

# Best Cases of the AIRP

Oct-Nov 2018

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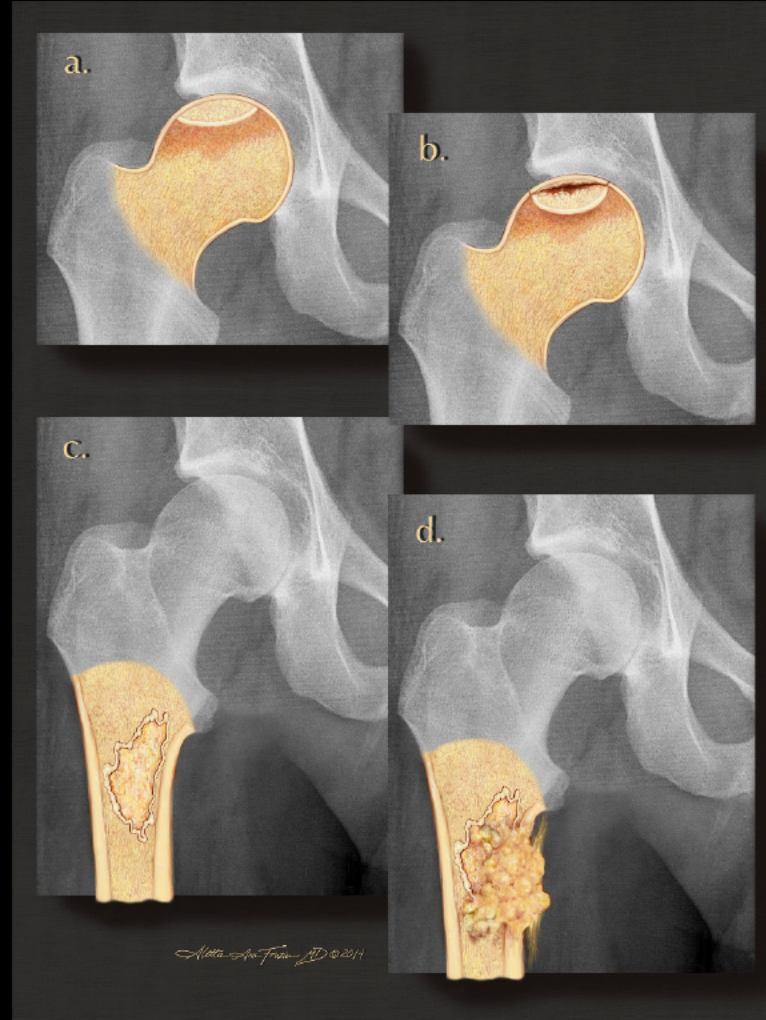
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# Musculoskeletal Best Case



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# Clinical Information

**45 year old healthy female with no significant past medical history presented with a palpable presternal nodule. She reported intermittent pain, but no dyspnea.**

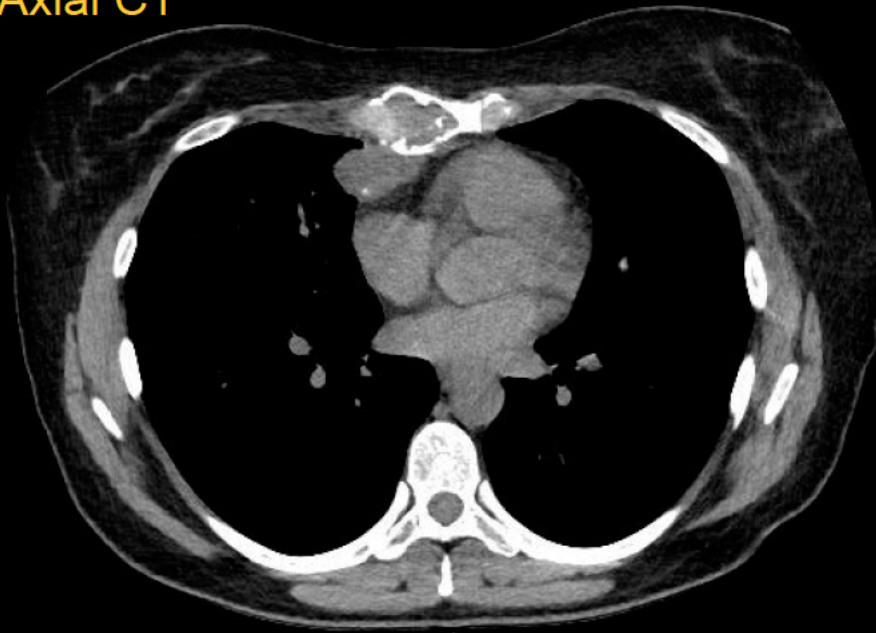


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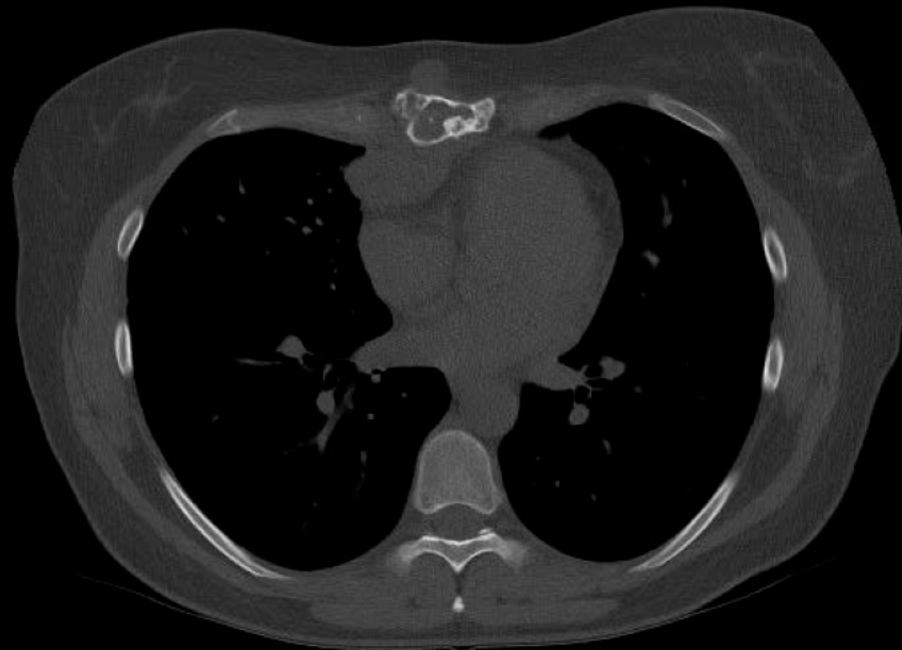
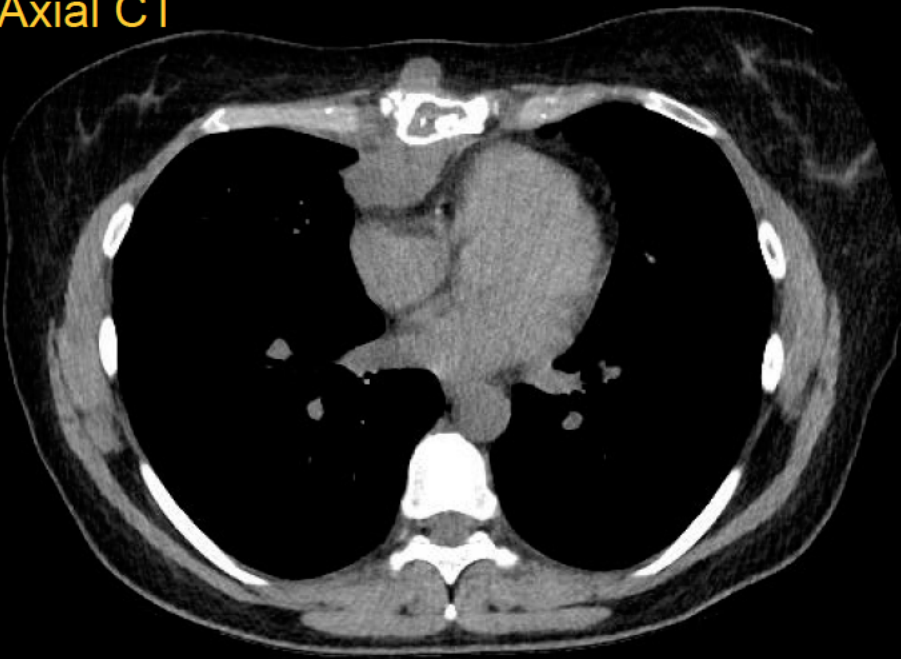
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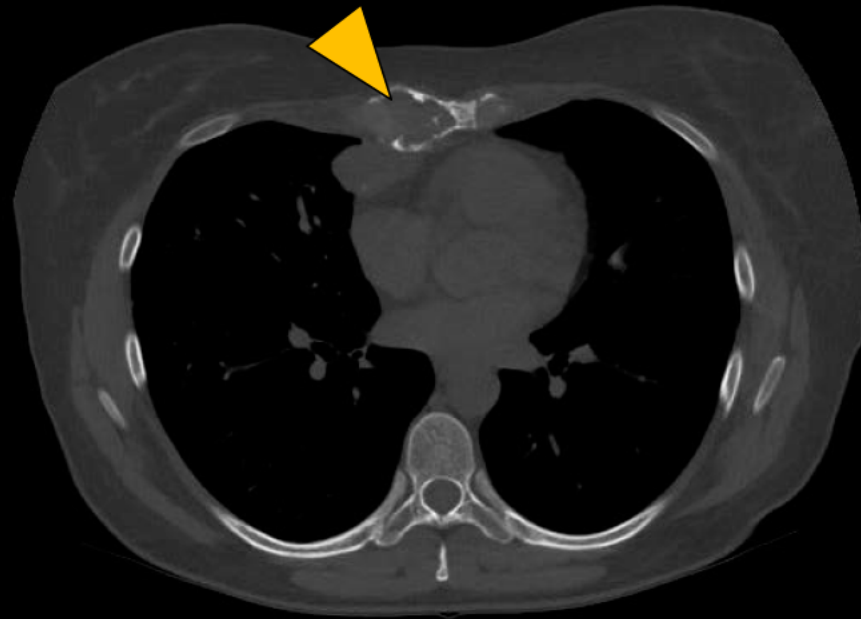
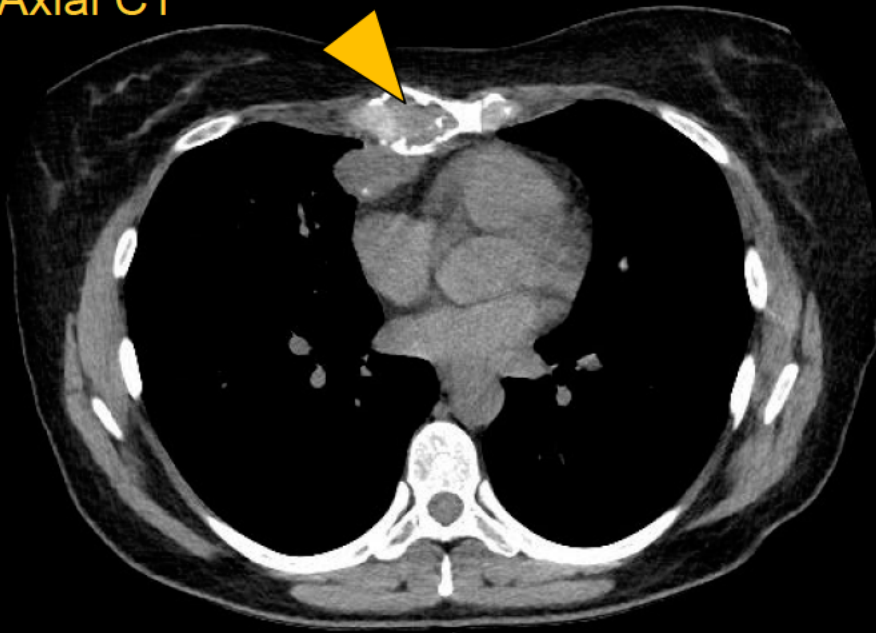
Axial CT



