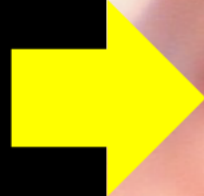
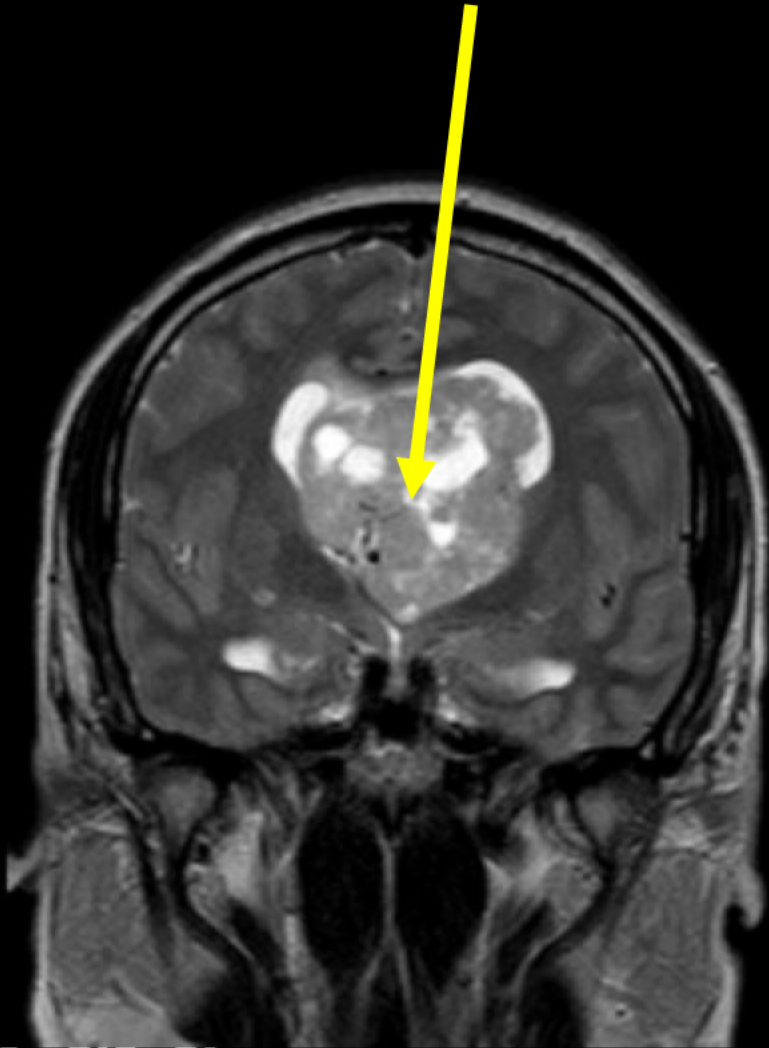


32 y/o M with progressive headache x 4 months

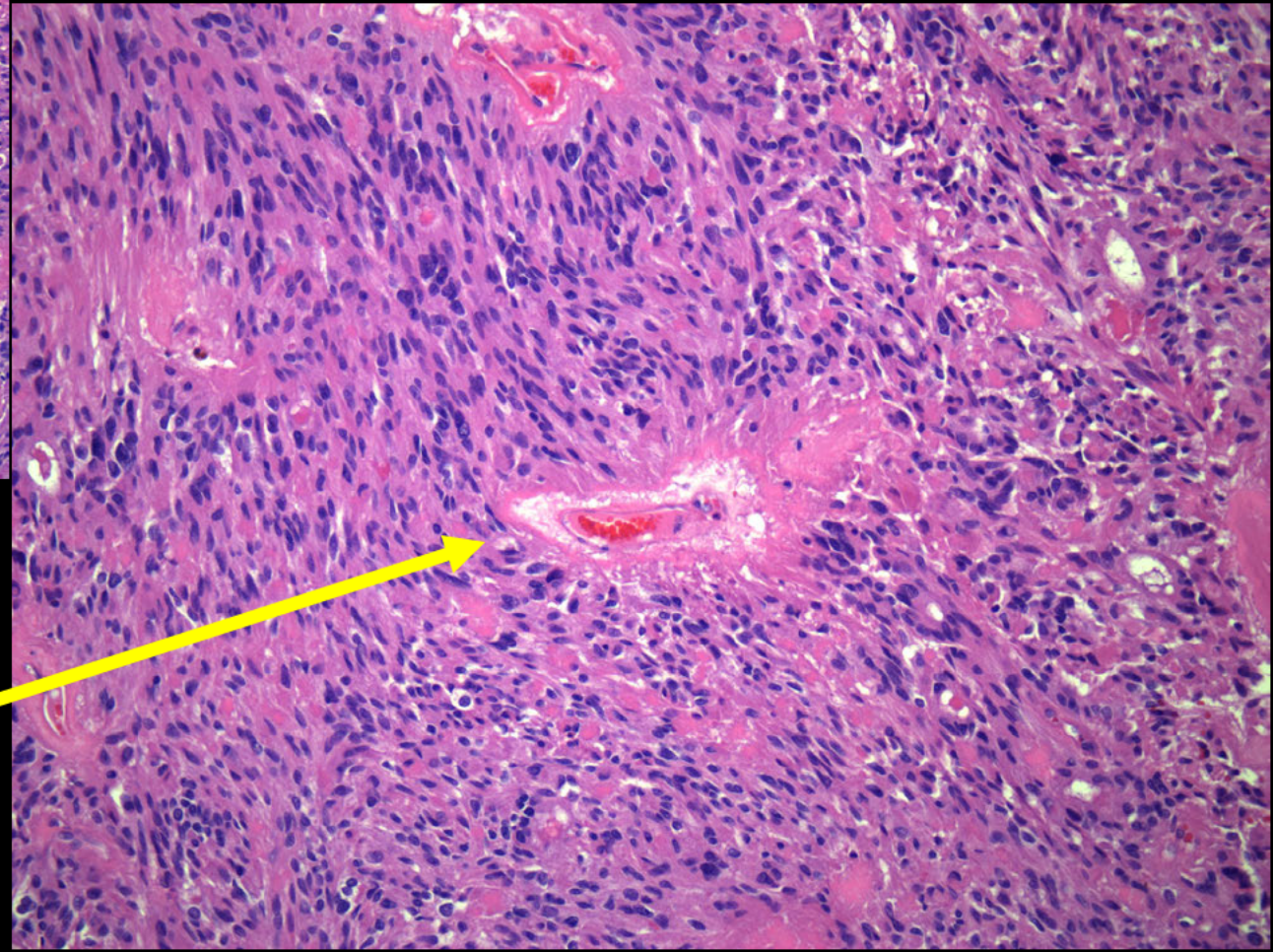
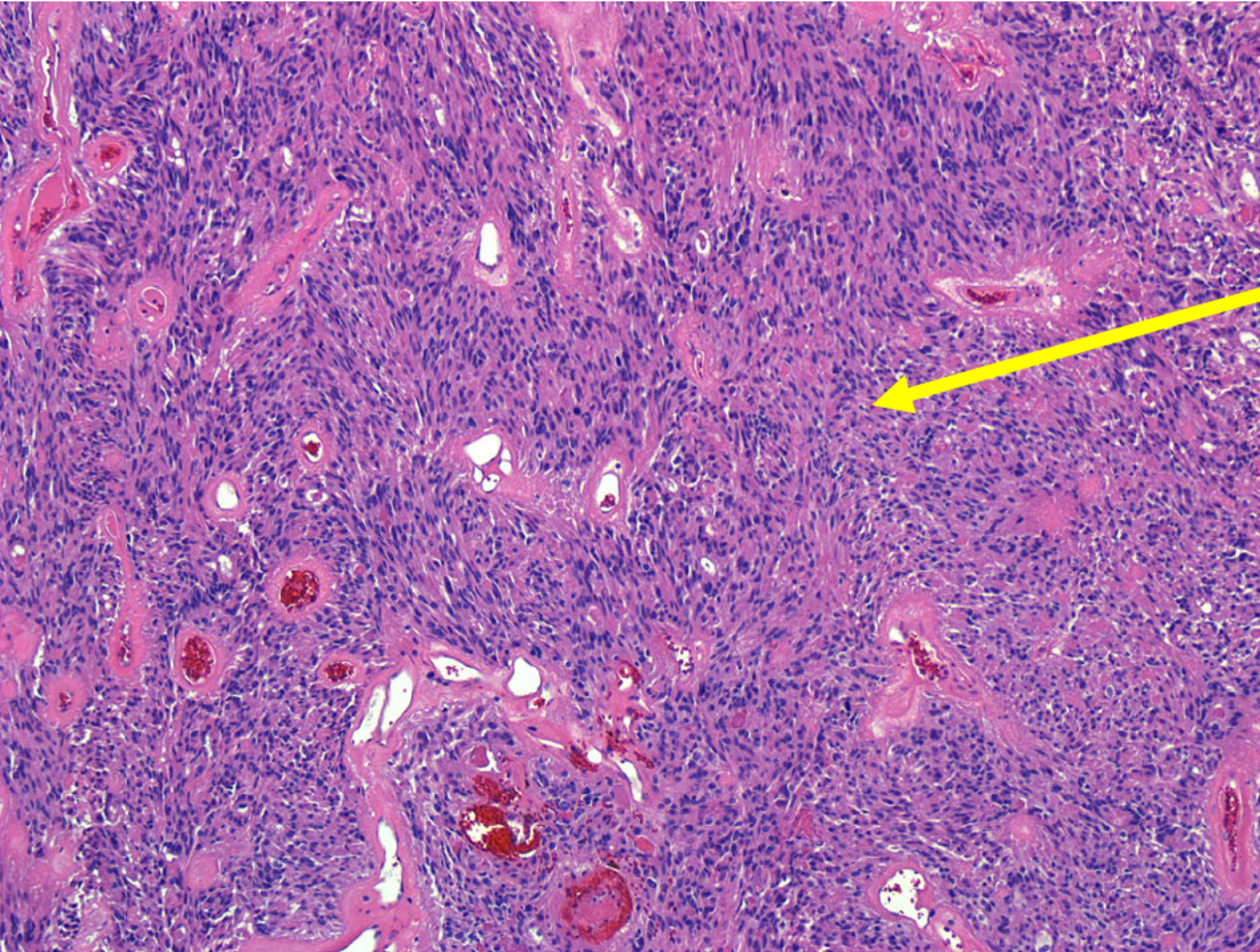


Young adult with enhancing T2/ADC isointense mass with cystic areas (bubbly appearance) arising from wall of ventricle (septum pellucidum)

Endoscopic Photograph: Transcallosal Approach



Cellular Tumor with Scattered Vessels



Diagnosis (Verified)

#1. BRAIN, BIOPSY:

IMMEDIATE SURGICAL PATHOLOGY CONSULTATION

FROZEN SECTION DIAGNOSIS ():

#1A: NEOPLASM, MAY BE COMPATIBLE WITH CENTRAL NEUROCYTOMA.

FINAL DIAGNOSIS:

- CENTRAL NEUROCYTOMA (WHO GRADE II).

#2. BRAIN, RESECTION:

- CENTRAL NEUROCYTOMA (WHO GRADE II).

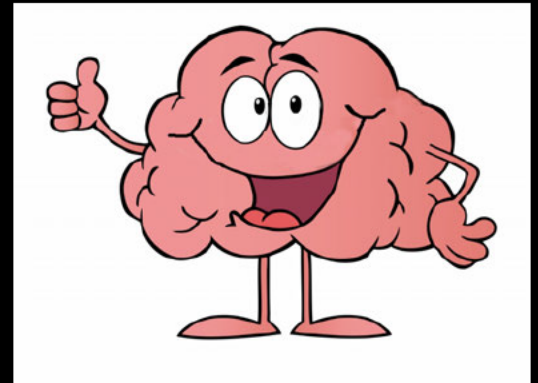
Note Immunohistochemical stains for S100, synaptophysin, CD56 and GFAP are positive while cytokeratin AE1-AE3, calretinin, chromogranin, CD34, TTF-1 and EMA are negative. The ki-67 is approximately 8-10%. Though, the current WHO does not include a category of 'atypical neurocytoma': there are papers that include 'atypical neurocytoma' with a ki-67 proliferation index of greater than 2-4% and is associated with a higher incidence of recurrence. The tumor has a slightly spindled morphology, for which, an intraventricular schwannoma is a differential; however, the immunoprofile is most consistent with a central neurocytoma.

Central Neurocytoma

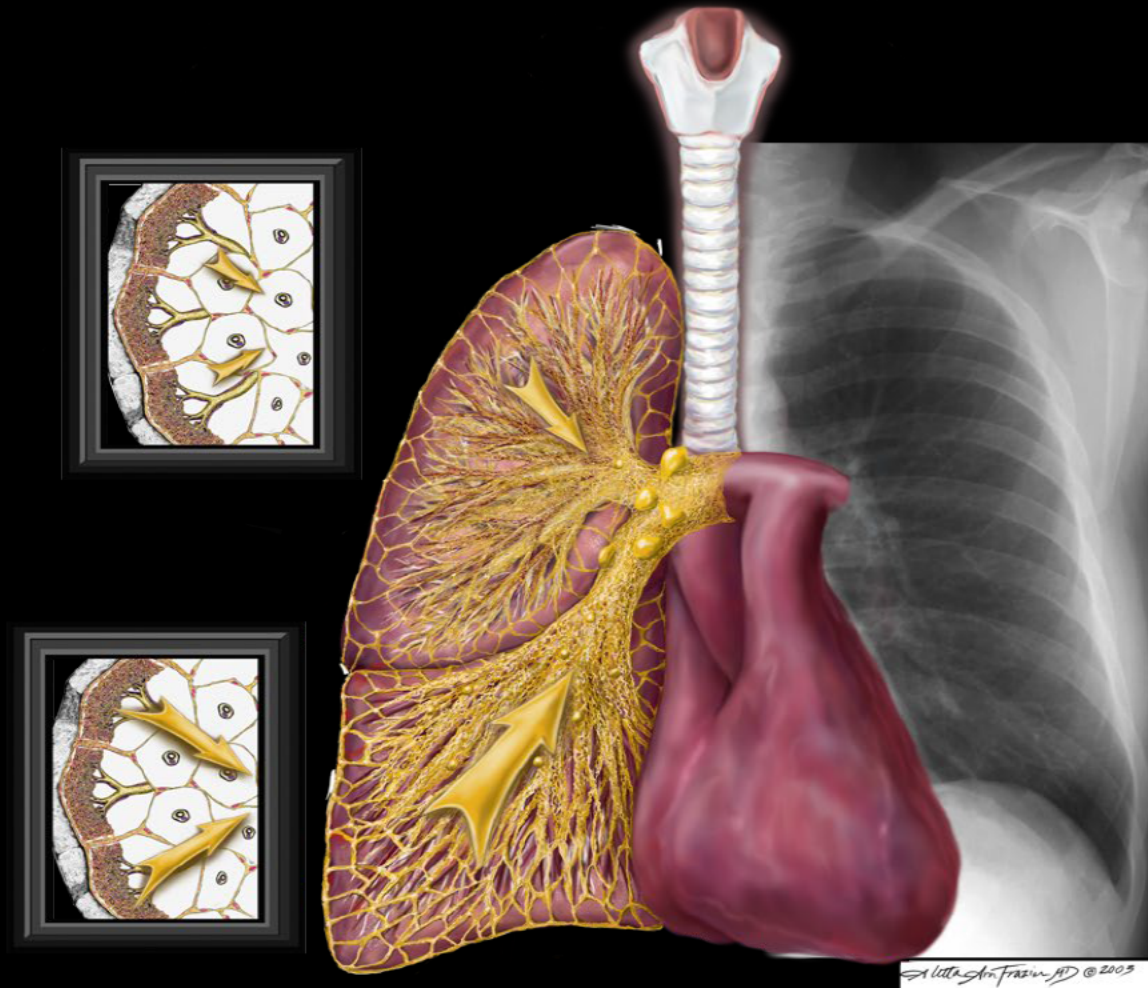
Rahul Kishore

Saint Barnabas Medical Center

Livingston, New Jersey



Cardiothoracic Best Case



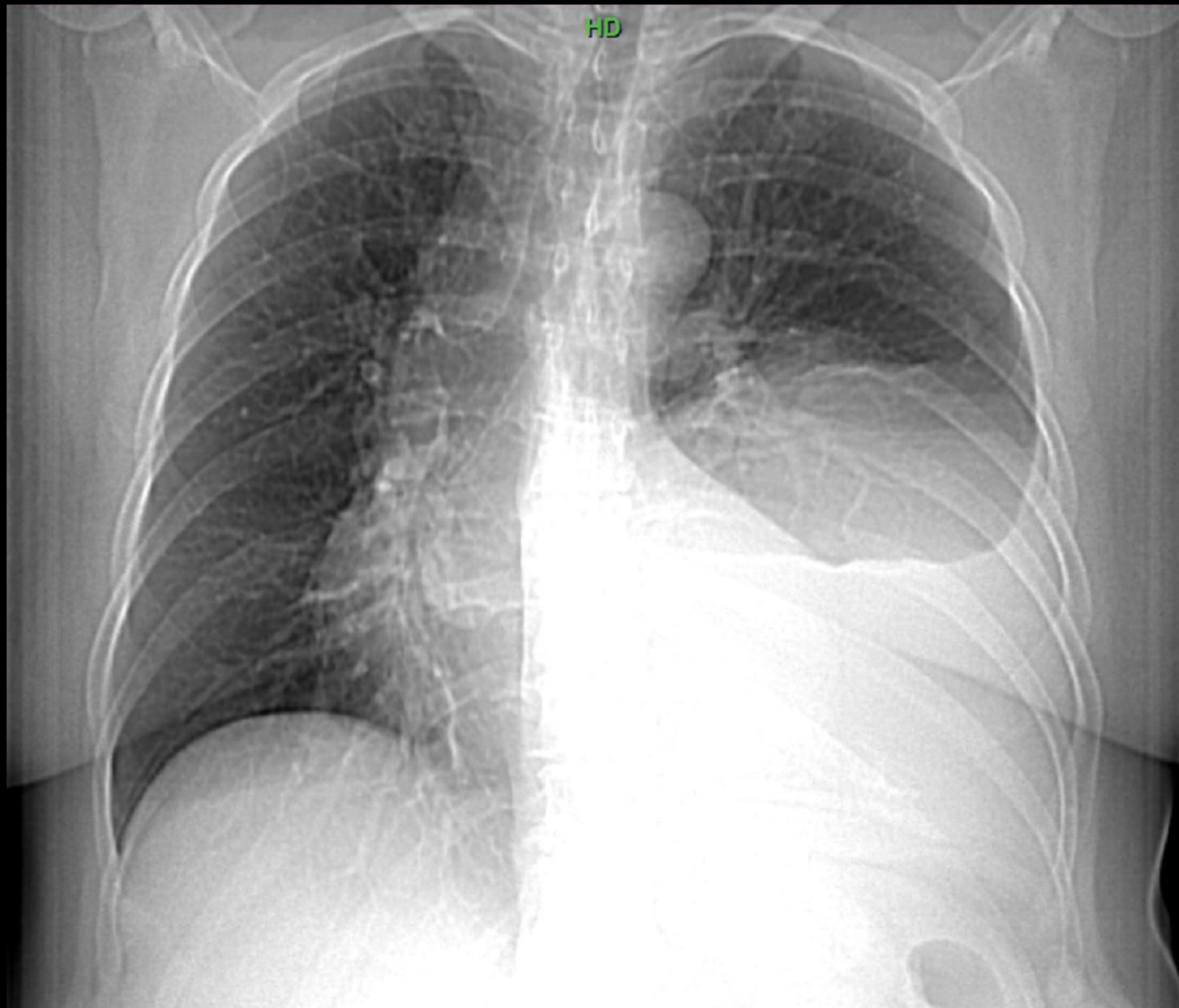
AIRPTM

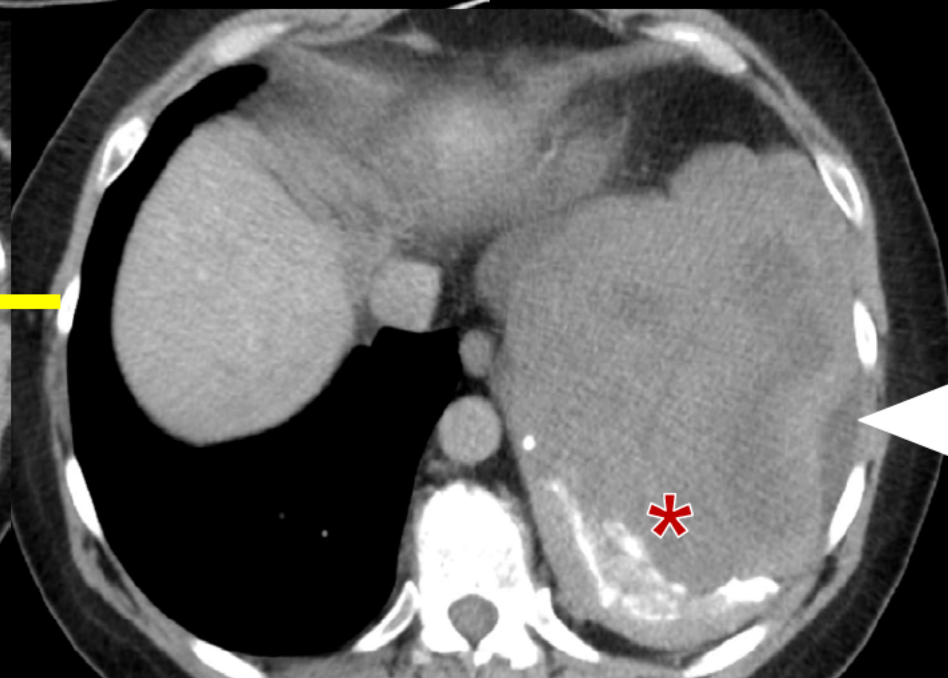
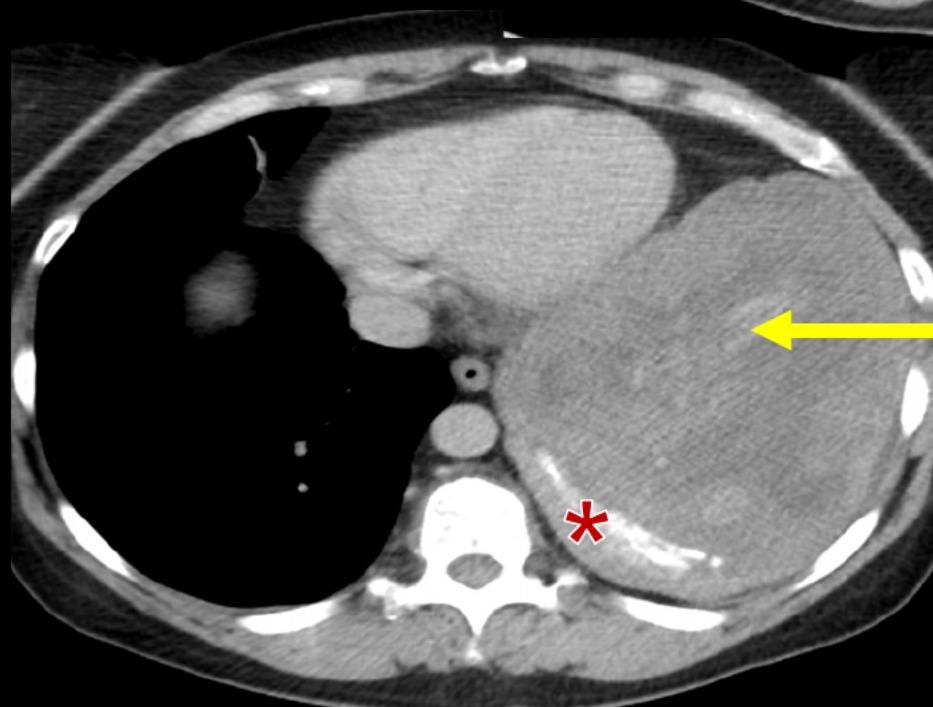
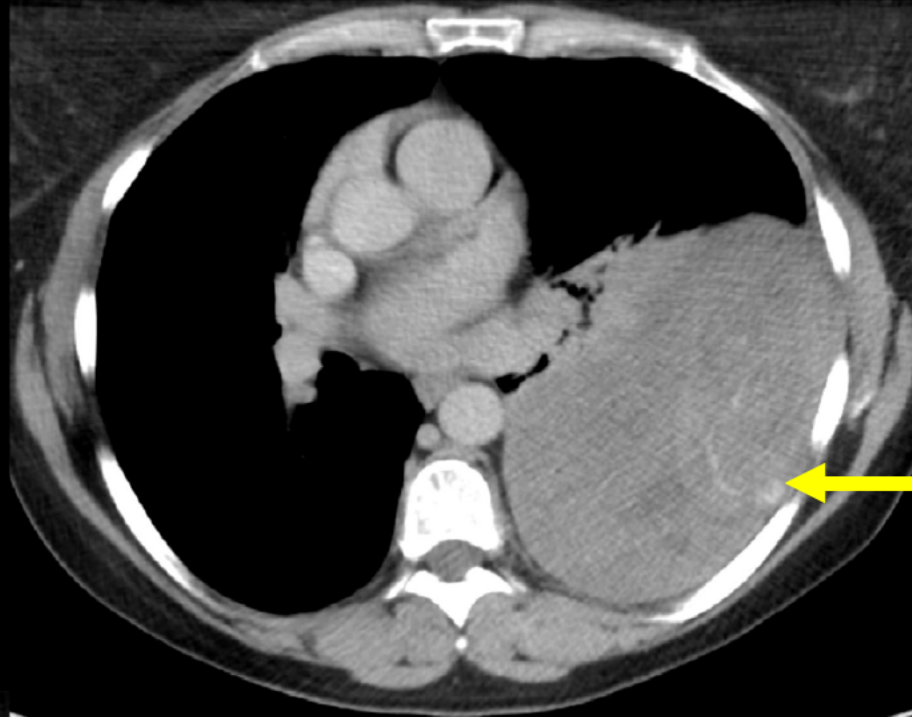
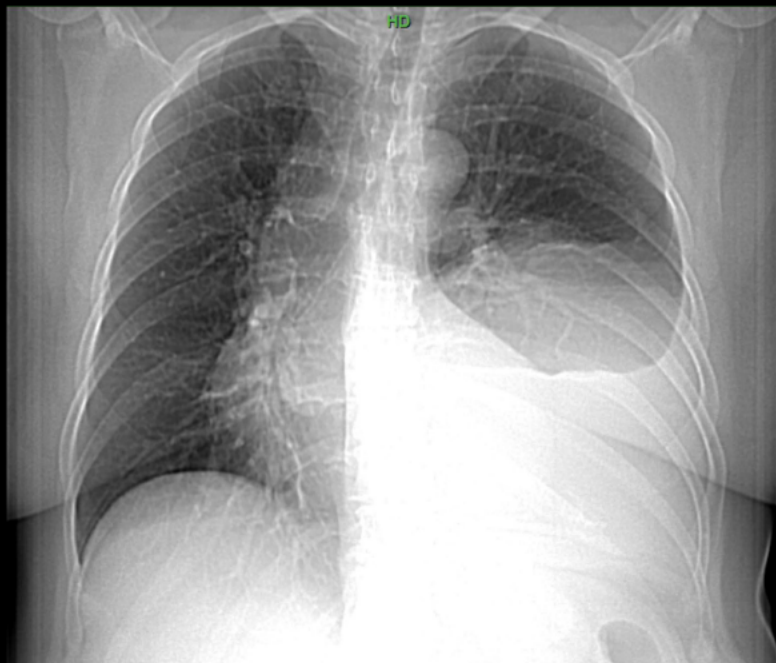
ACR INSTITUTE FOR
RADIOLOGIC PATHOLOGY

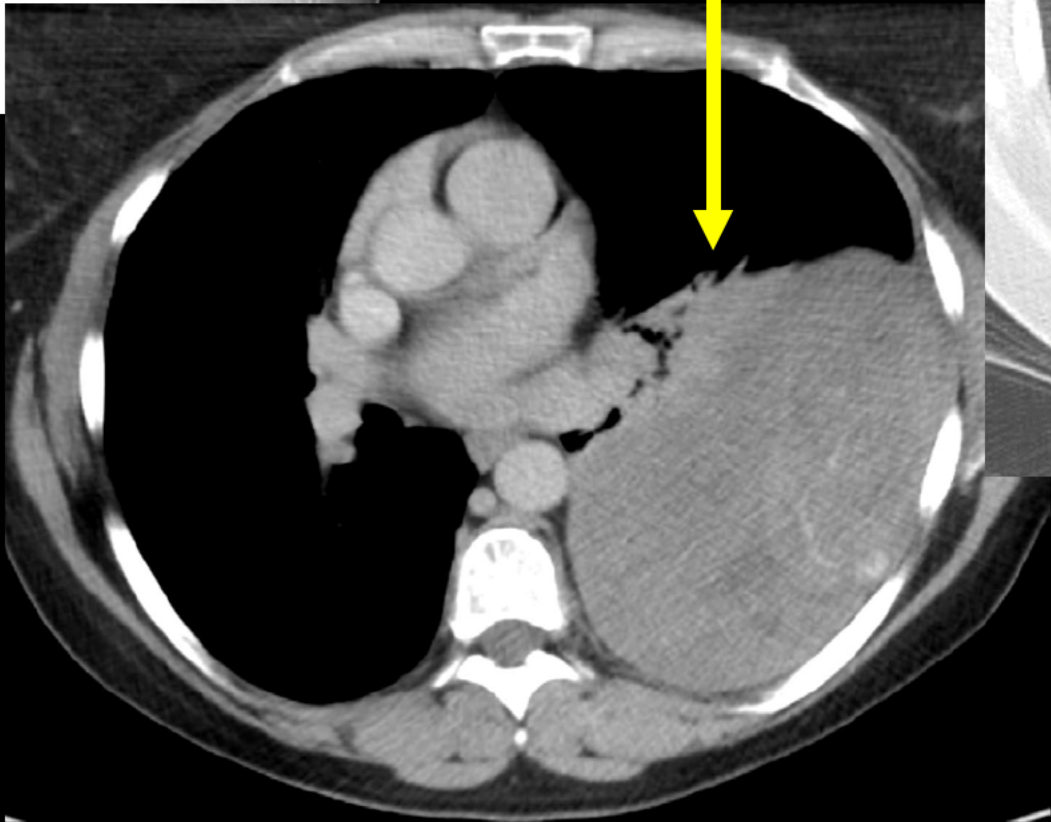
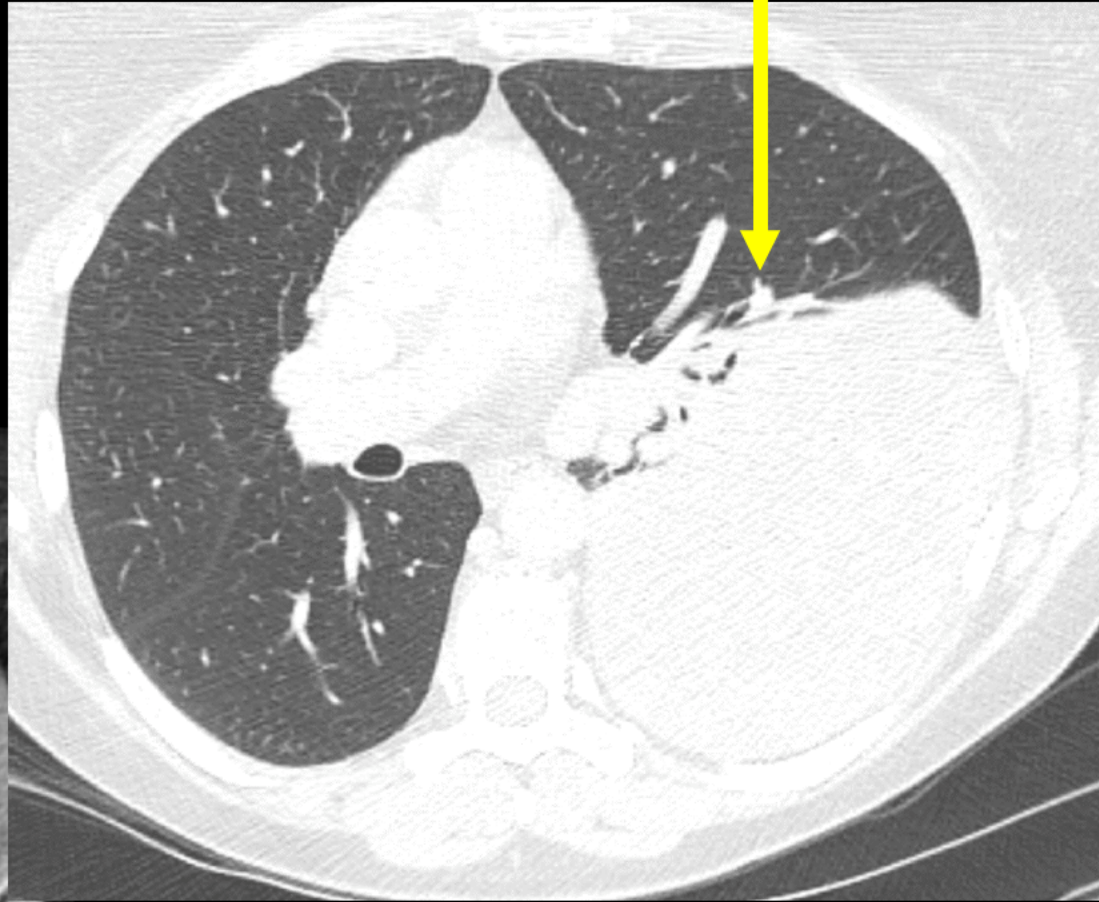
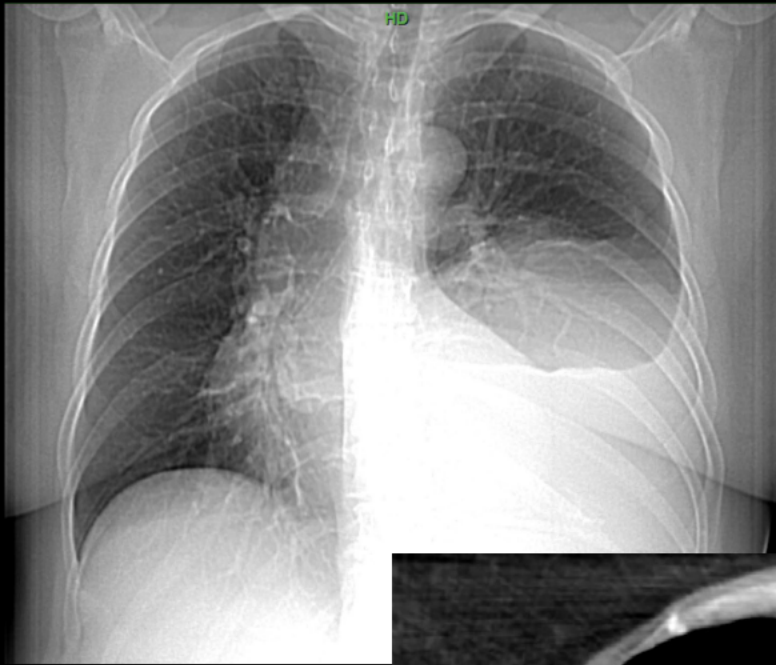
Clinical information