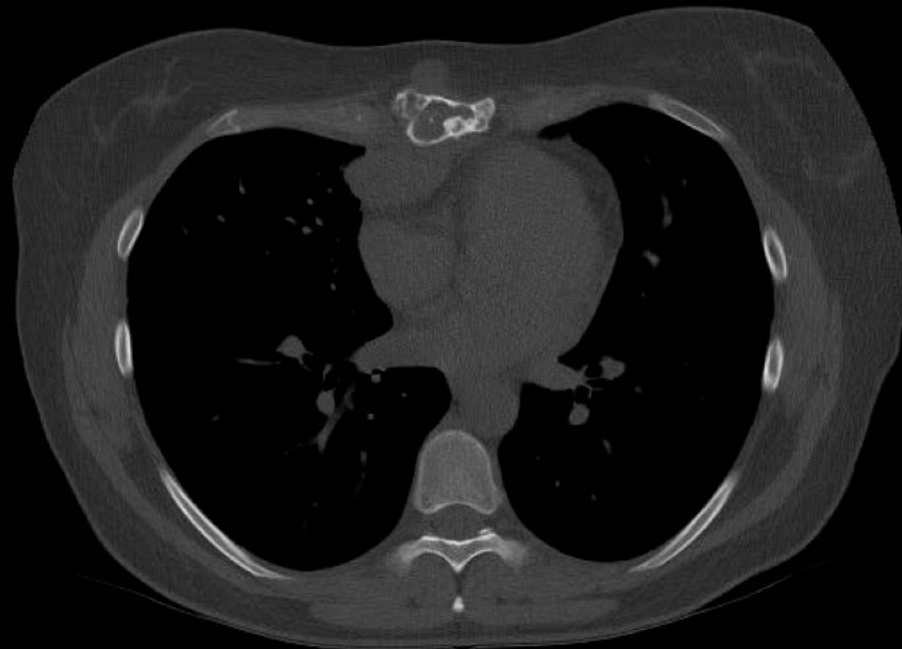
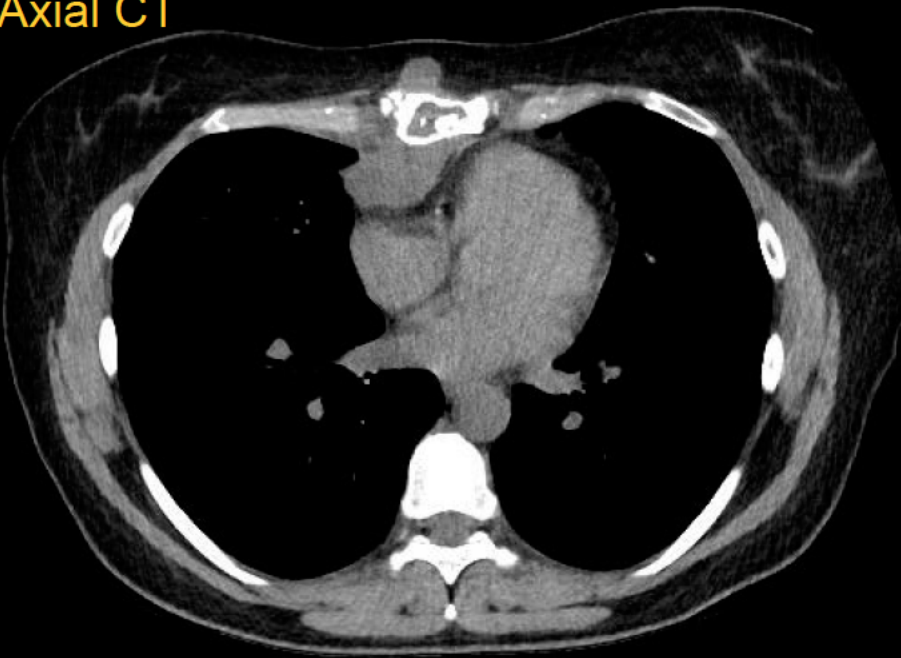
Axial CT



Axial CT

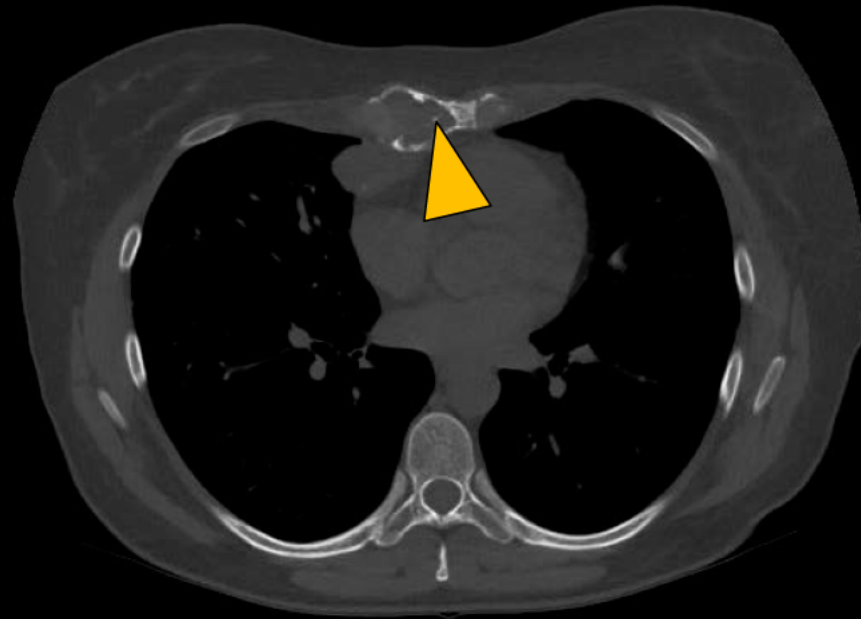
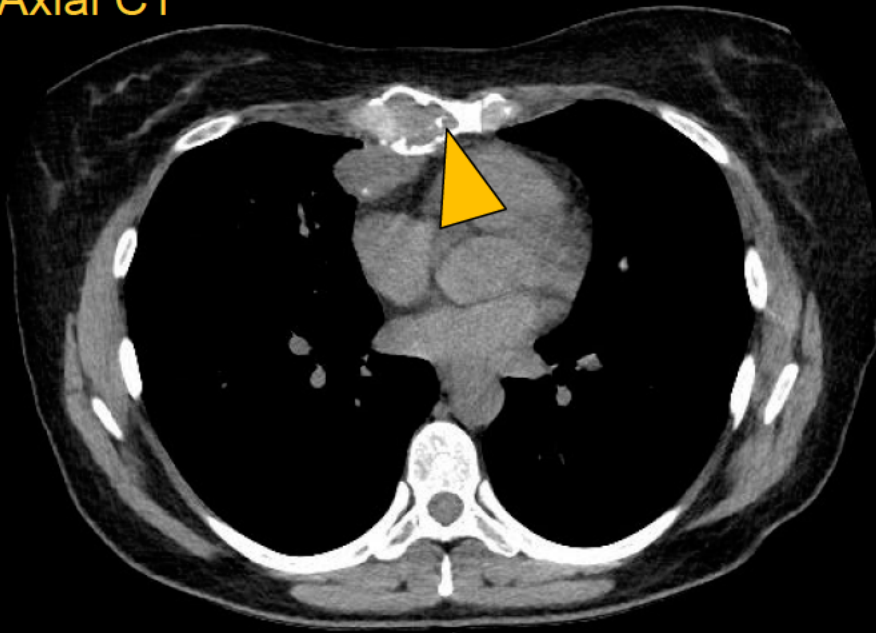


Axial CT

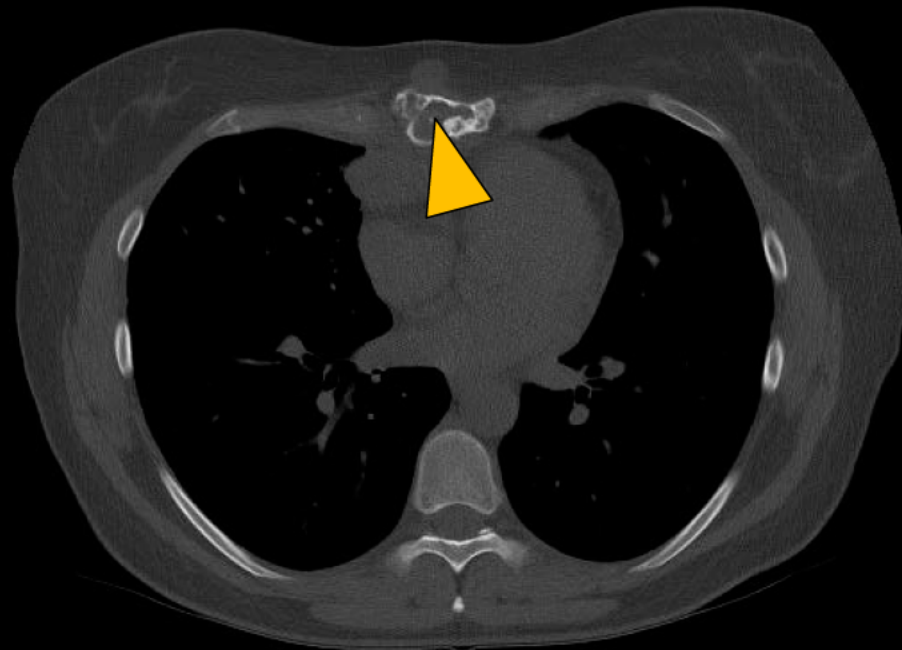
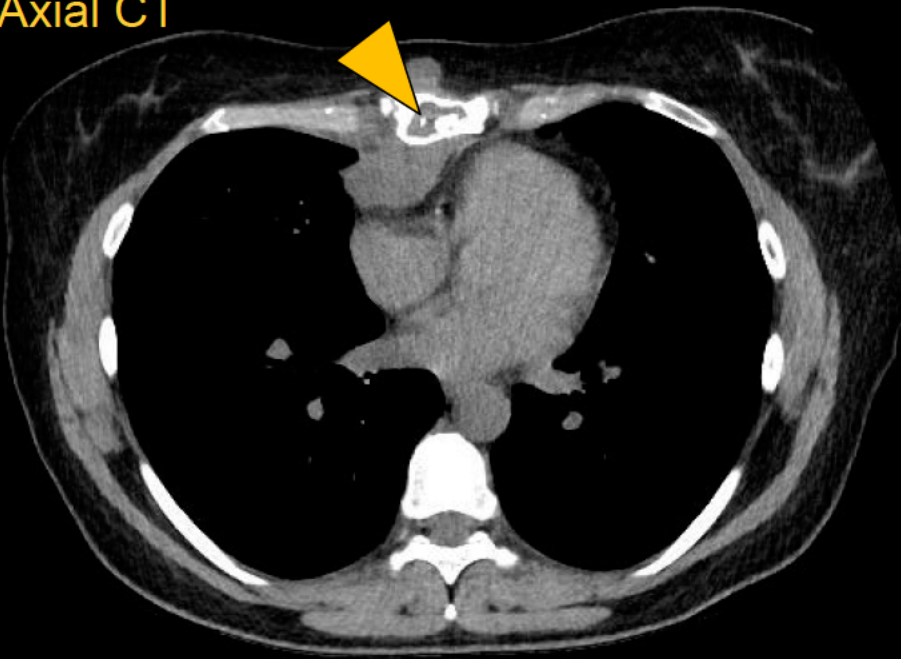