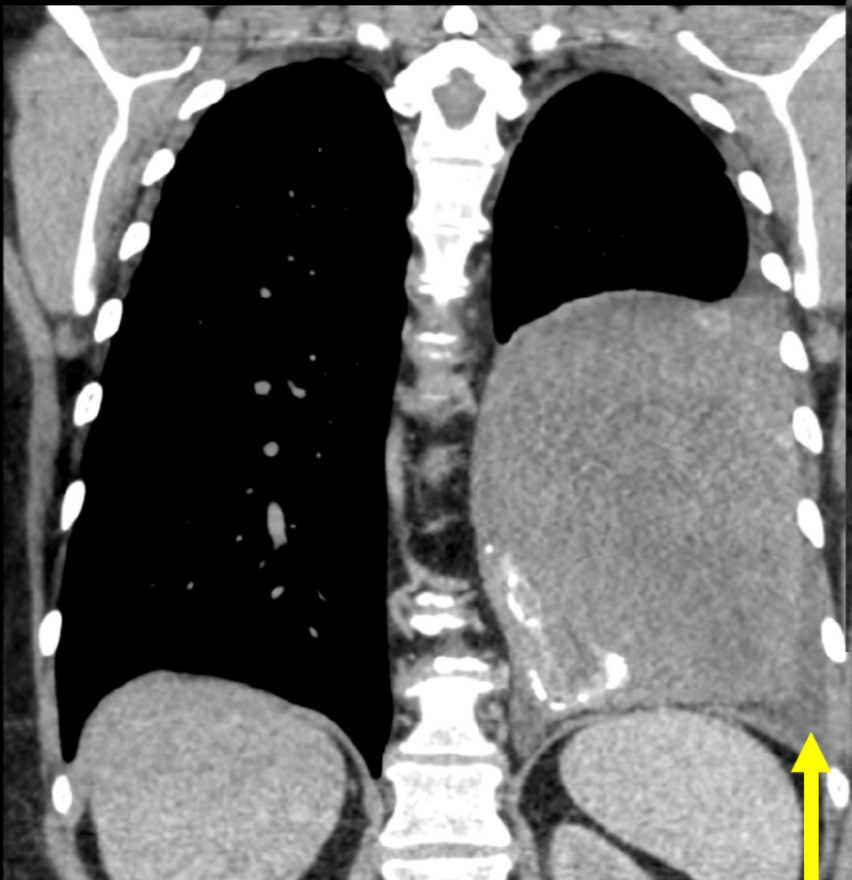
53-year-old female with history of fibromyalgia and a current “gurgly” sensation centered in the left chest accompanied by left-sided back pain.

No respiratory symptoms (denies cough, dypnea).



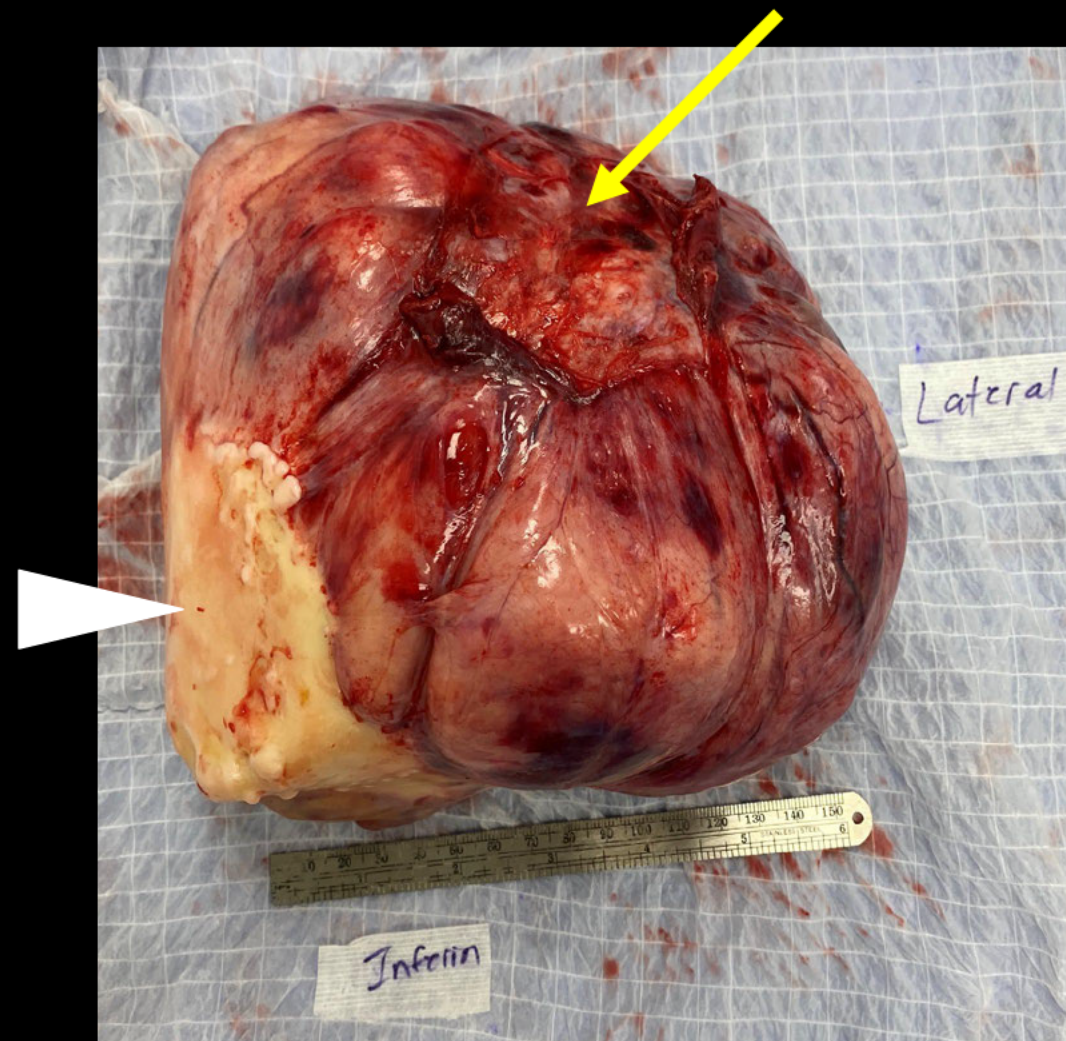


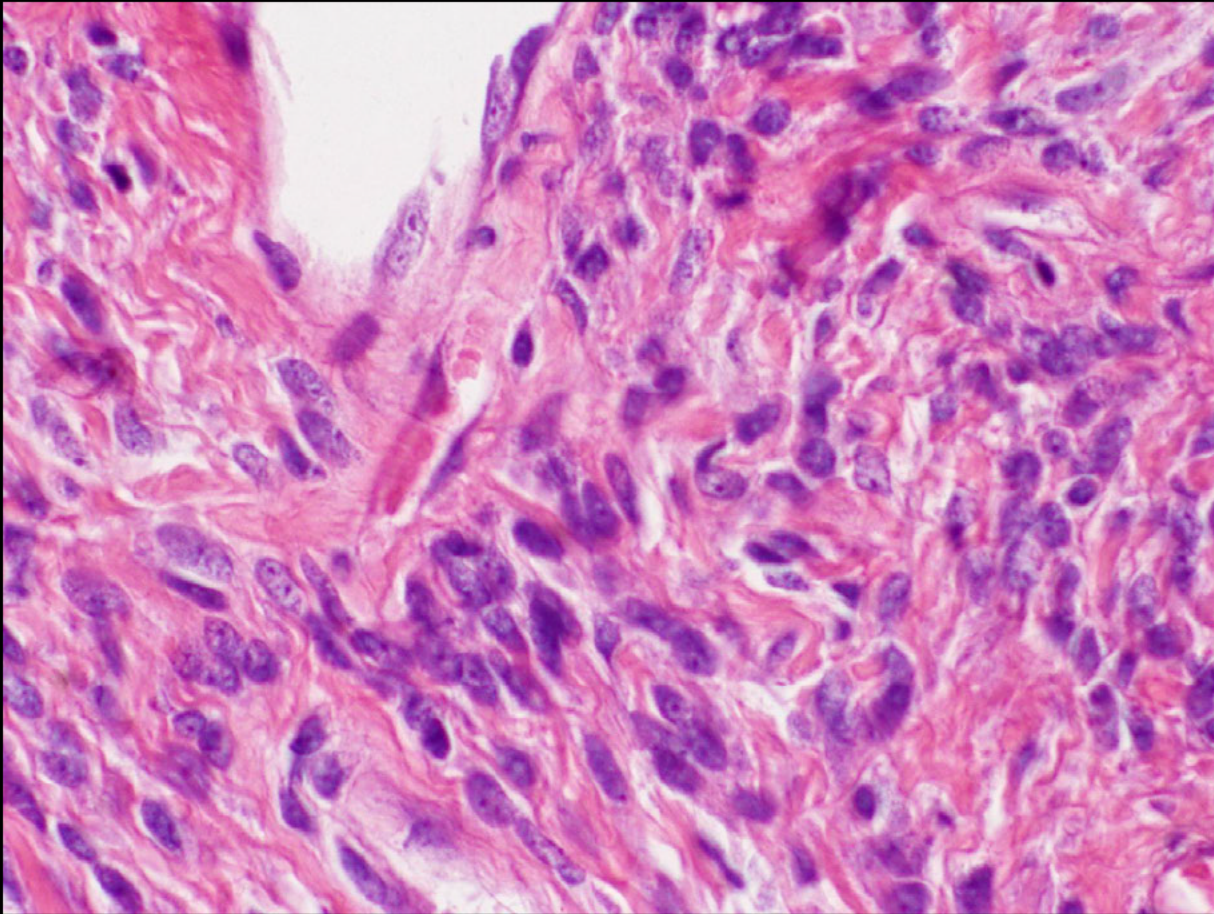




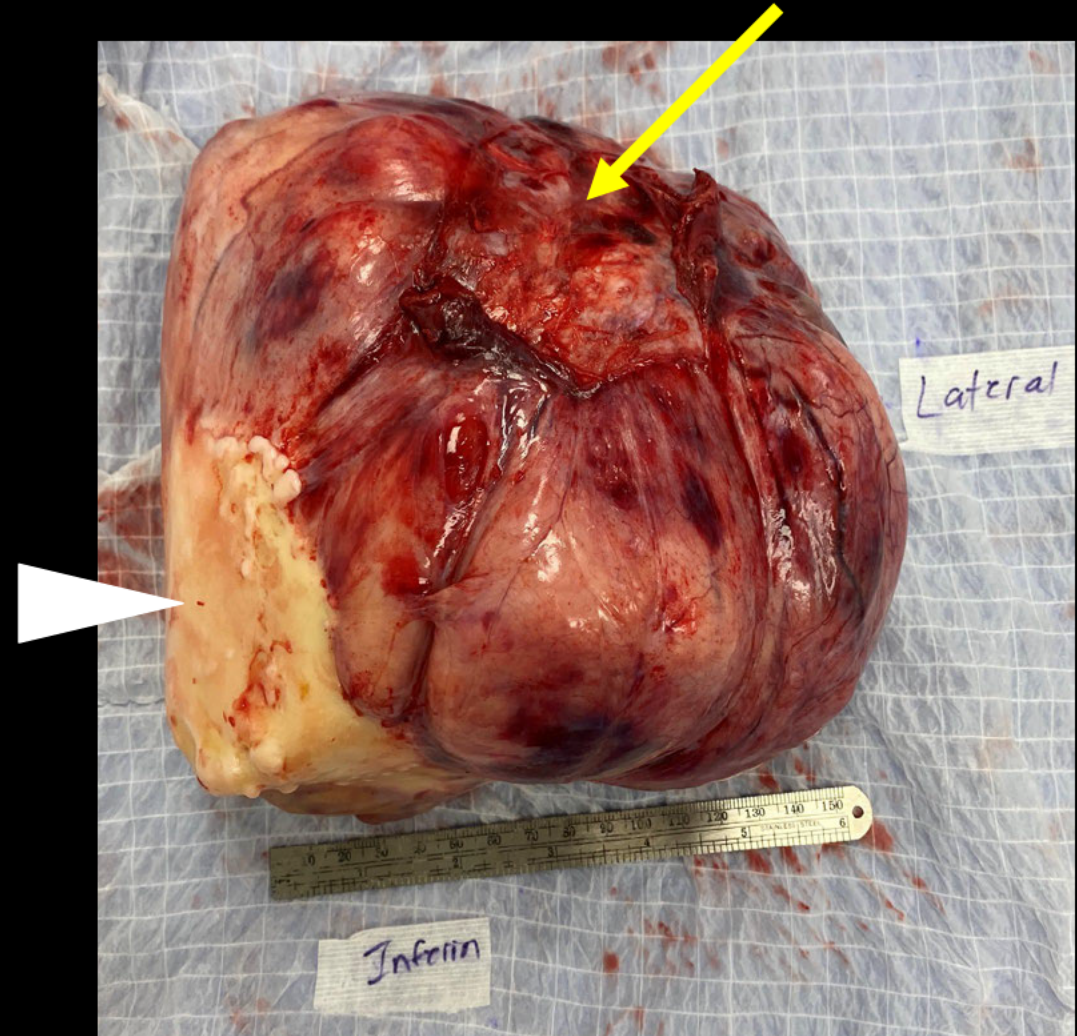
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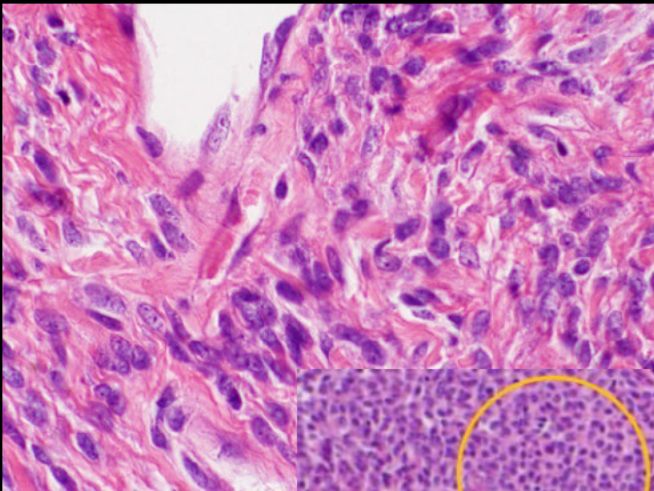
ACR INSTITUTE FOR
RADIOLOGIC PATHOLOGY



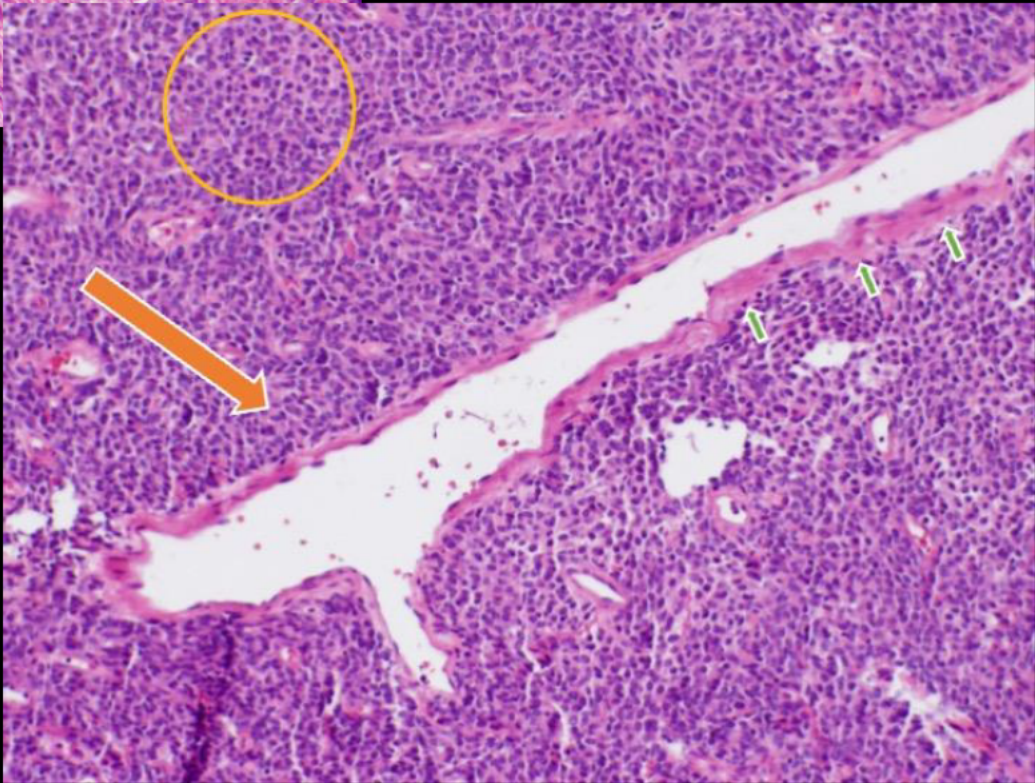


High power (40x) H&E: spindle-shaped and uniform ovoid cells.

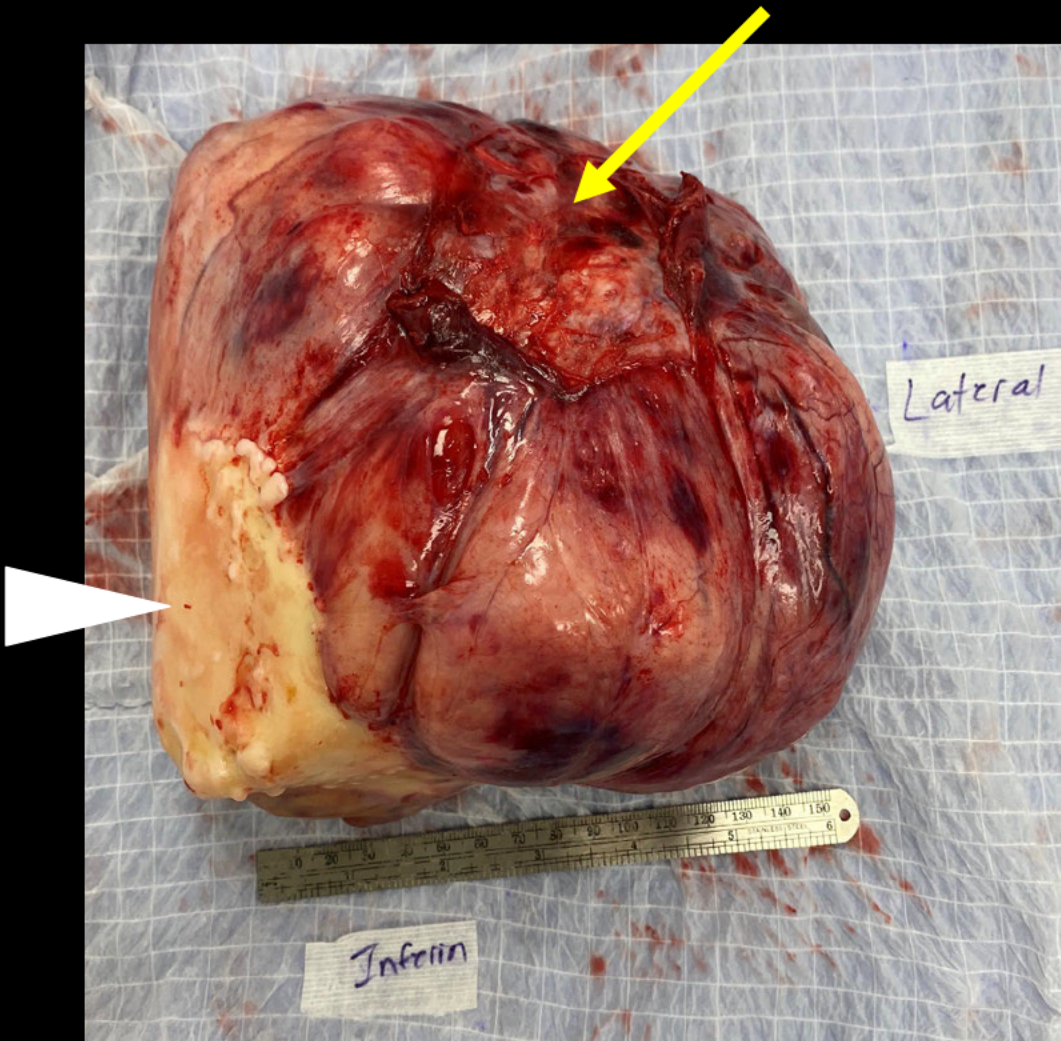


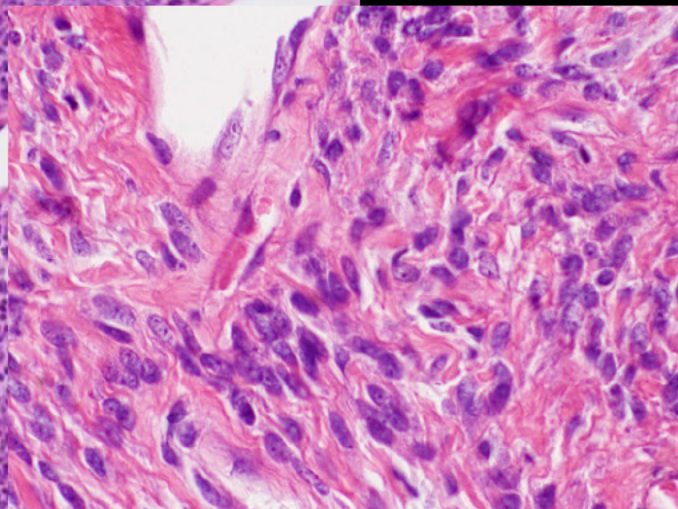
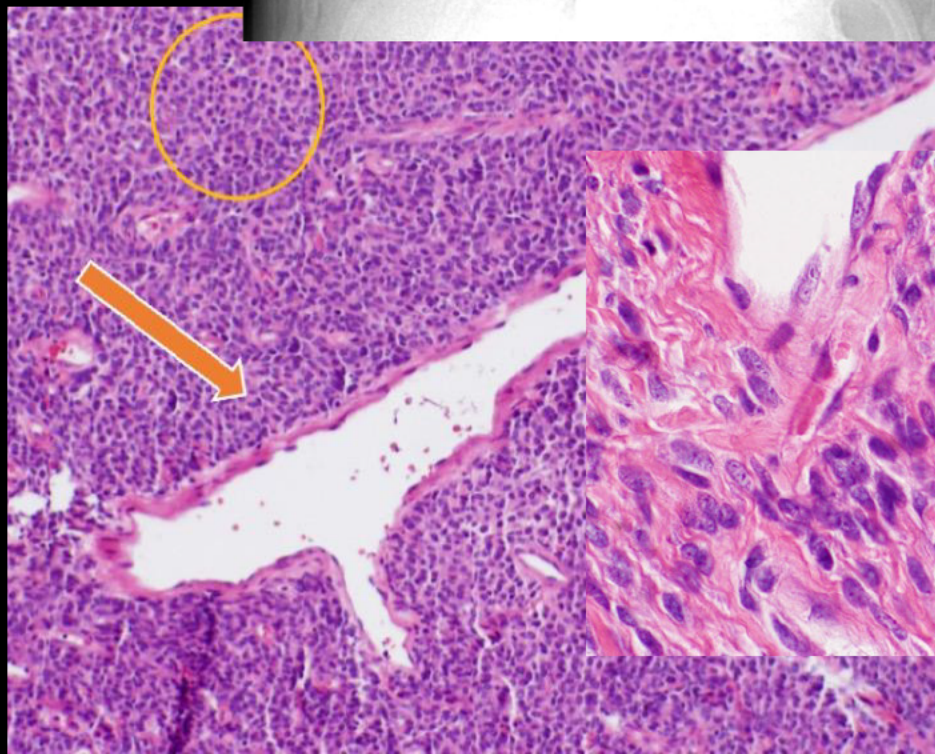
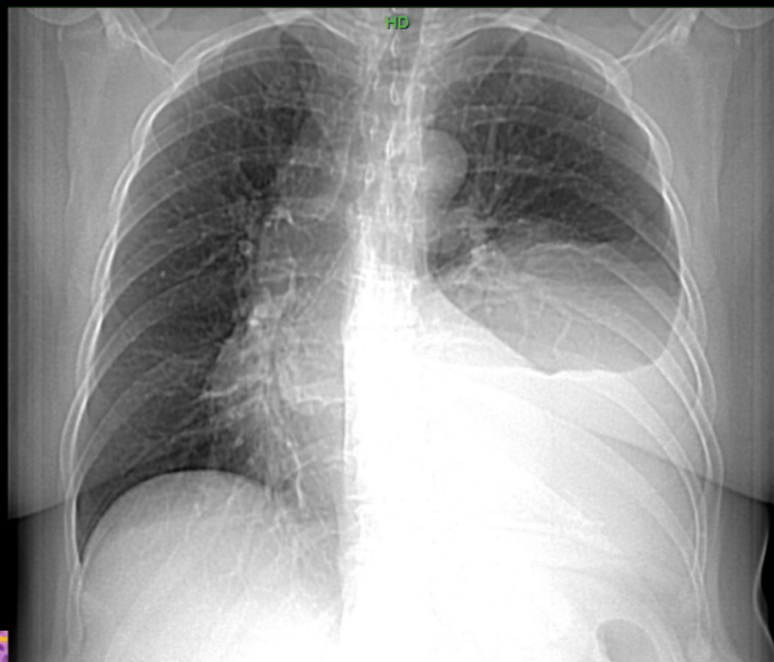


High power (40x) H&E:
spindle-shaped and uniform
ovoid cells.



Medium power (10x) H&E:
Perivascular hyalinization,
staghorn vascularization,
widespread ovoid cells.



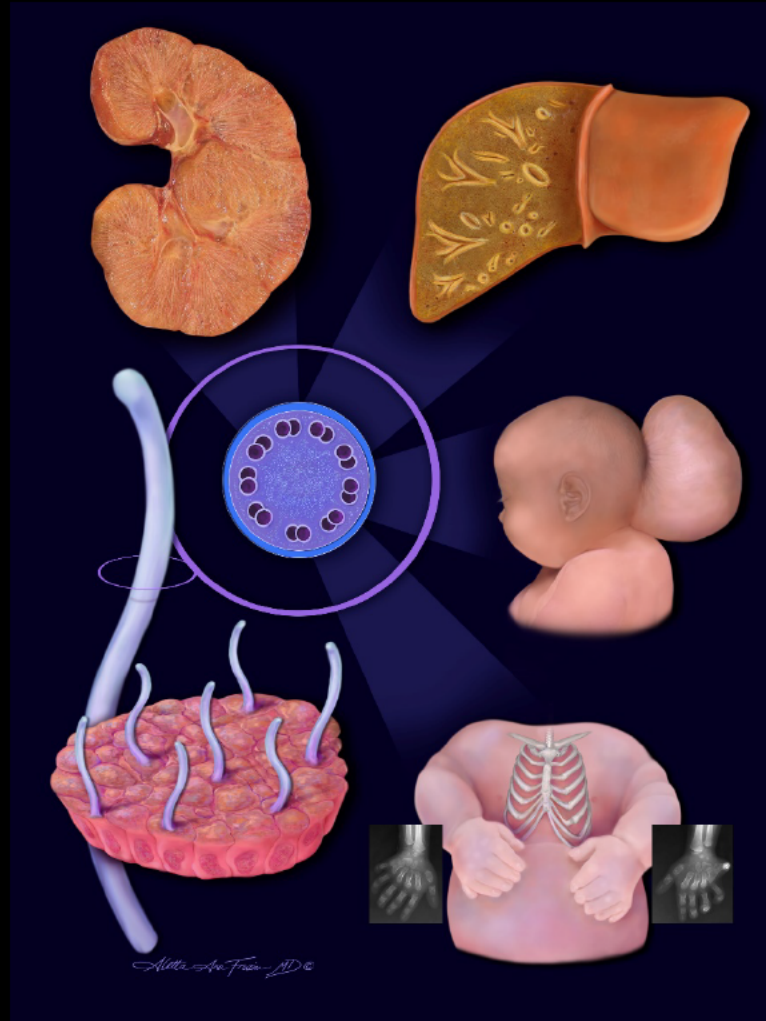


Solitary Fibrous Tumor of the Pleura

Samantha Phung M.D.