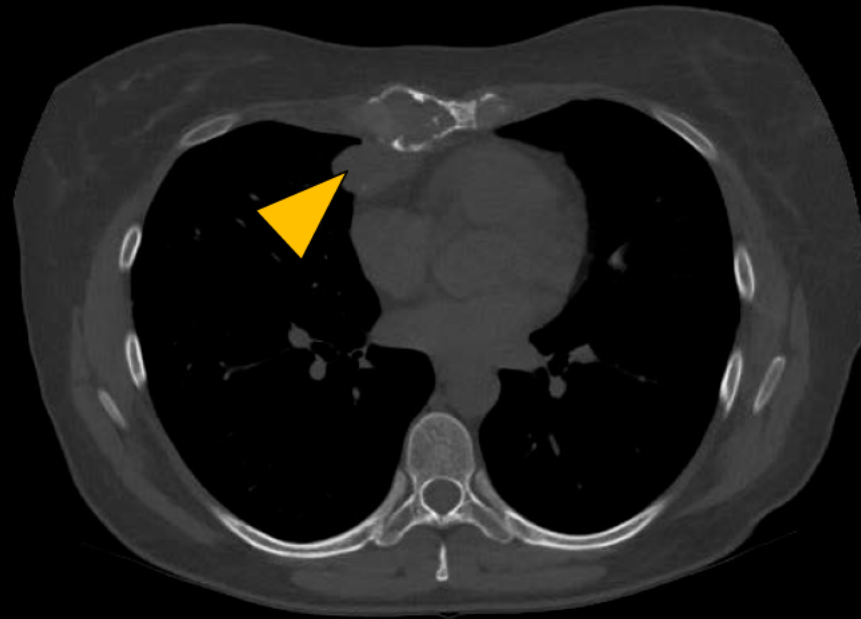
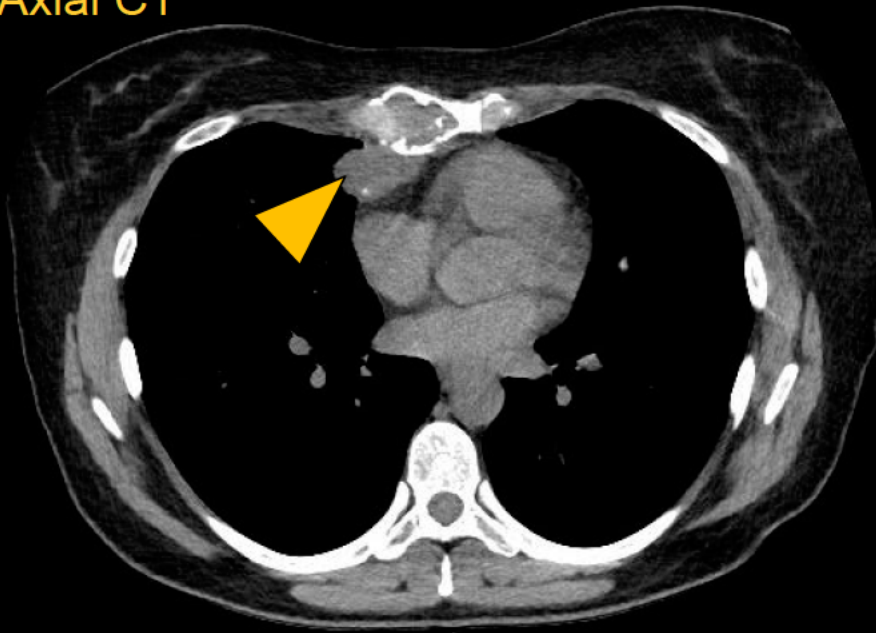
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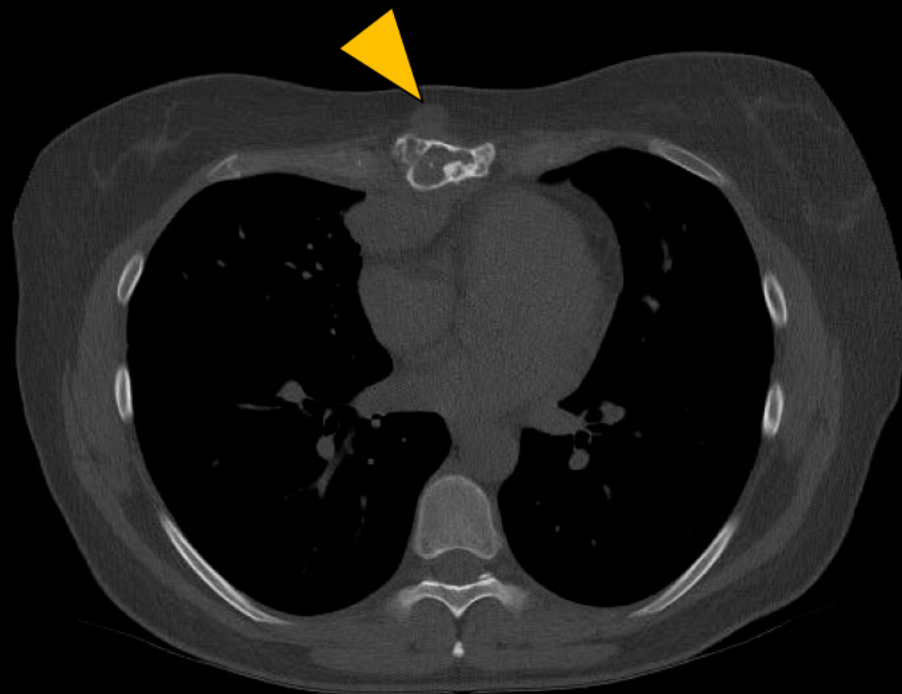
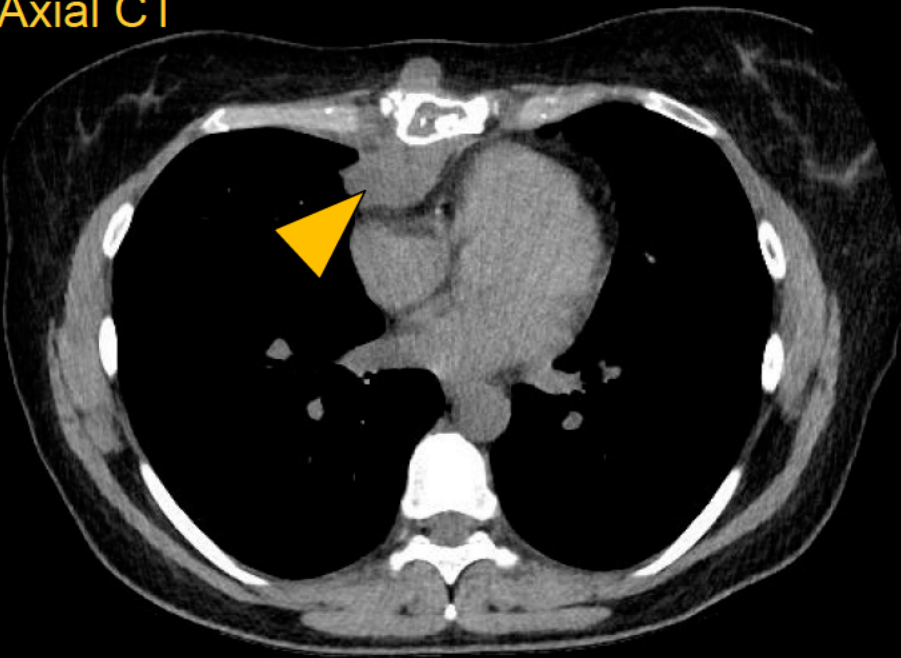
Axial CT