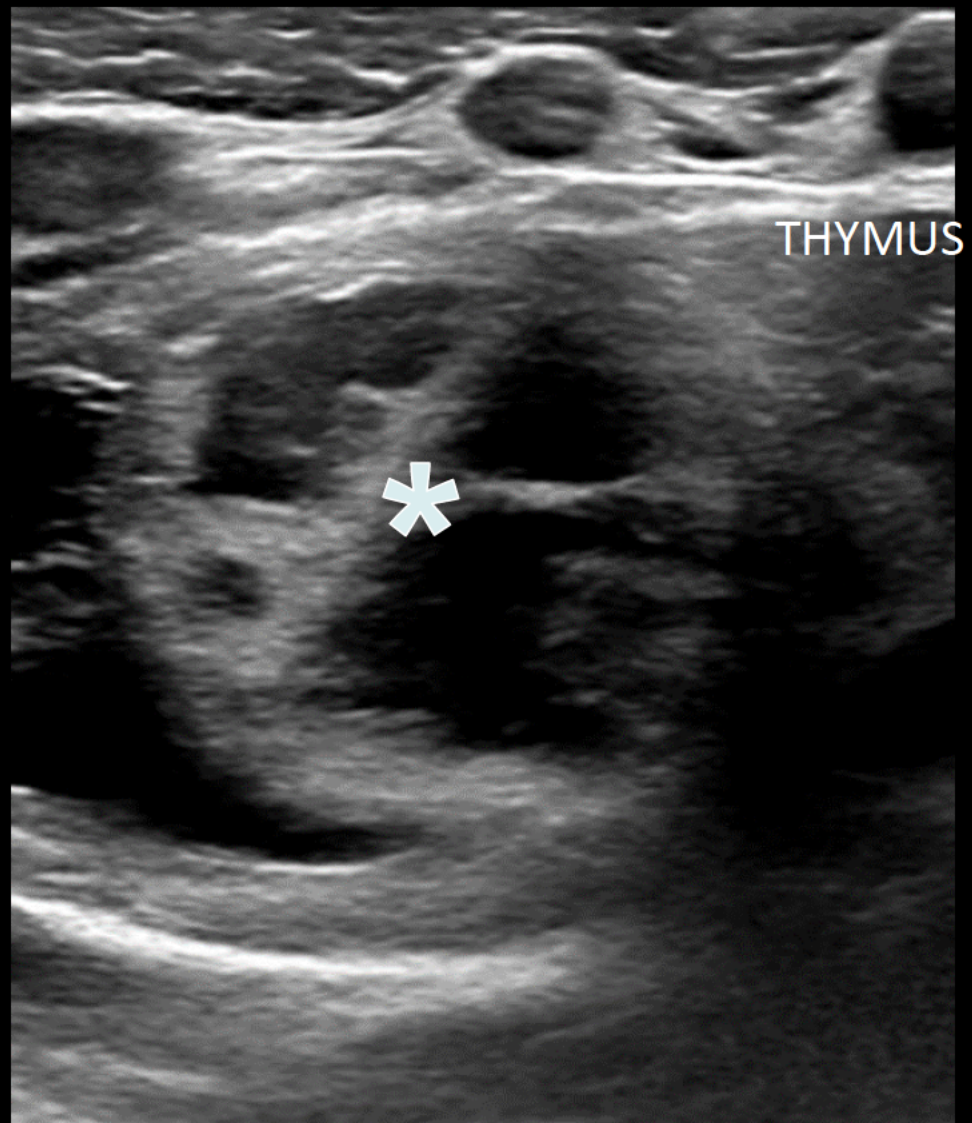
**University of Illinois College of Medicine at Peoria
Peoria, Illinois**

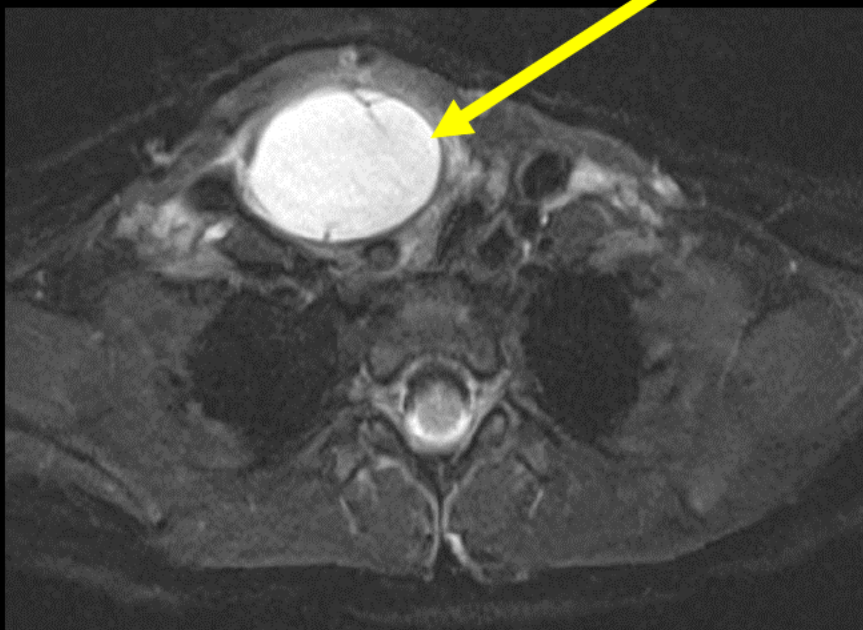
Pediatric Best Case

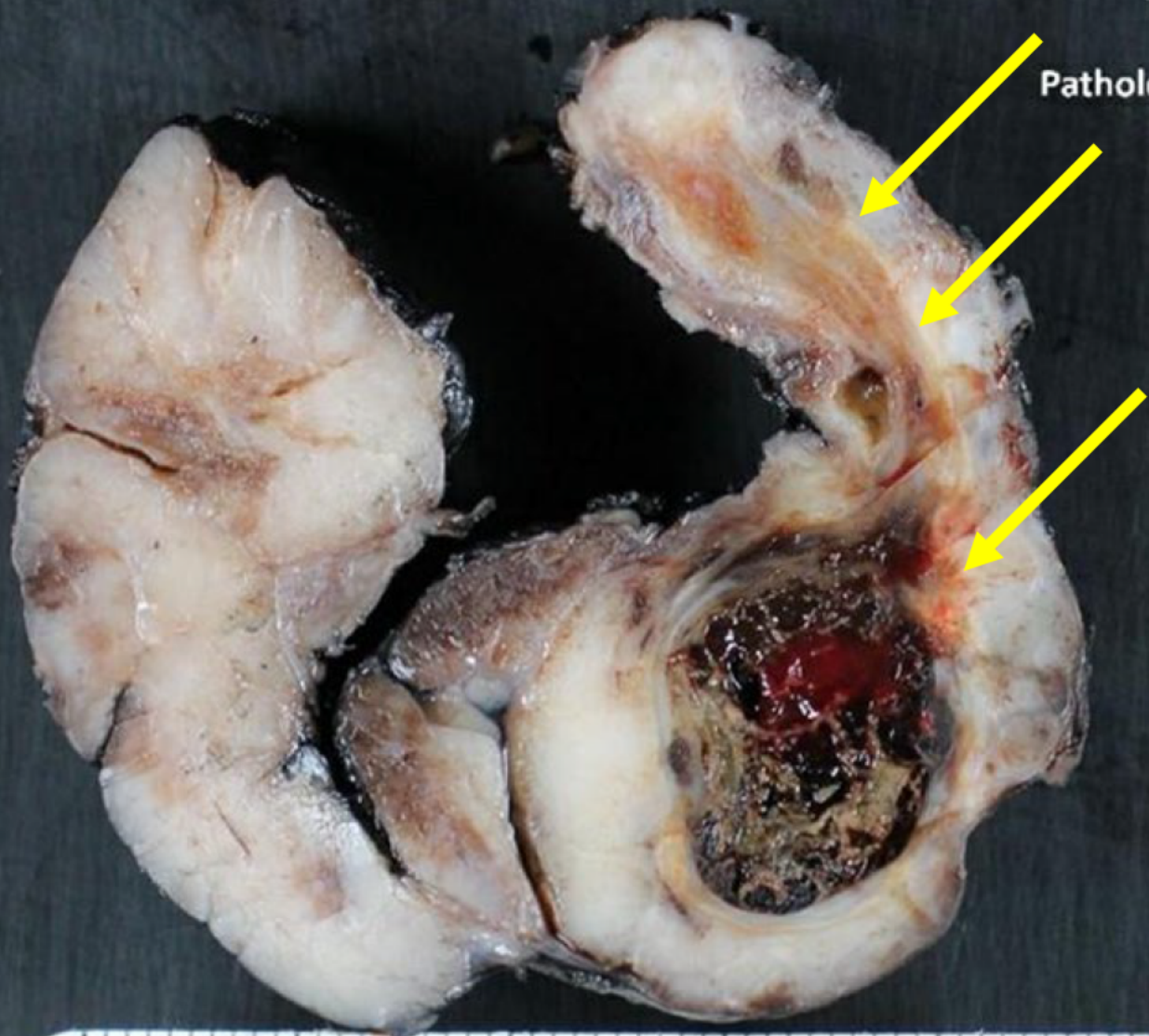


Clinical information

25-month-old who presented with several months of progressive neck swelling and enlargement

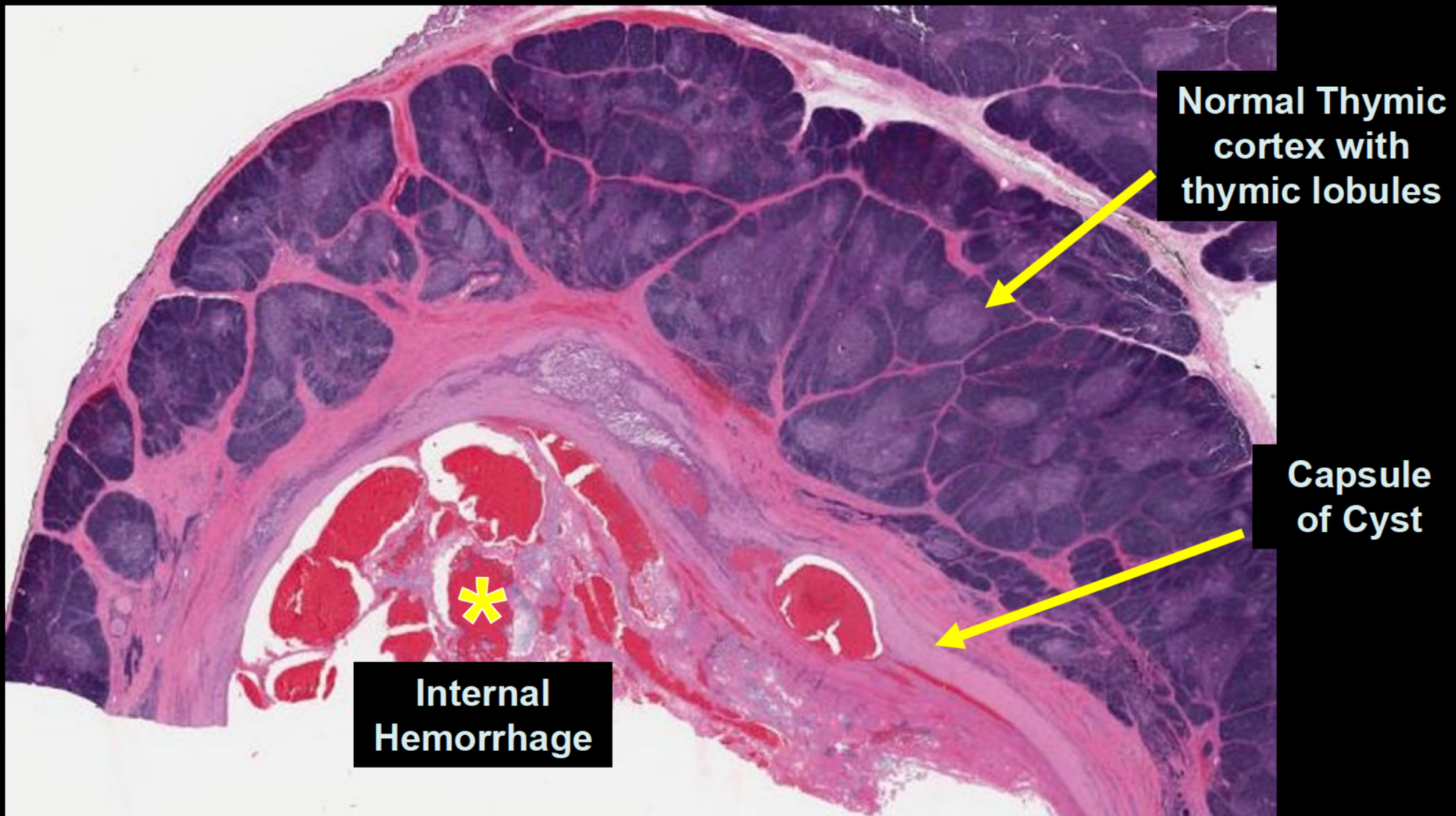


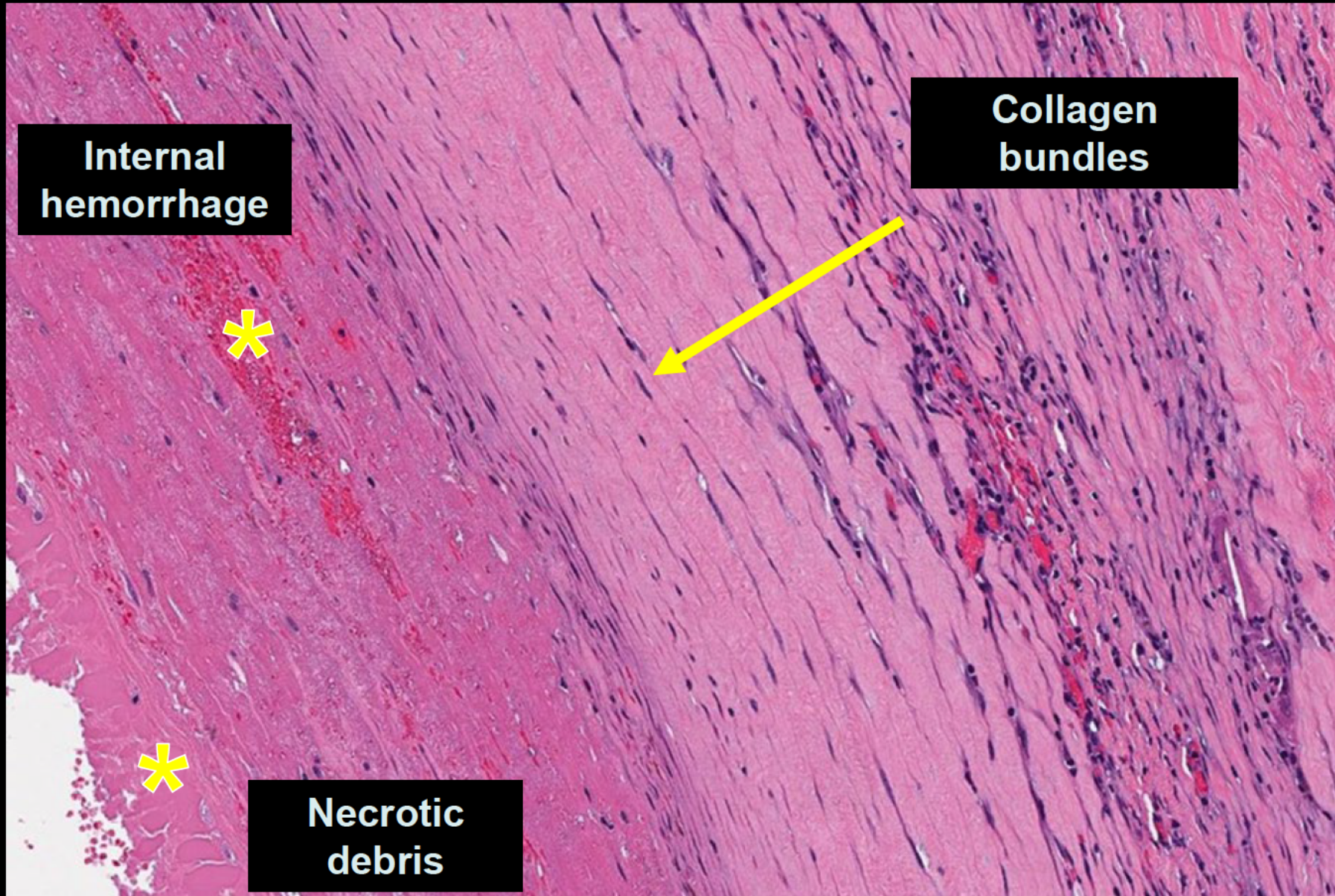




Patholo

**Up to 9 cm
lobulated U-
shaped
lesion with
central
hemorrhage**





Internal hemorrhage

Collagen bundles

Necrotic debris

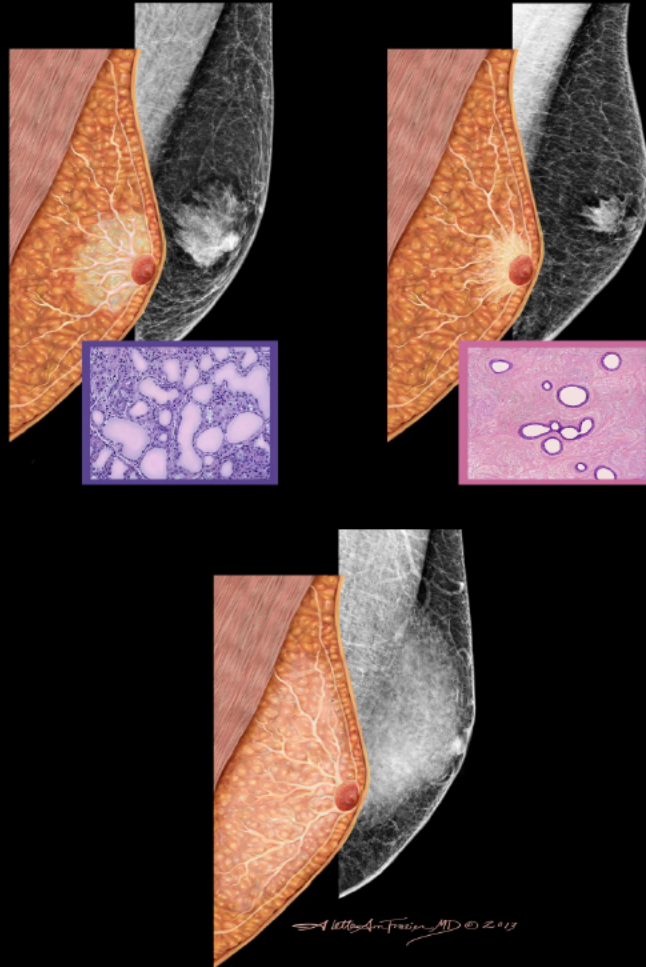
Thymic Cyst

Dallin Johansen

Dartmouth-Hitchcock Medical Center

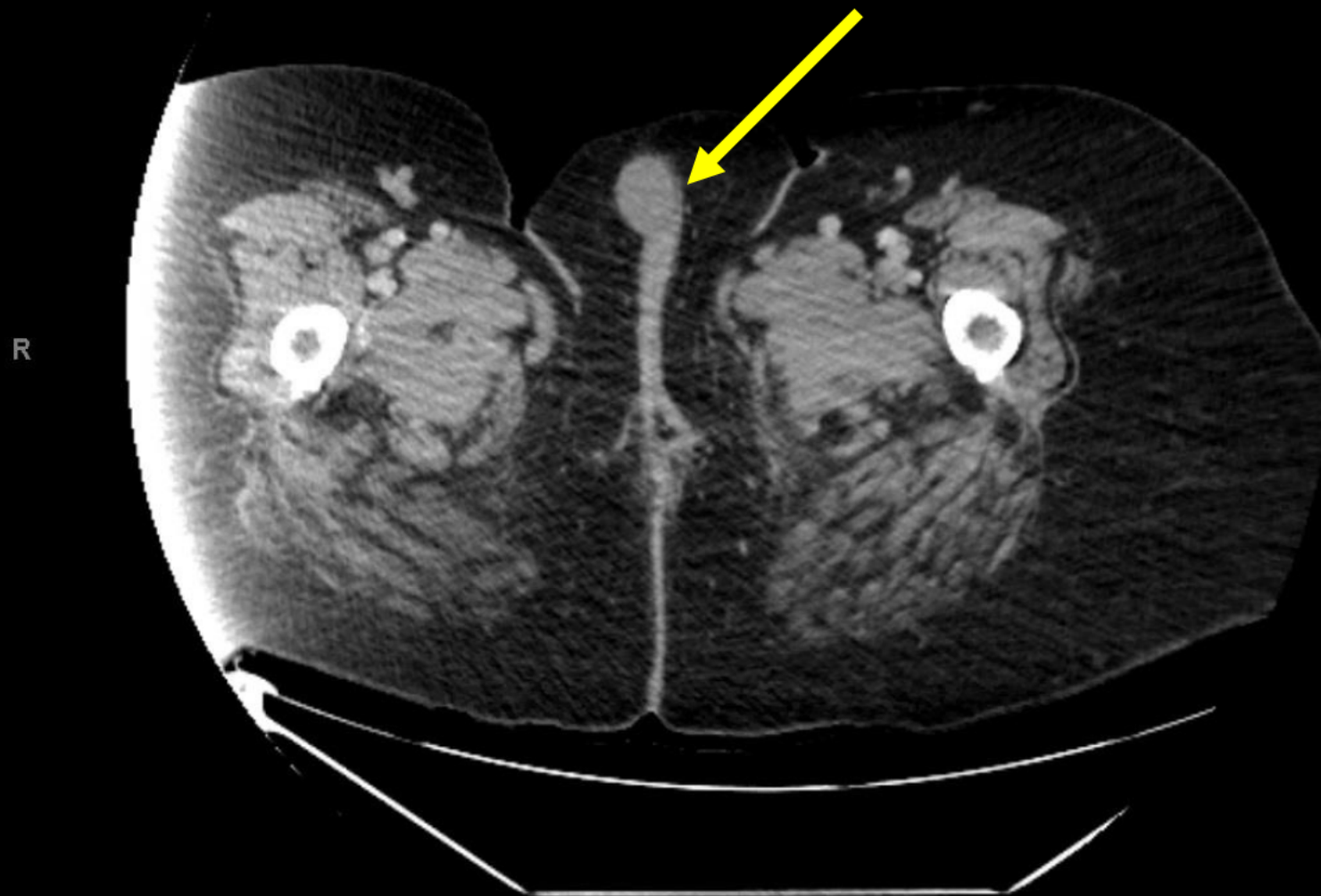
Lebanon, NH

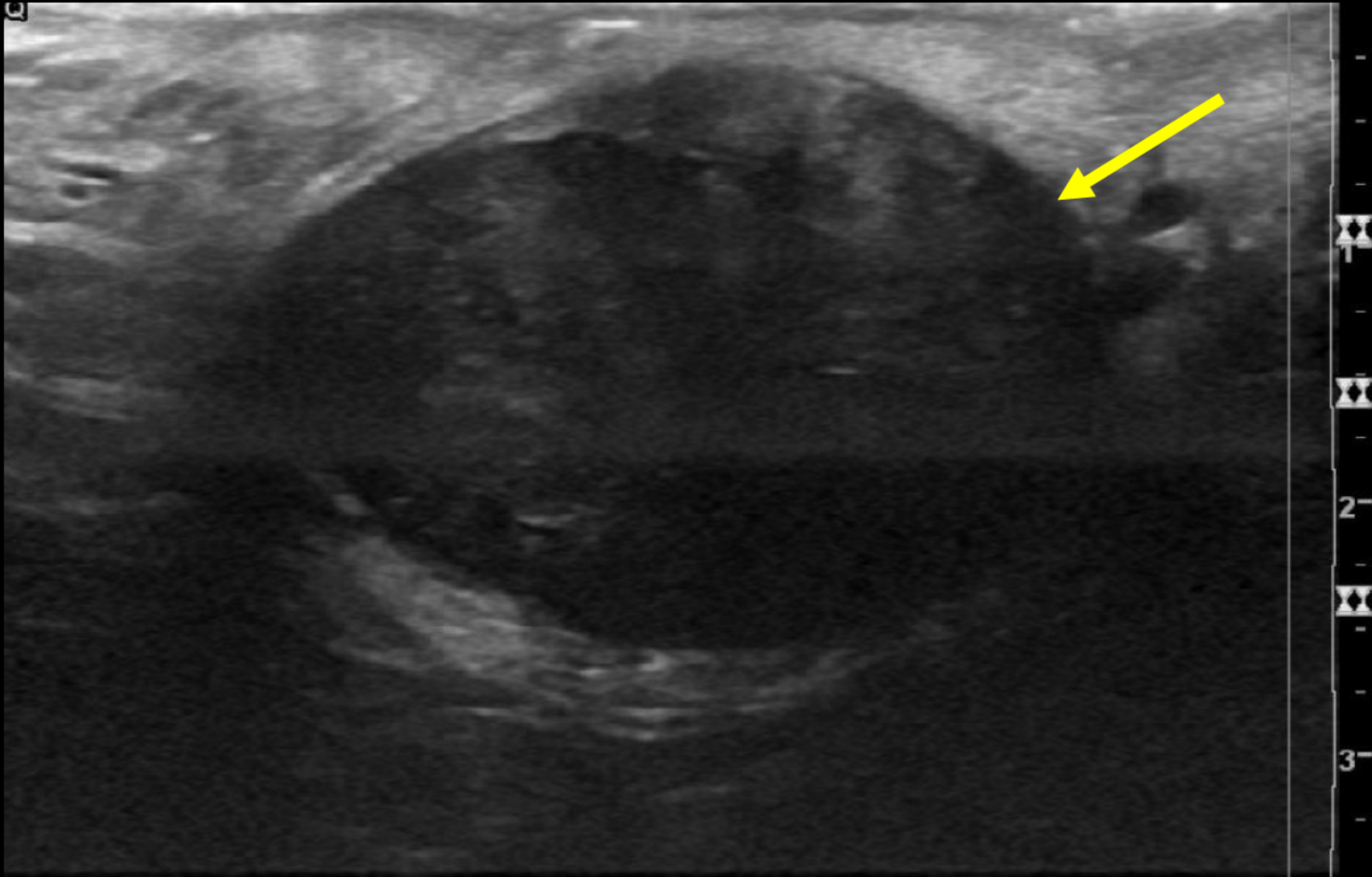
Breast Best Case

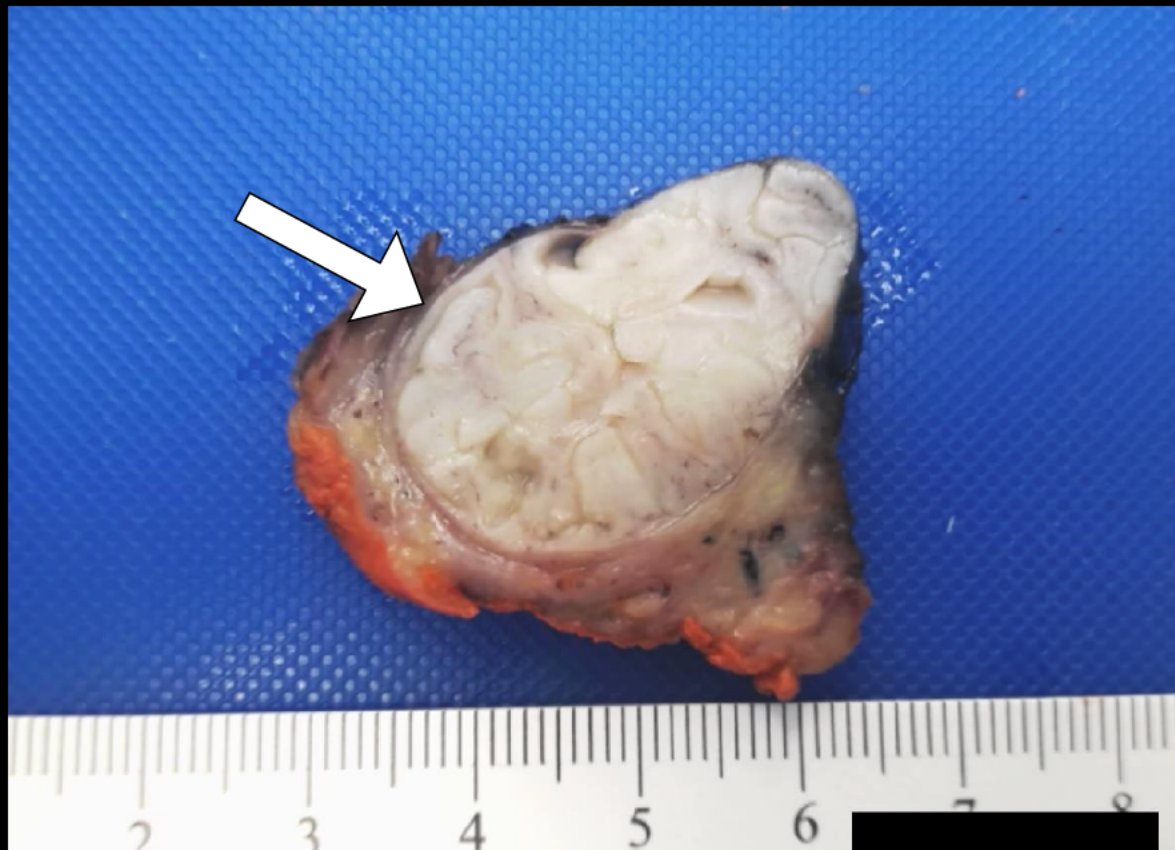


Clinical information

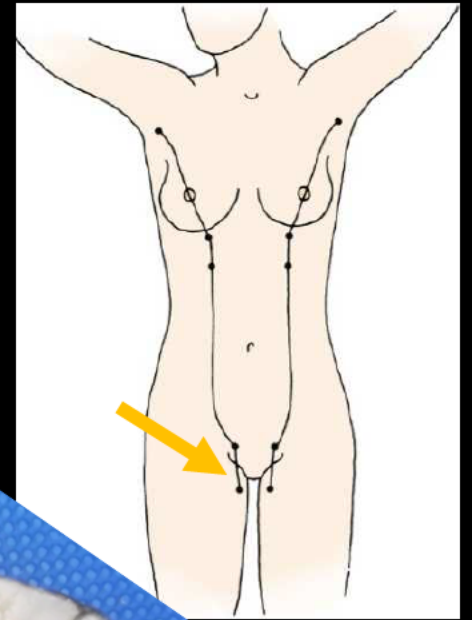
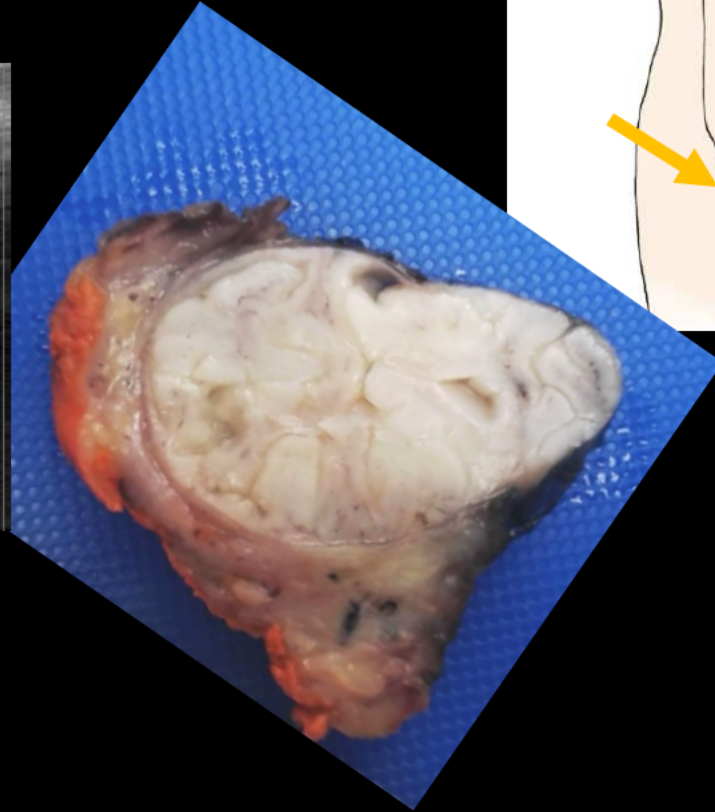