Axial CT



Axial CT



## Sagittal CT

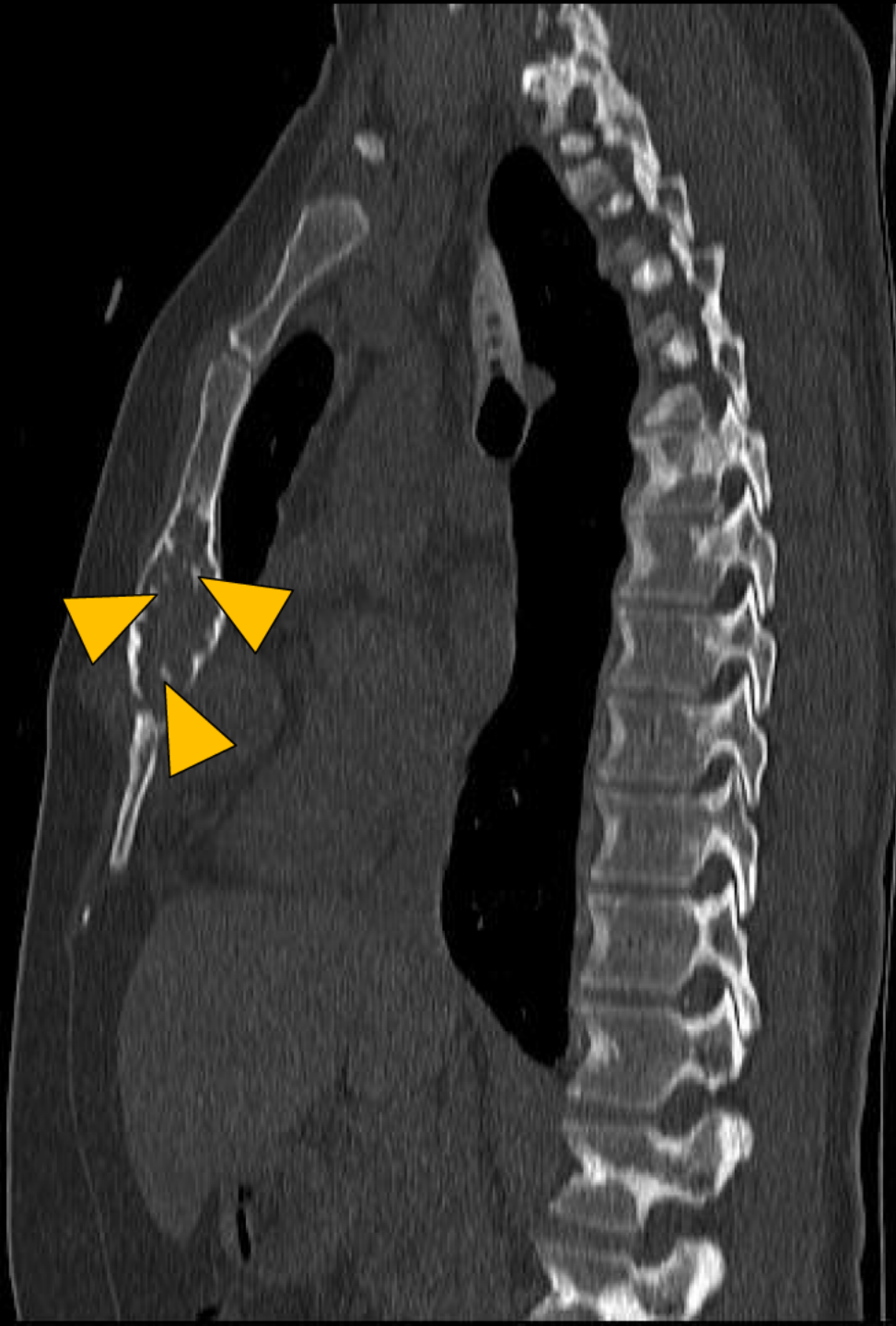


## Sagittal CT

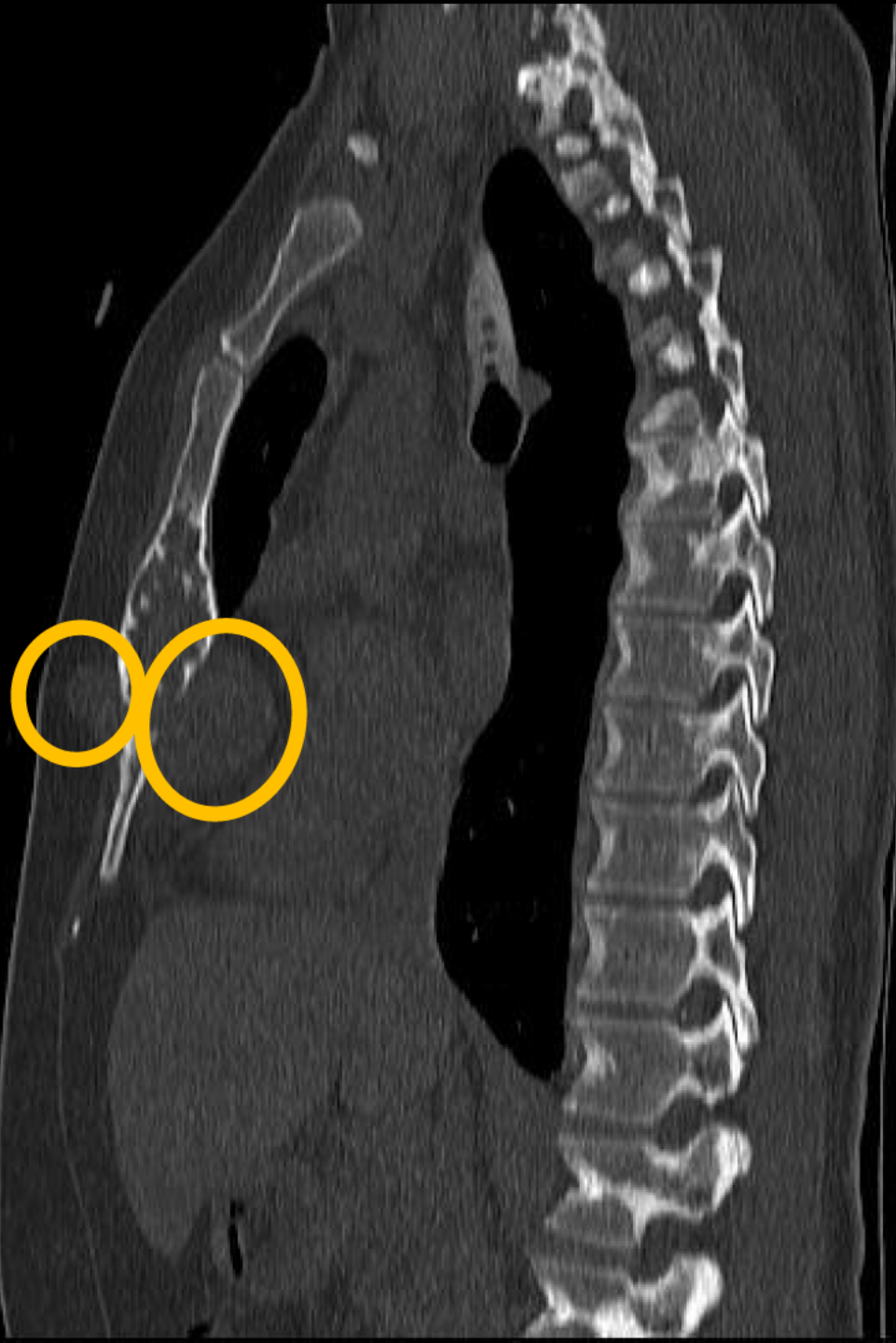




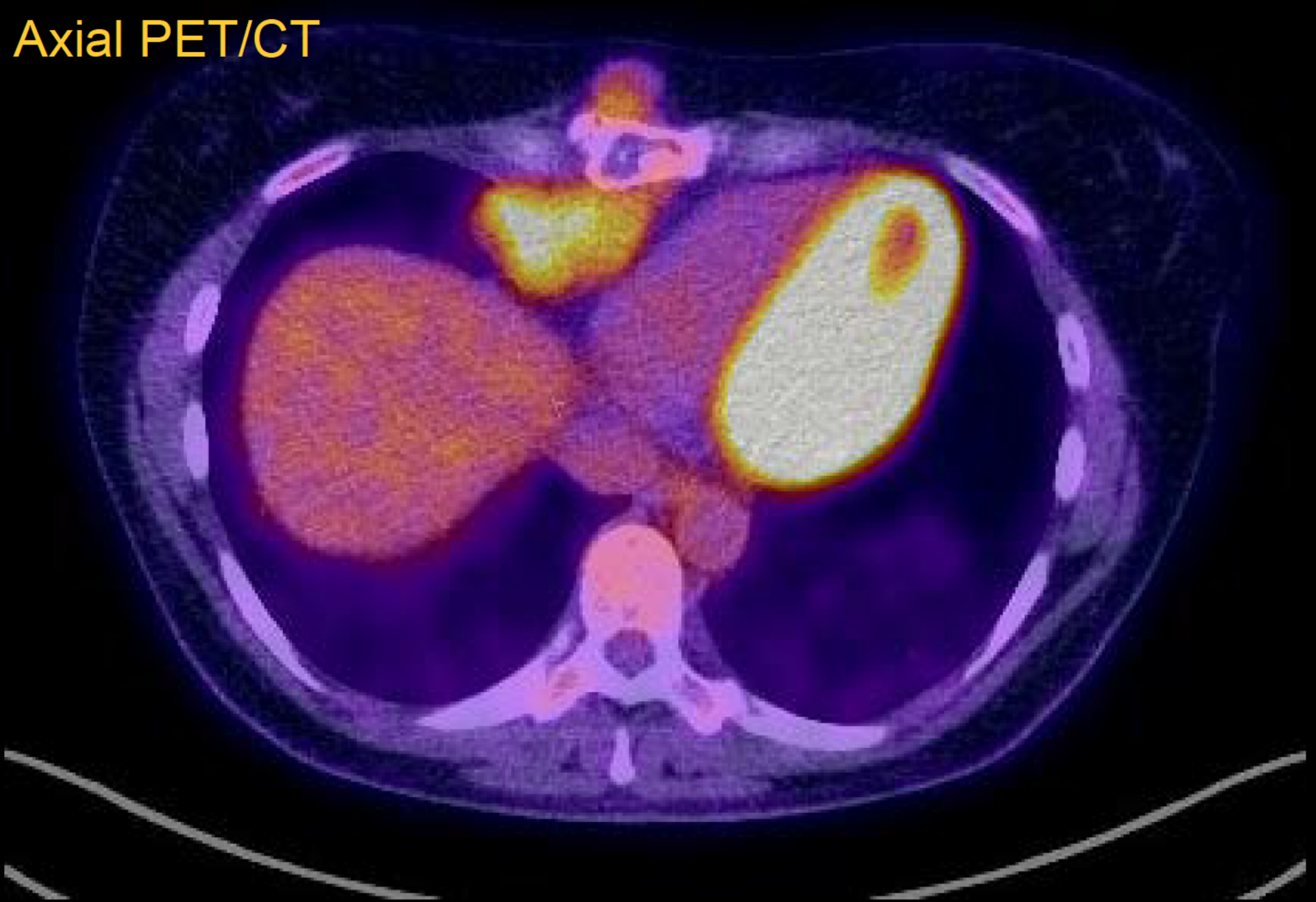
## Sagittal CT



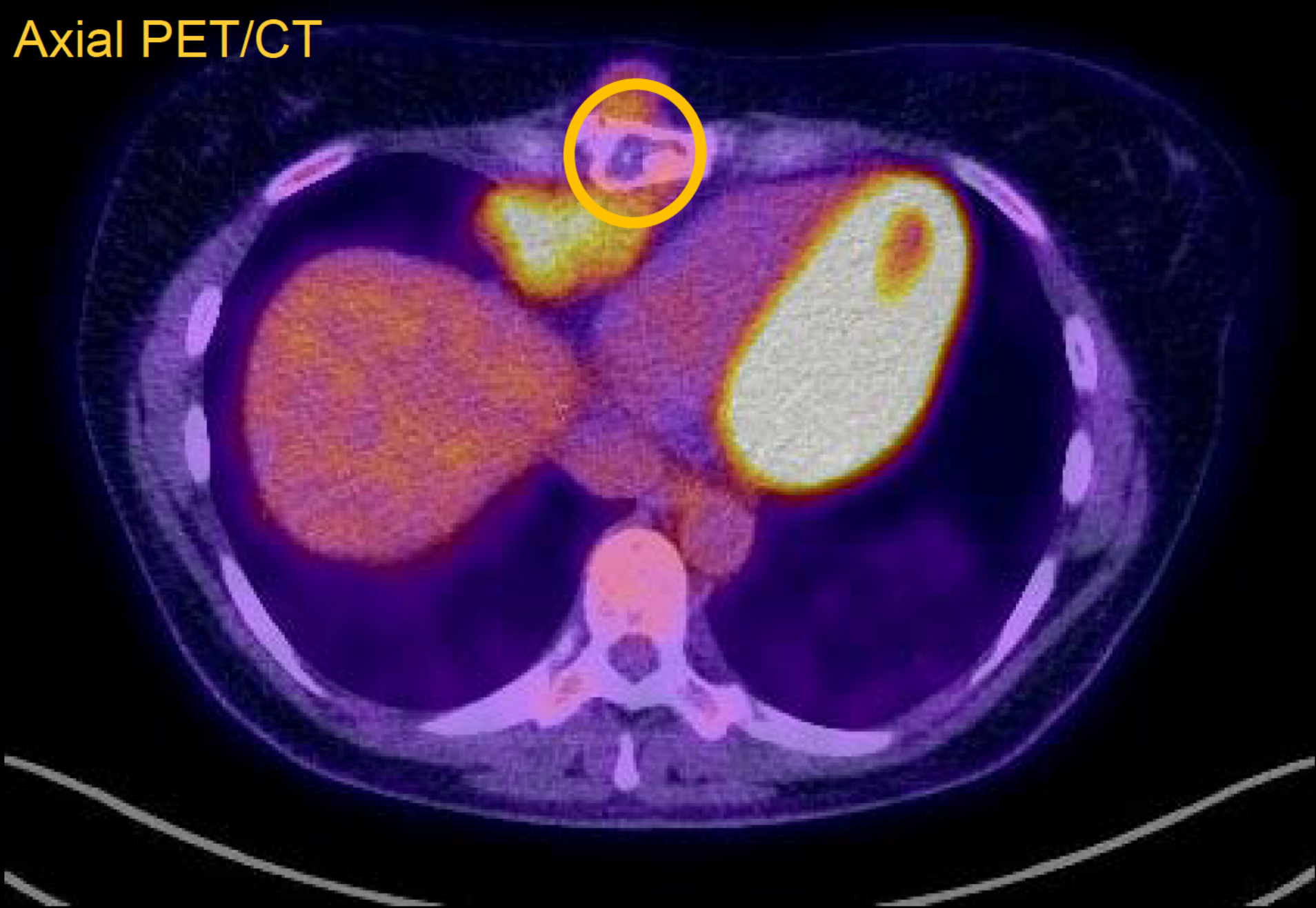
Sagittal CT