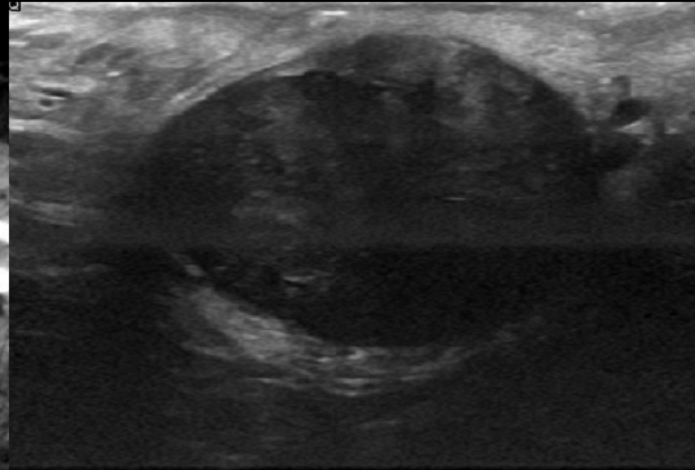
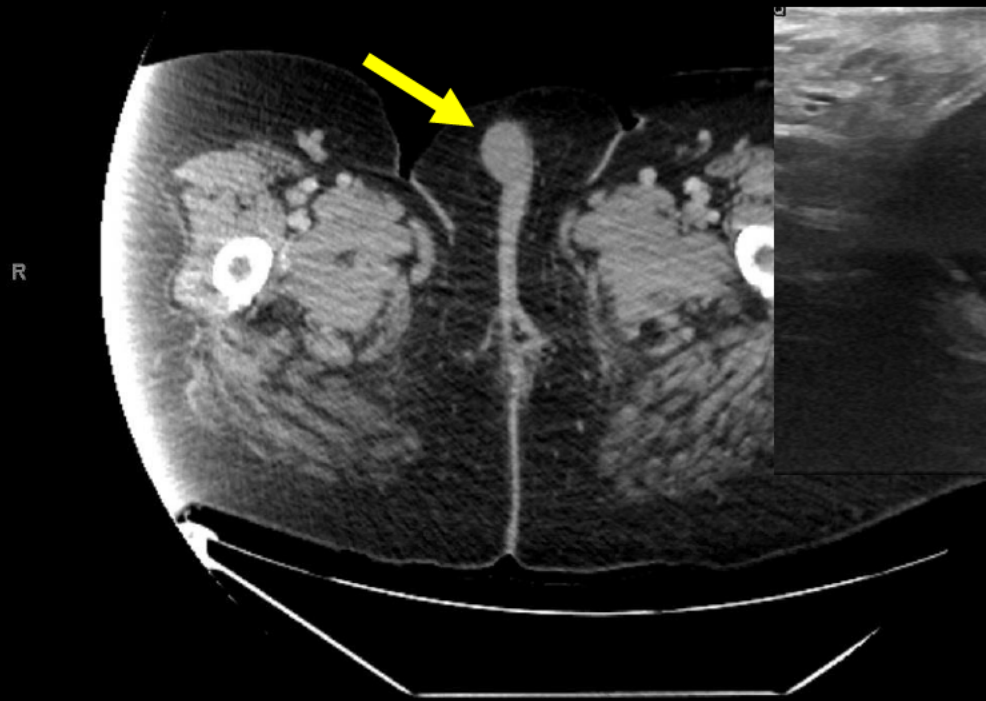
64-year-old female with history of diabetes and septic kidney stones presented to the ED with diffuse abdominal pain and a palpable vulvar lump.







Rad-Path Correlation



Benign Phyllodes Tumor in Presumed Ectopic Breast Tissue

**Nathan Palmer
Geisinger Medical Center
Danville, PA**

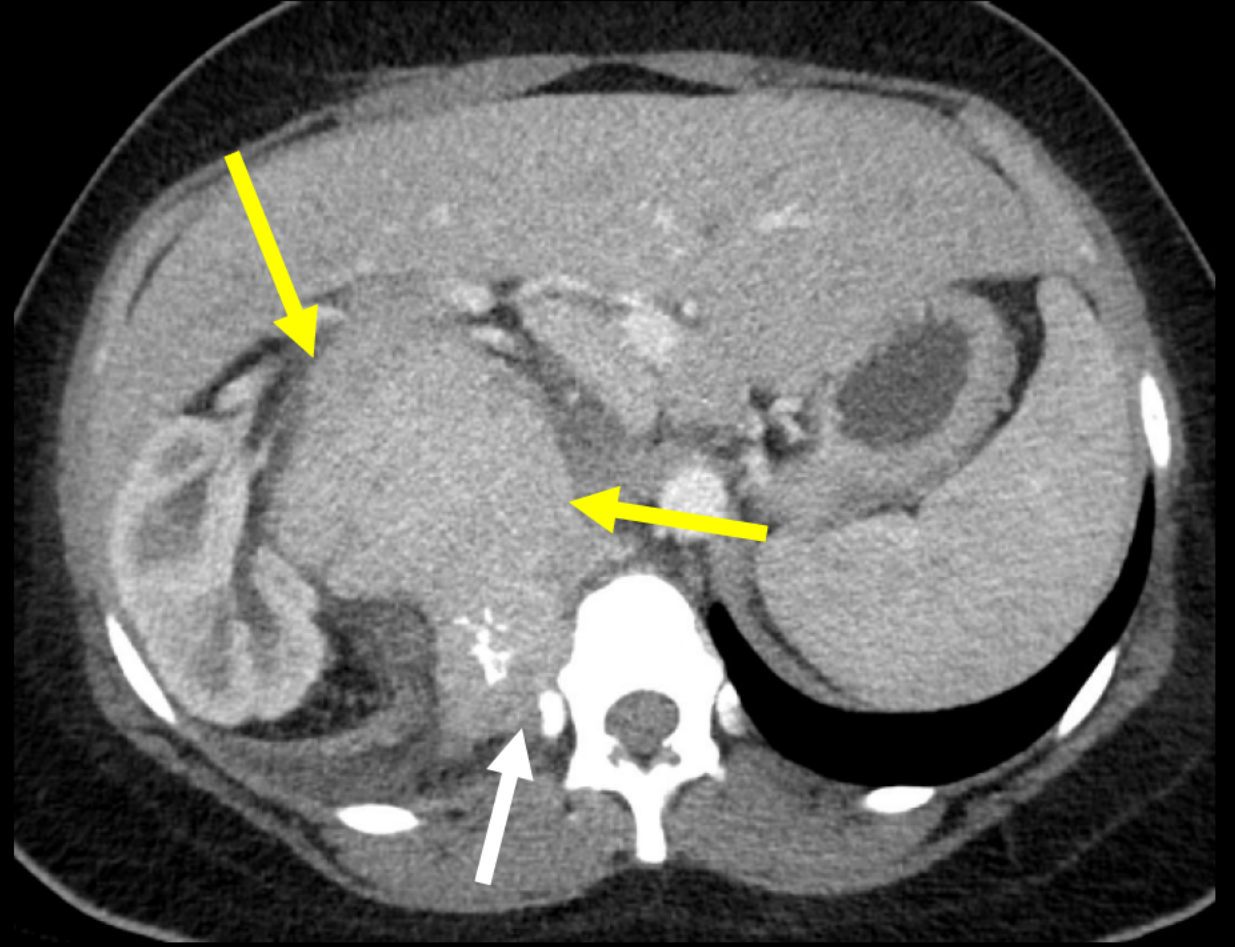
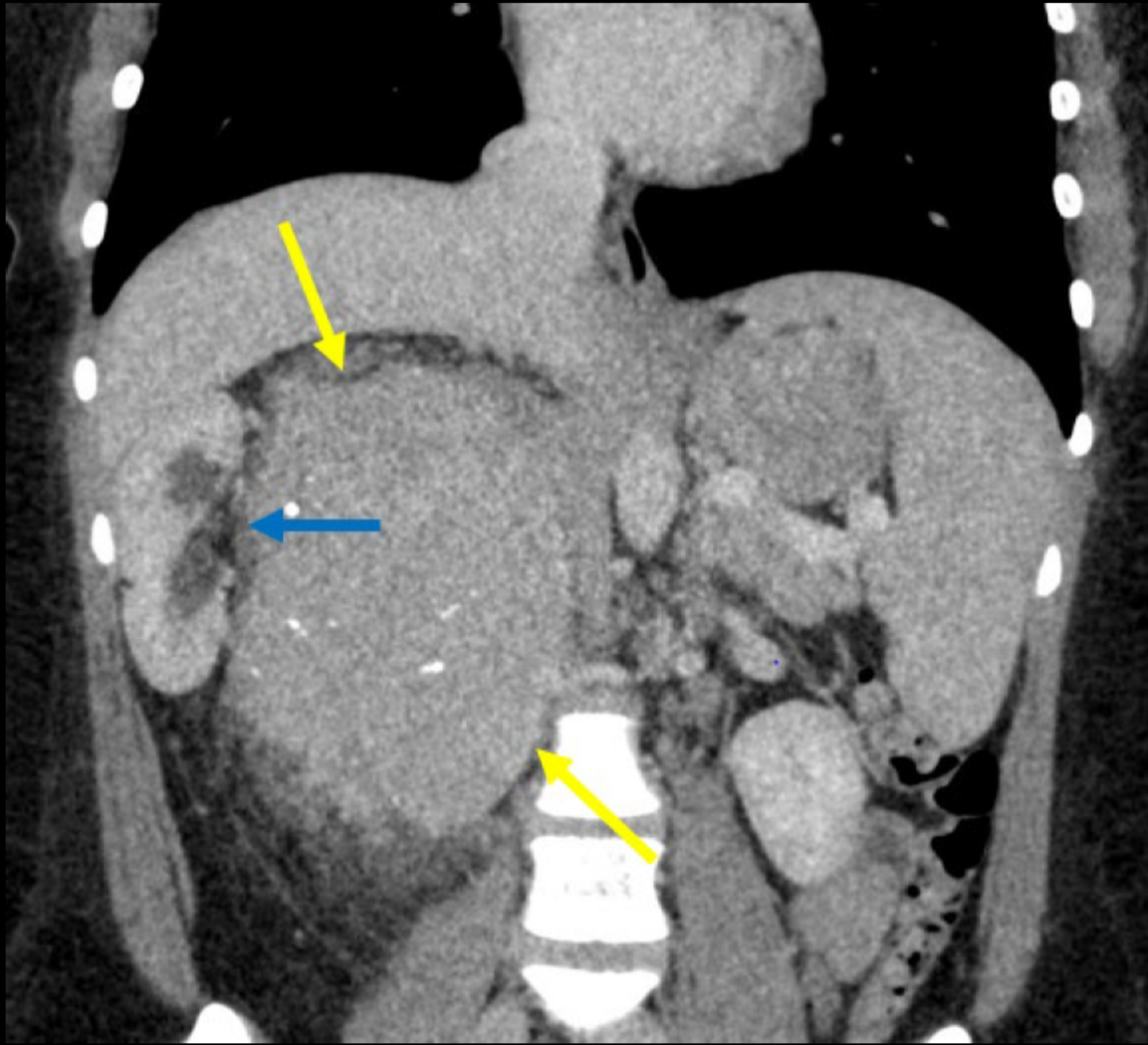
Genitourinary Best Case

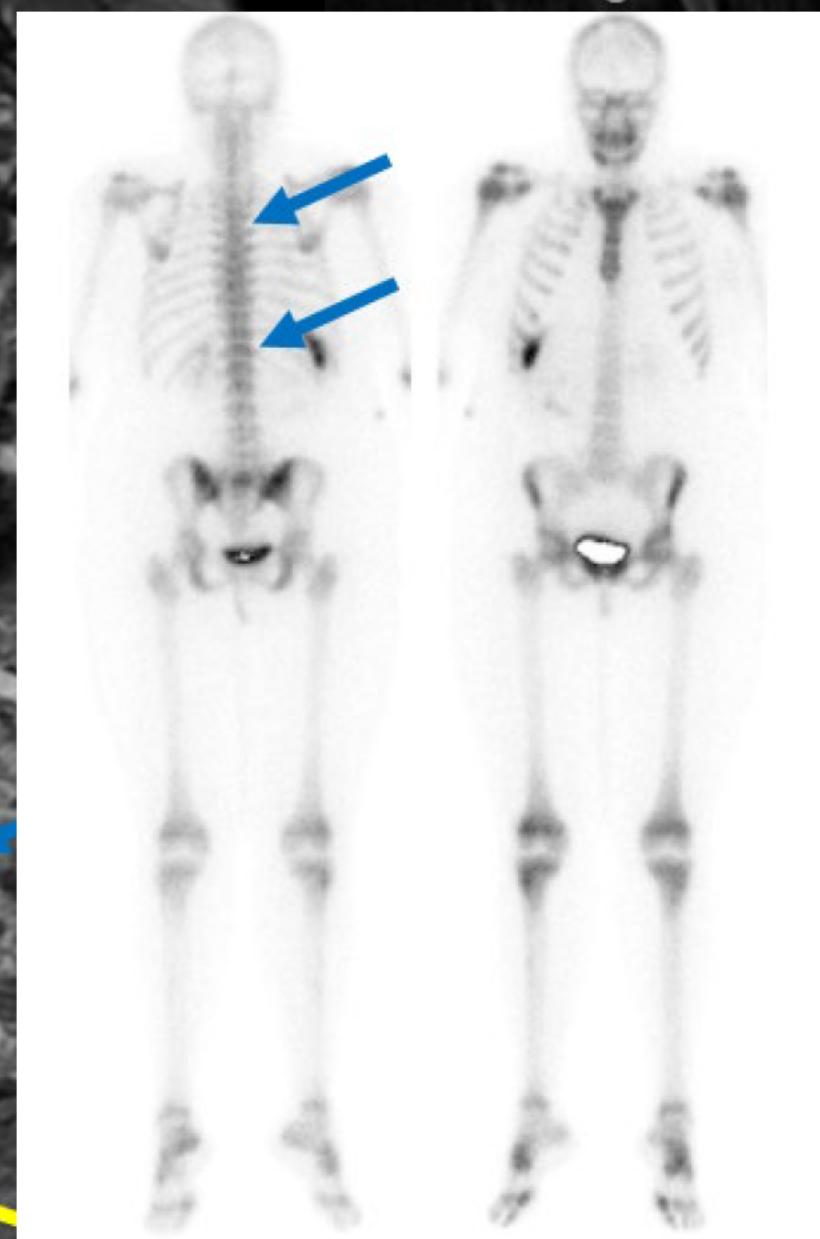
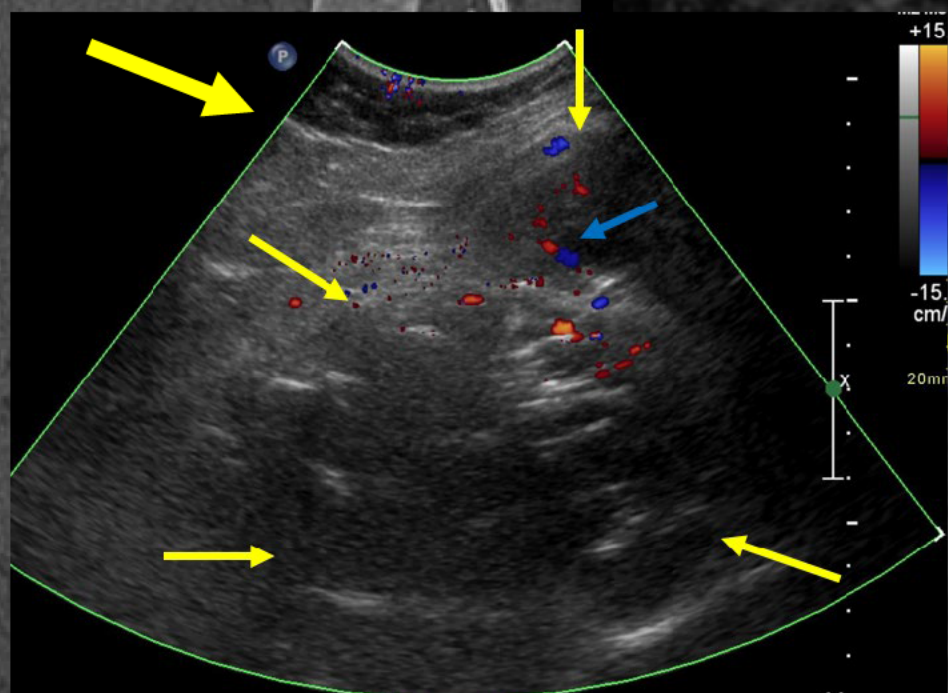