Axial PET/CT

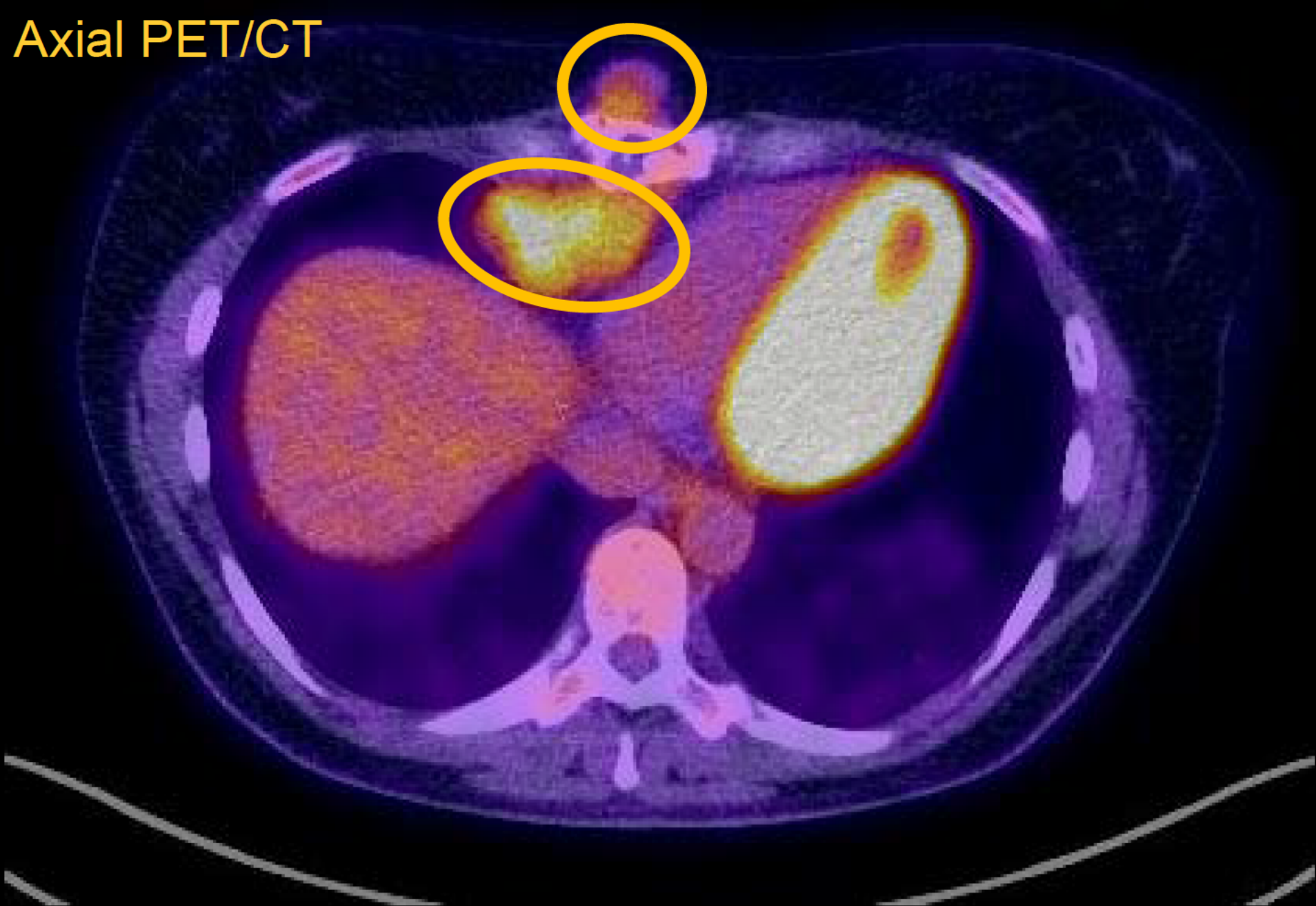


Axial PET/CT

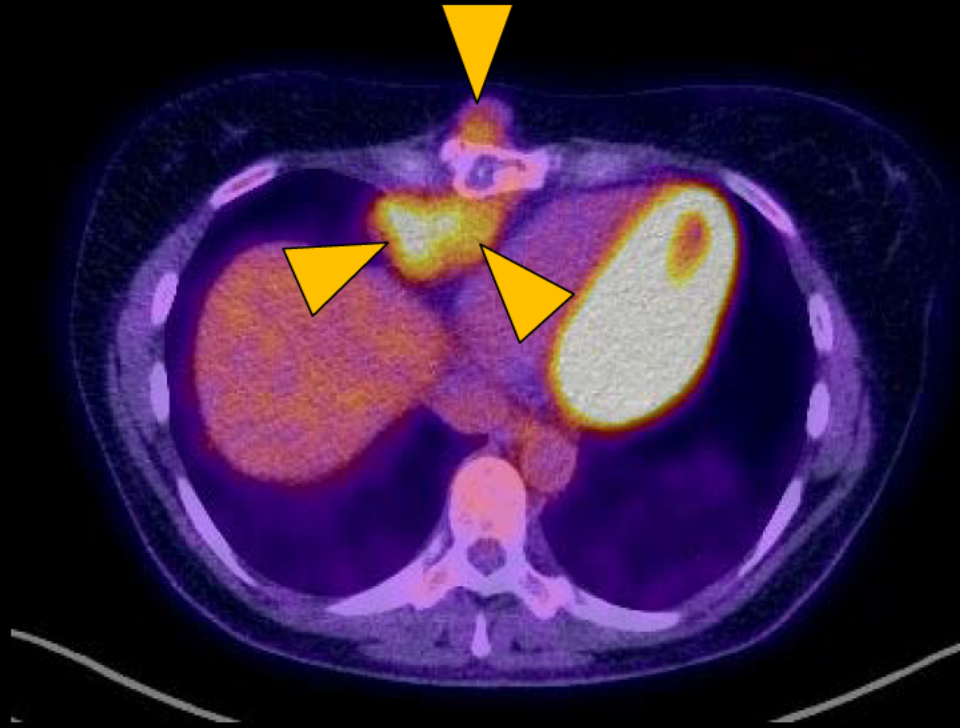




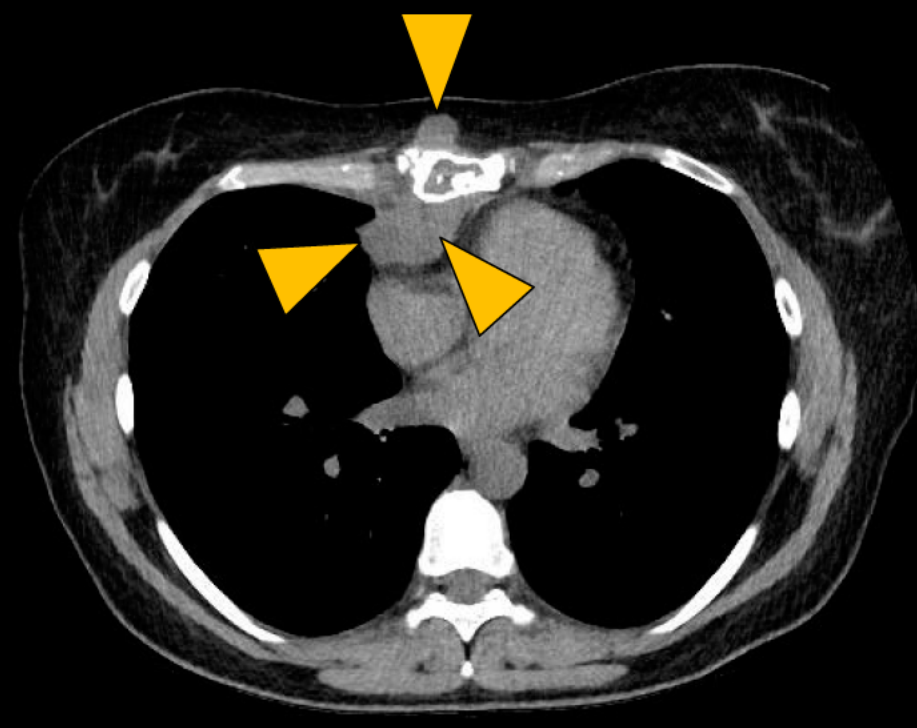
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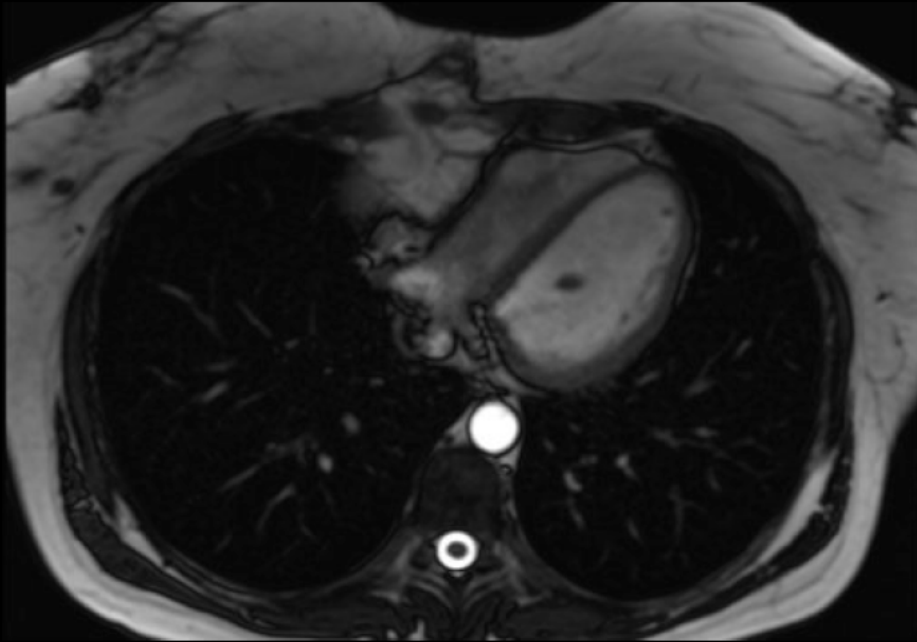
Axial PET/CT



Axial CT



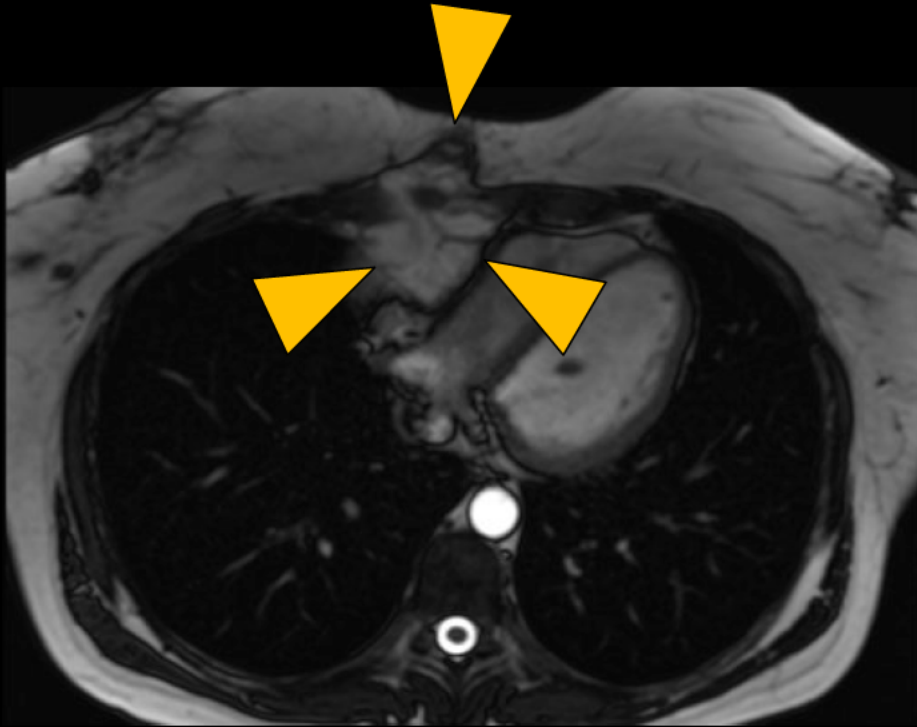
Axial GRE



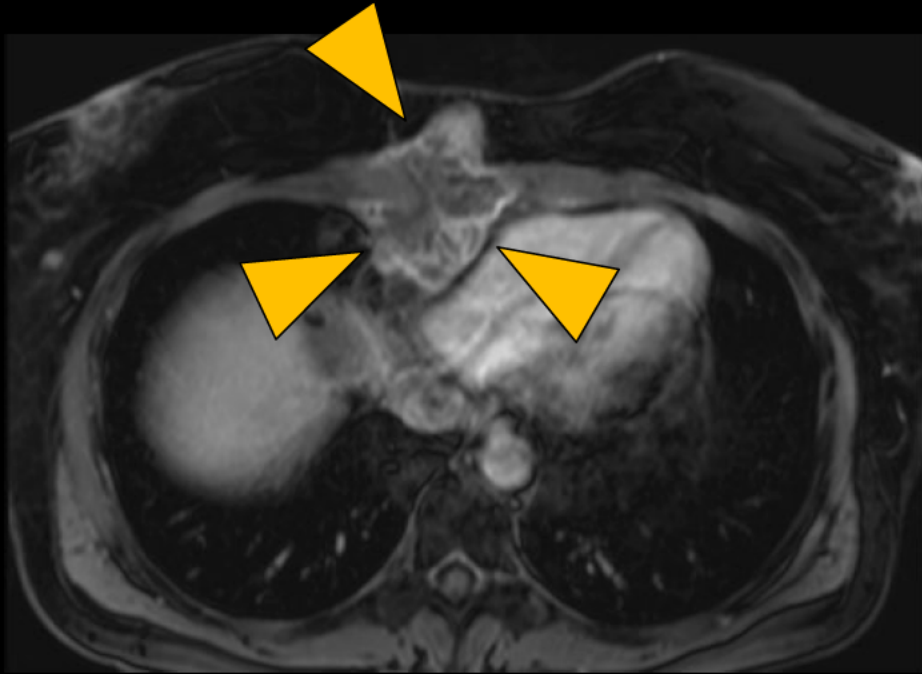
Axial T1+C



Axial GRE

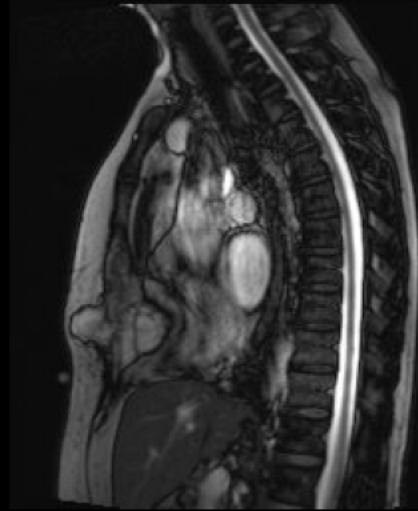
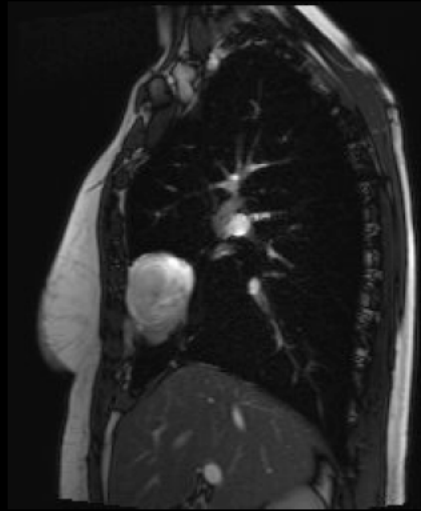


Axial T1+C MRI scan of the chest showing a large, bright, heterogeneous mass in the right lung base, indicated by three yellow arrowheads.

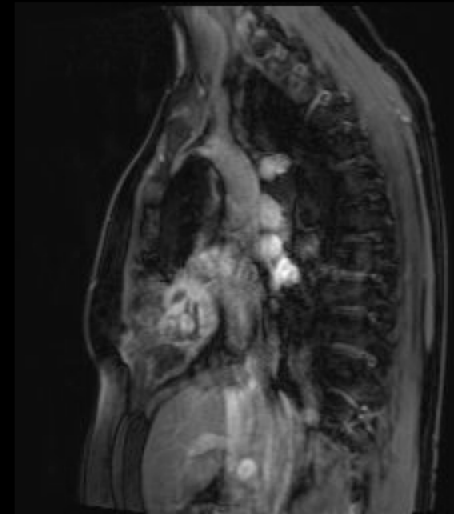
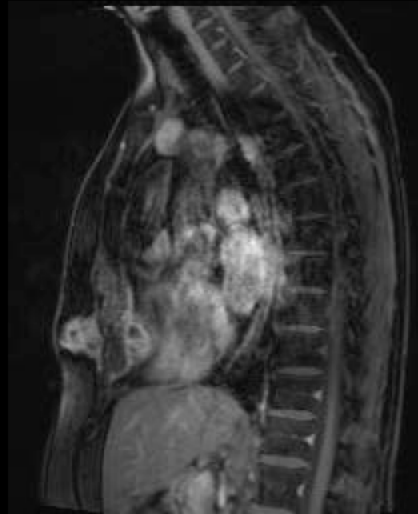




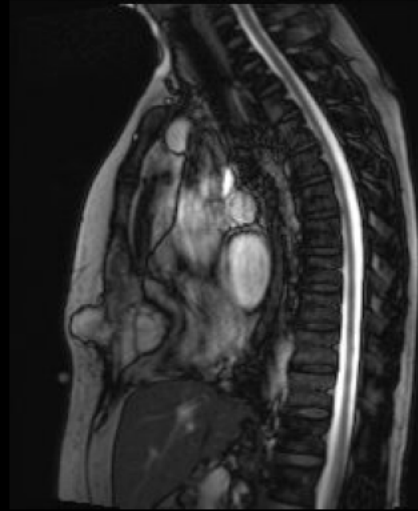
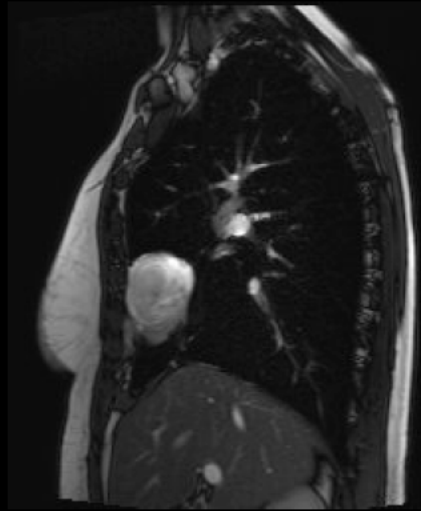
Sagittal GRE