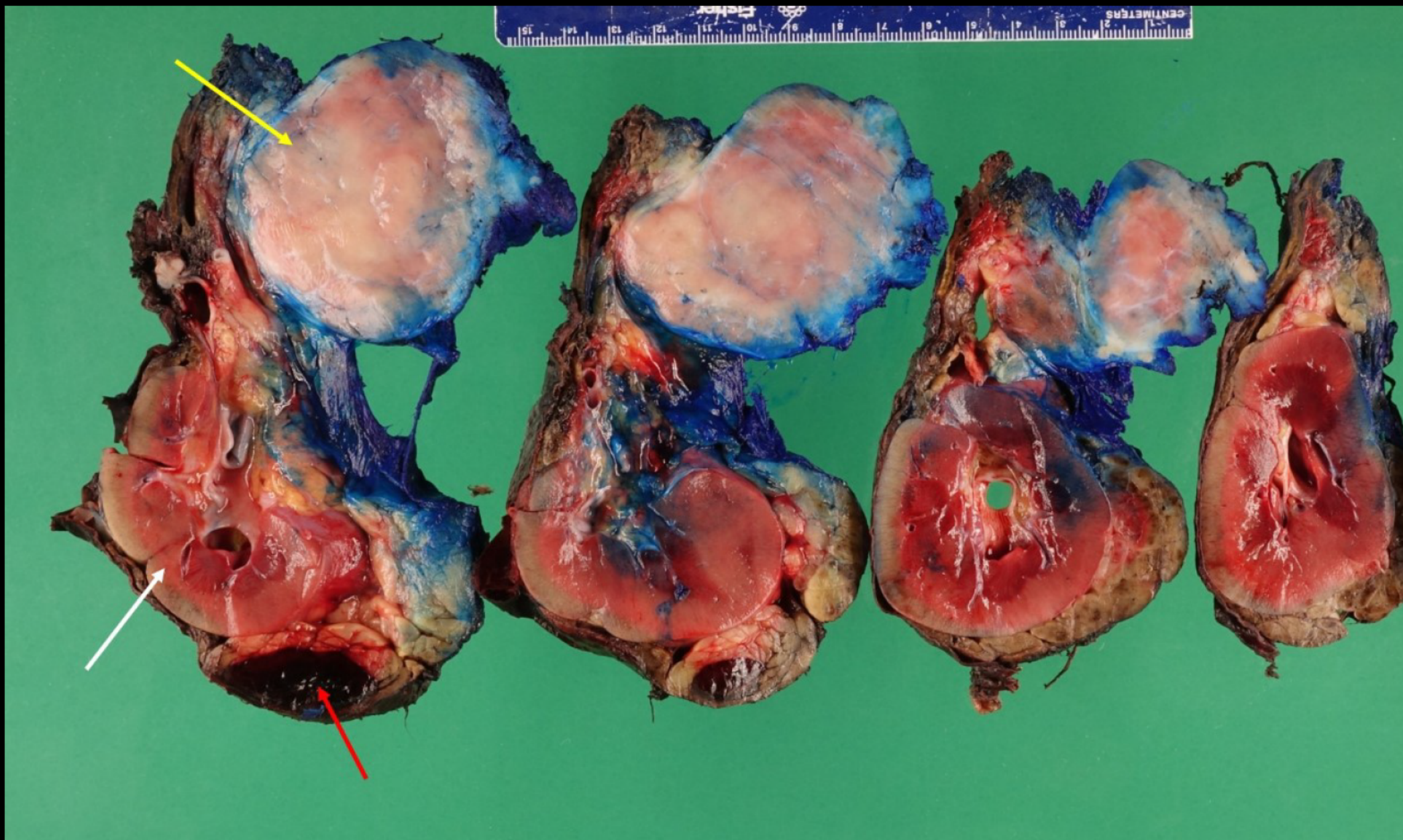
Clinical Information

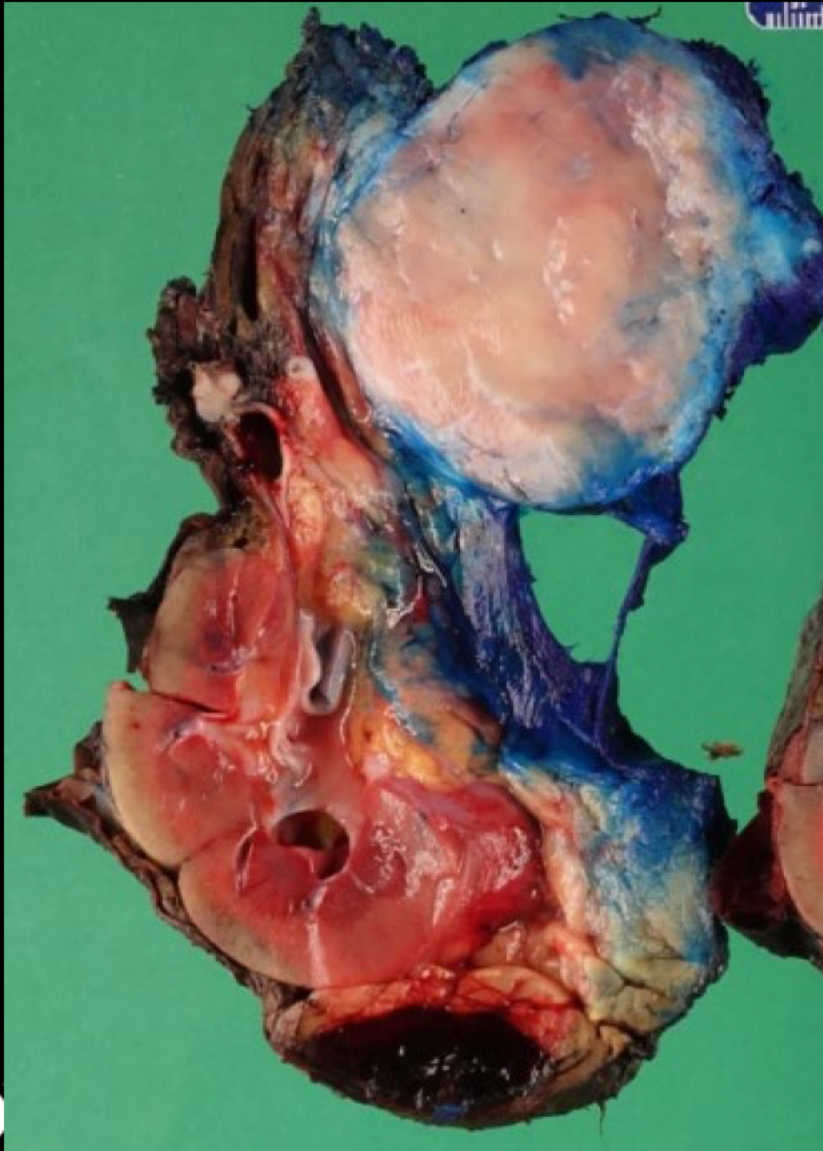
22-year-old female with recent diagnosis of hypertrophic lichen planus who presented to the ED with debilitating, recurrent skin infections and blistering maculopapular rash. Despite prior treatment with antibiotics and steroids, her symptoms had continued to worsen, and she developed oral ulcers resulting in an unintentional weight loss of 60 pounds. Given the recalcitrant erosive mucocutaneous lesions, a skin biopsy was obtained that revealed 'paraneoplastic pemphigus in appropriate clinical context'. This prompted further investigation to rule out an underlying malignancy.

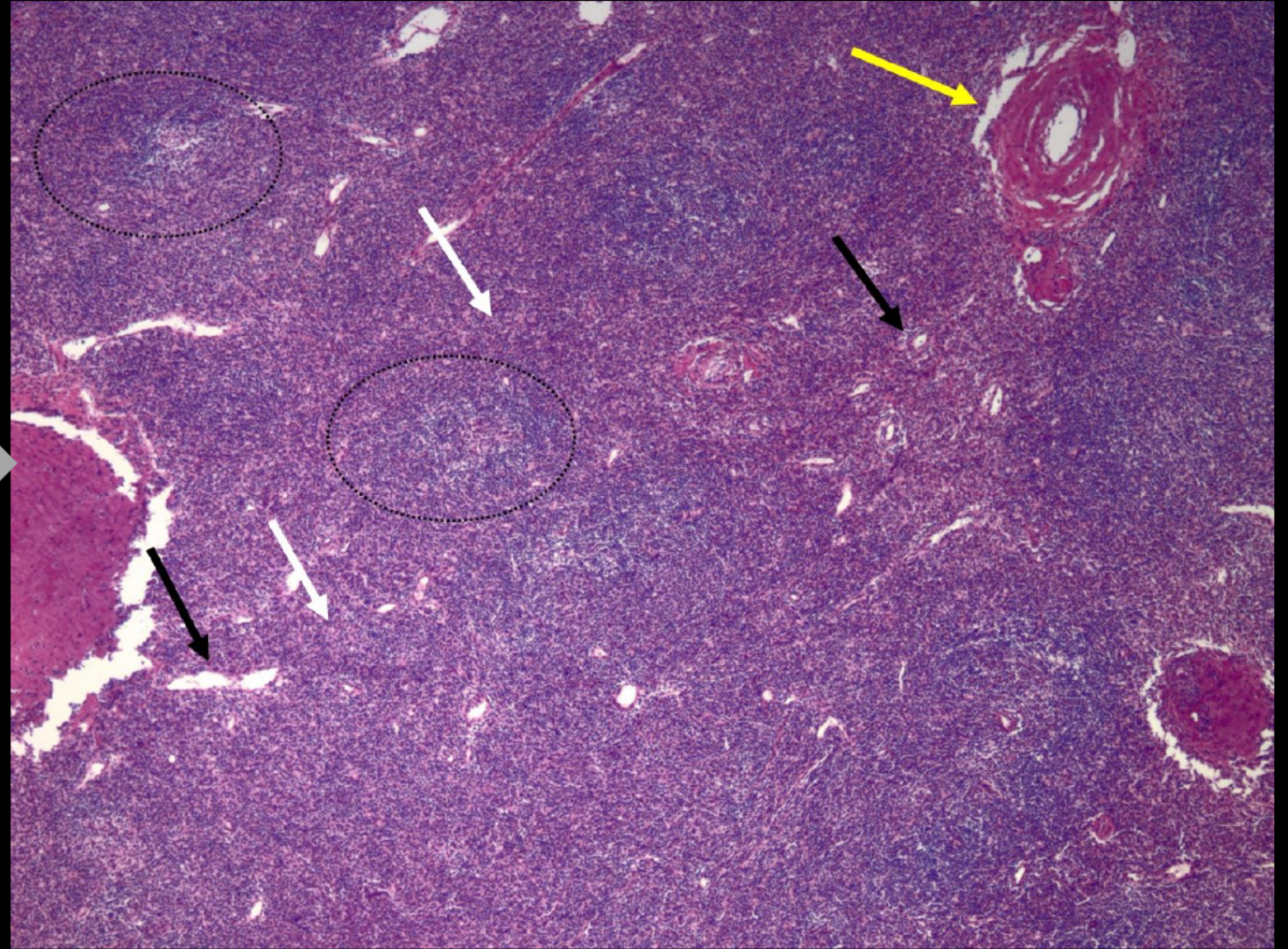
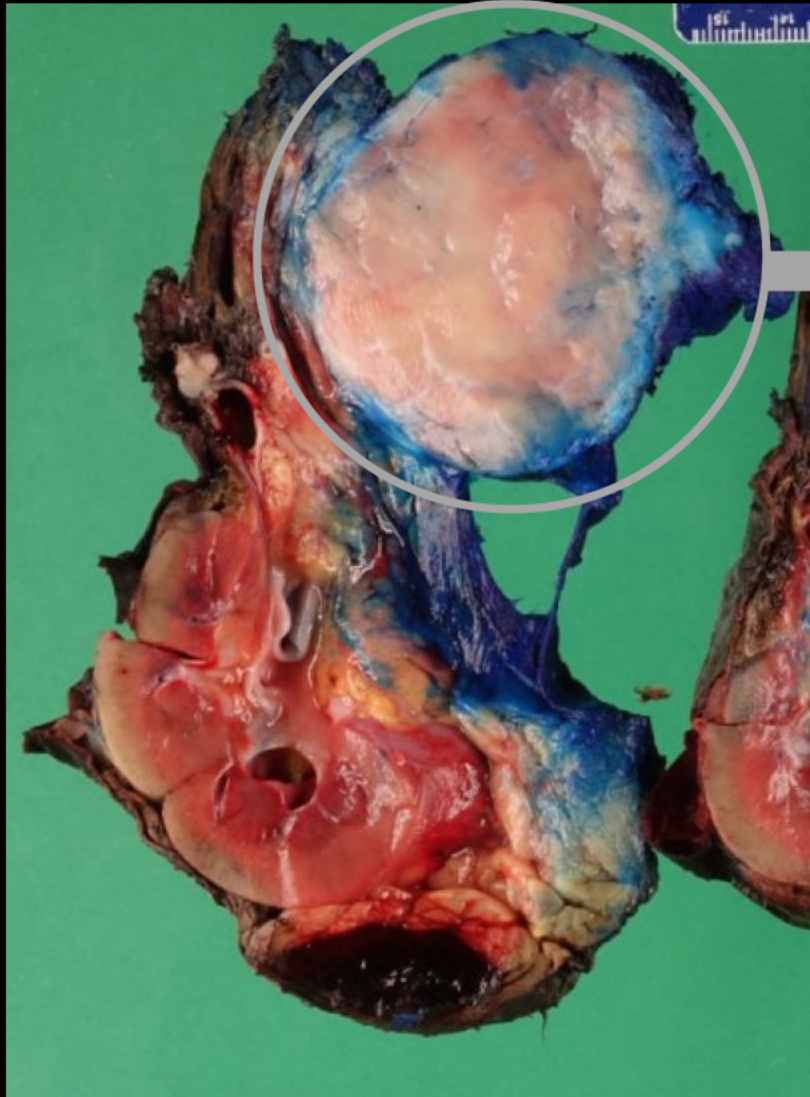












Castleman Disease (hyaline vascular type)

Efaza Siddiqui, MD

UMass Memorial Medical Center/UMass Chan Medical School
Worcester, MA

**Many thanks to all of you for
submitting such great cases!**

**From the staff of the
American Institute for Radiologic Pathology**