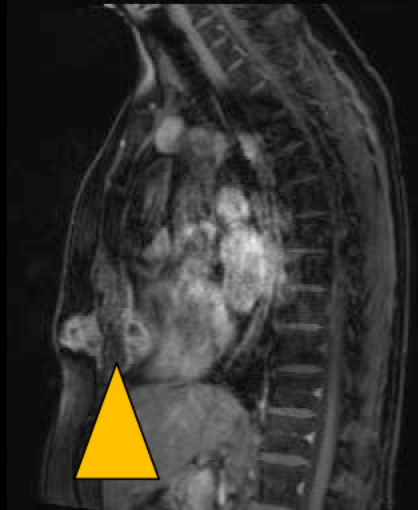
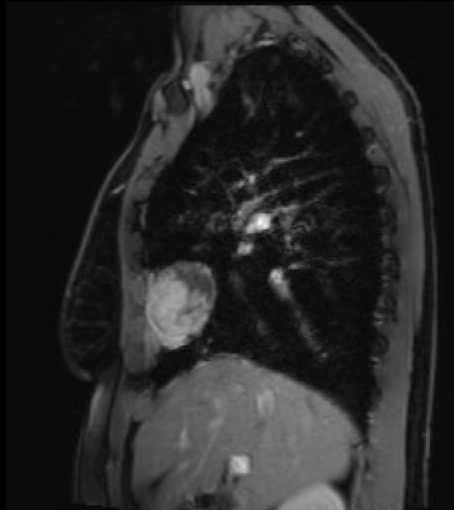
Sagittal T1 +C



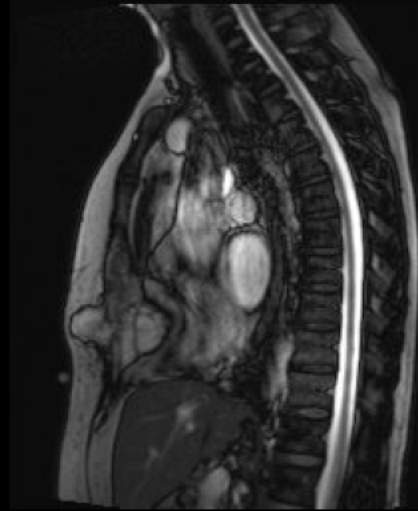
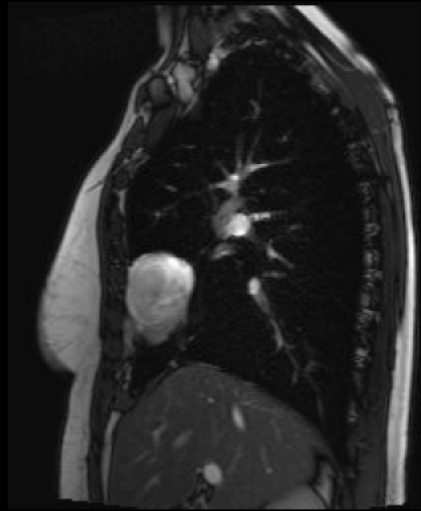
Sagittal GRE



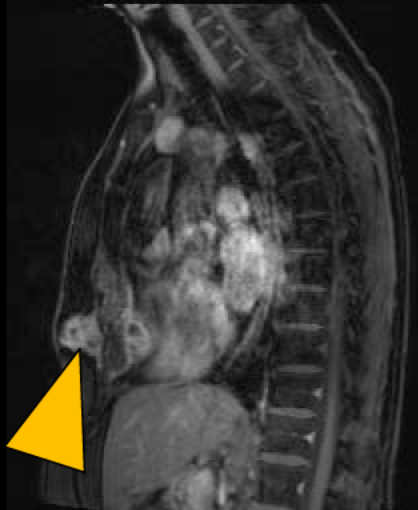
Sagittal T1 +C



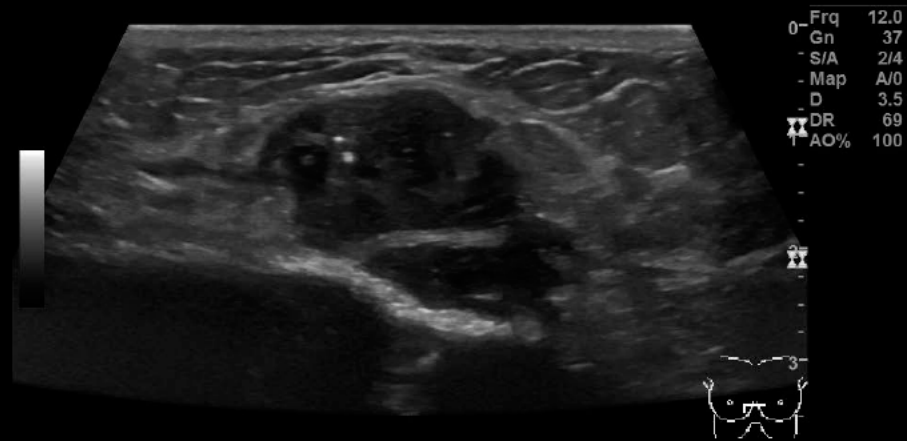
Sagittal GRE



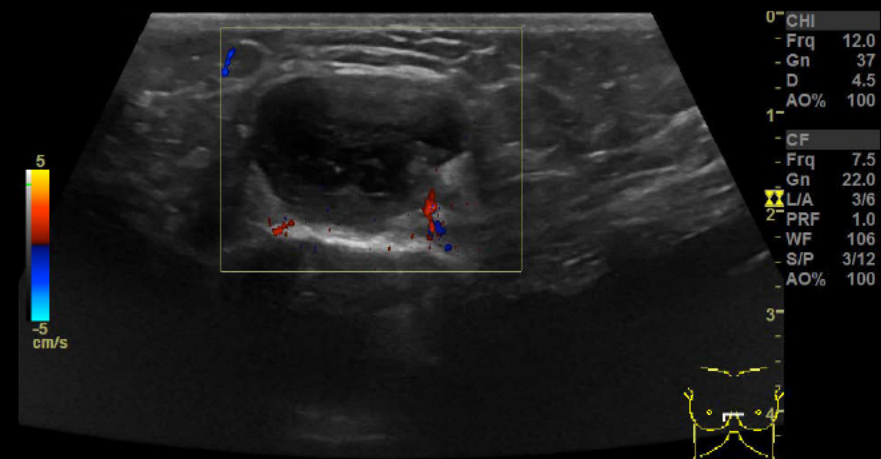
Sagittal T1 +C



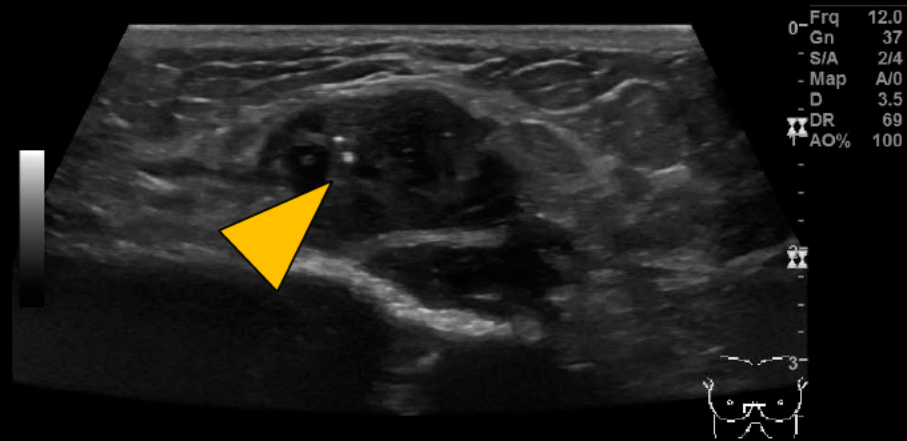
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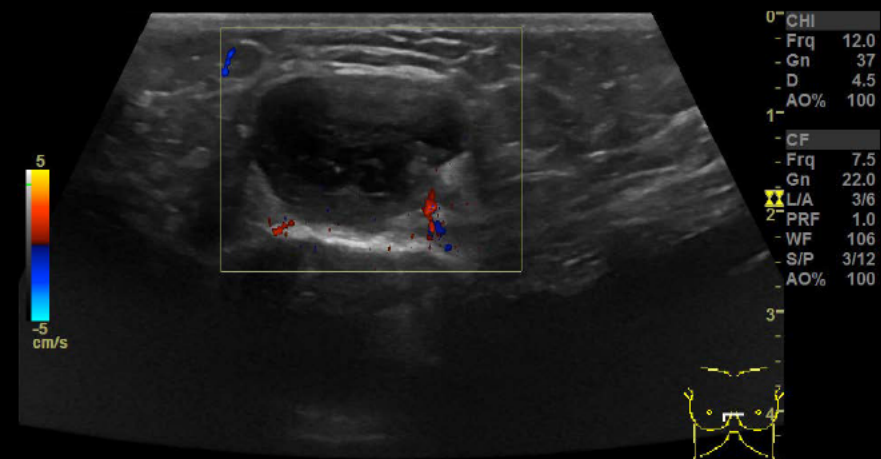
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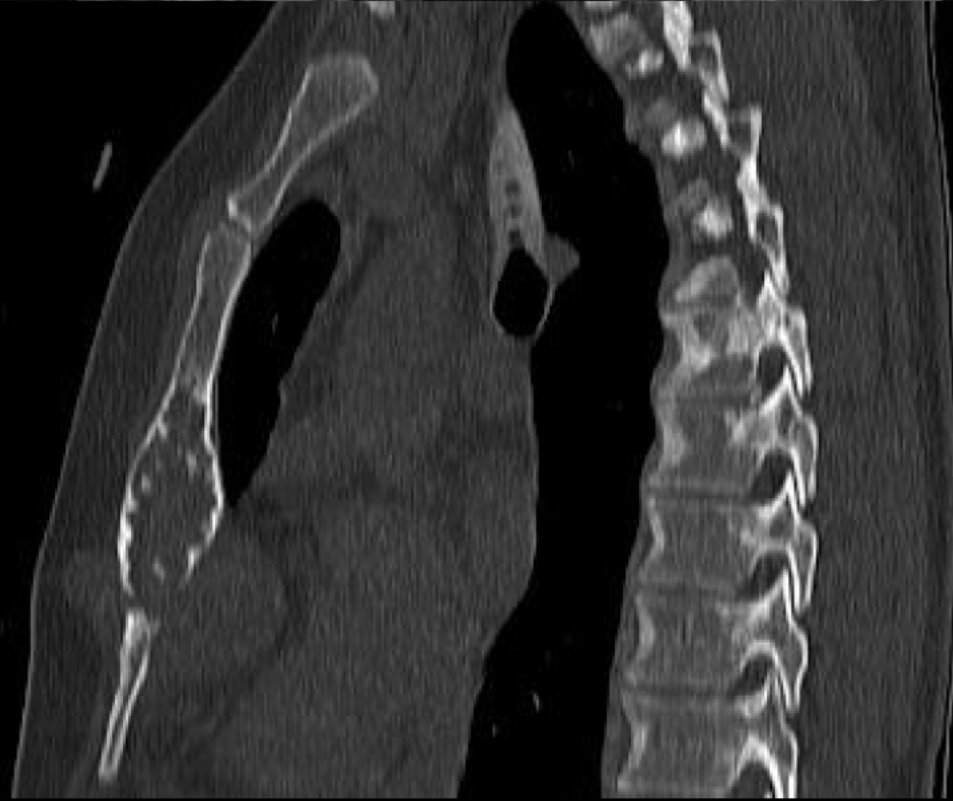
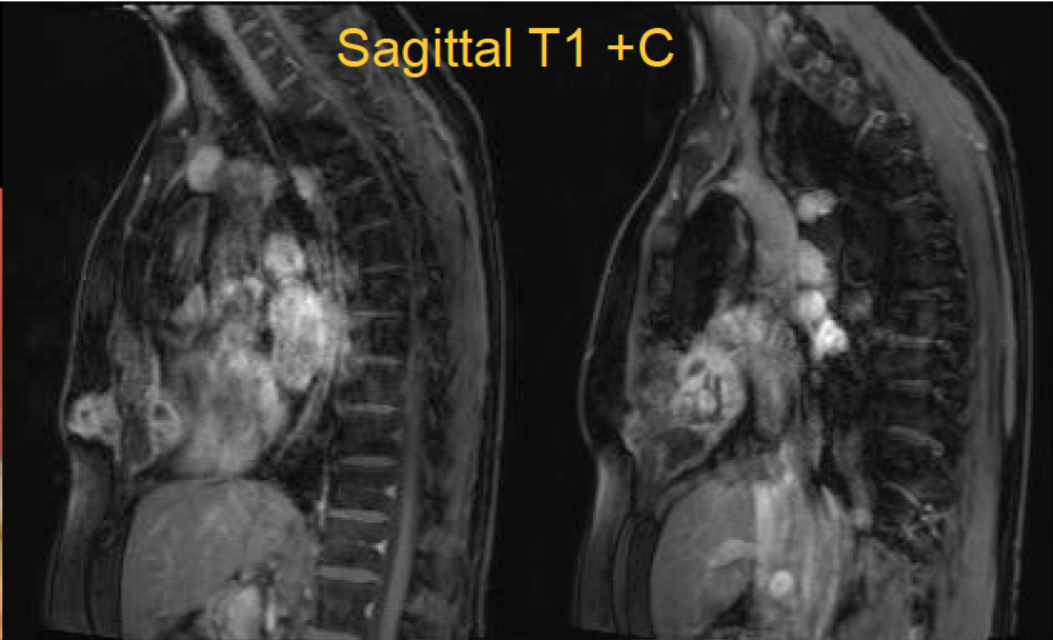
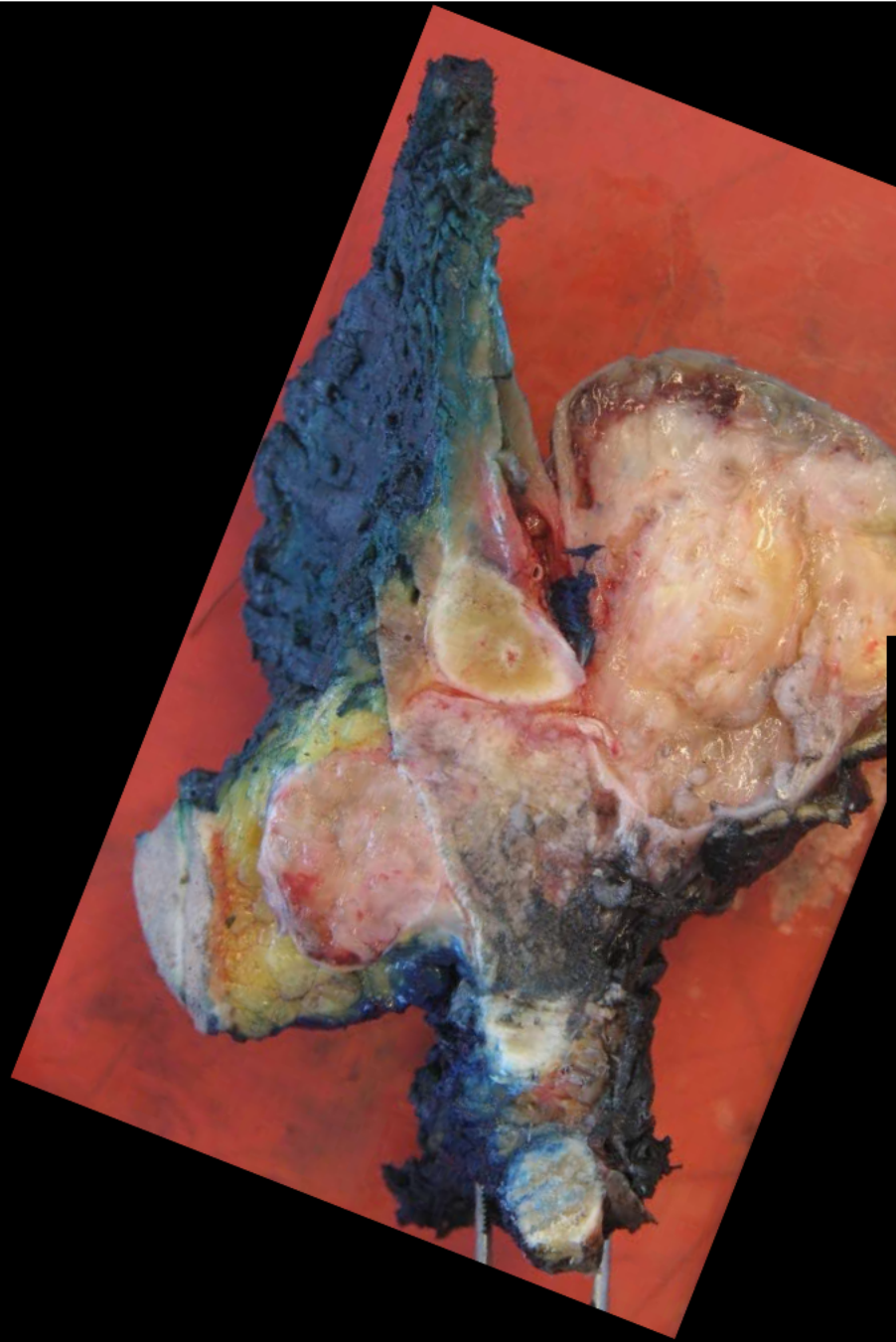
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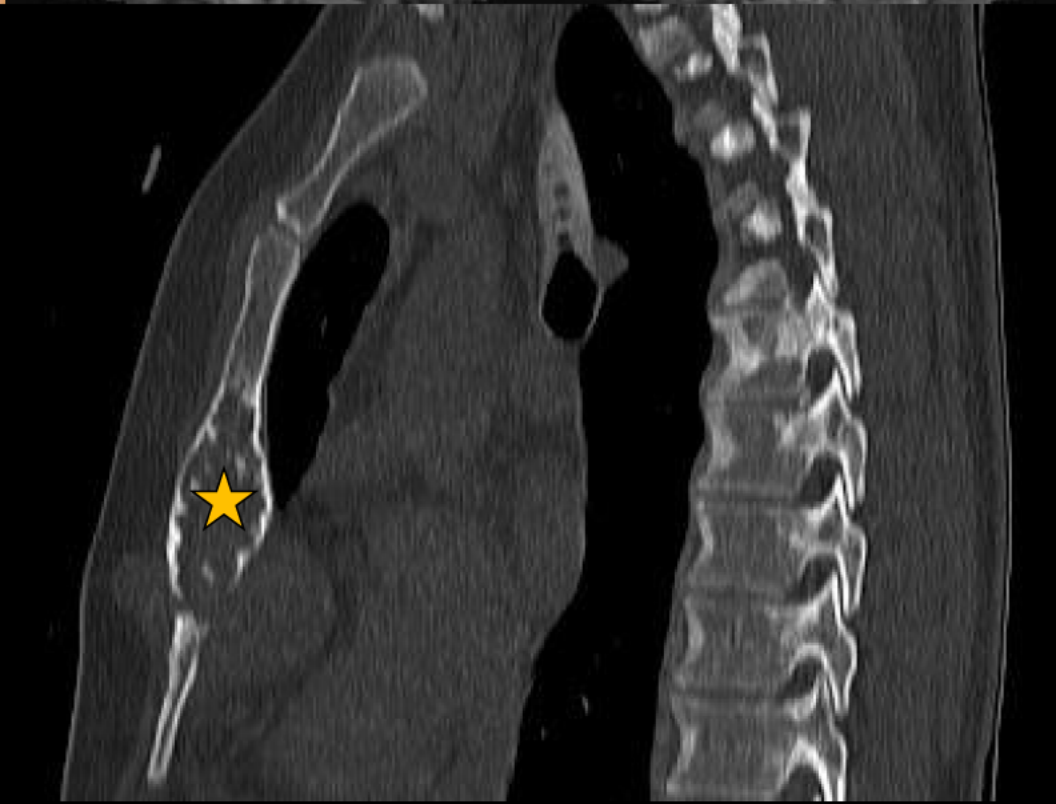
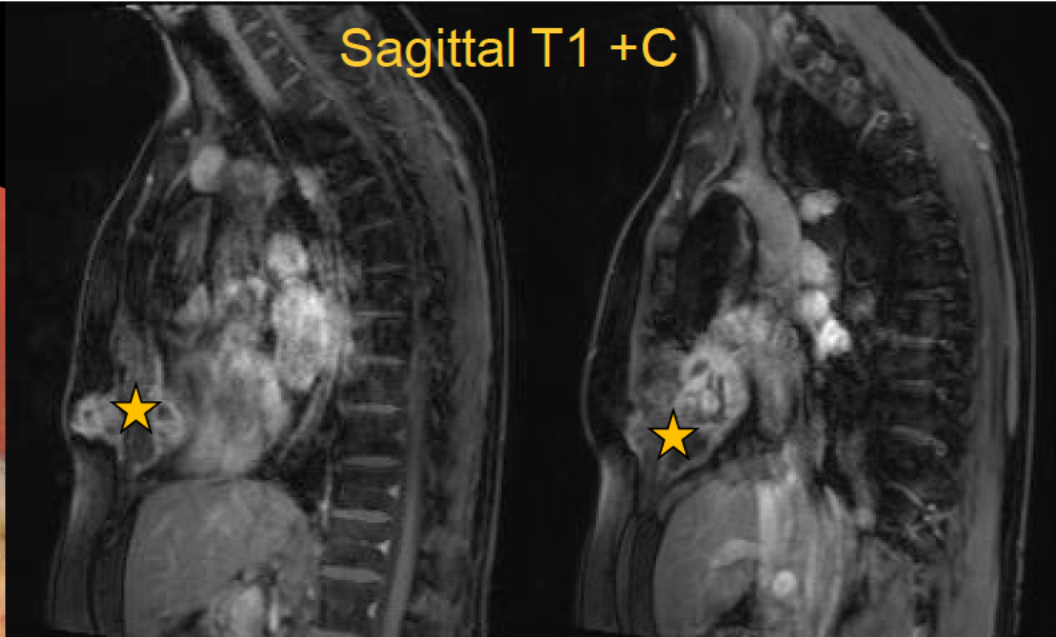
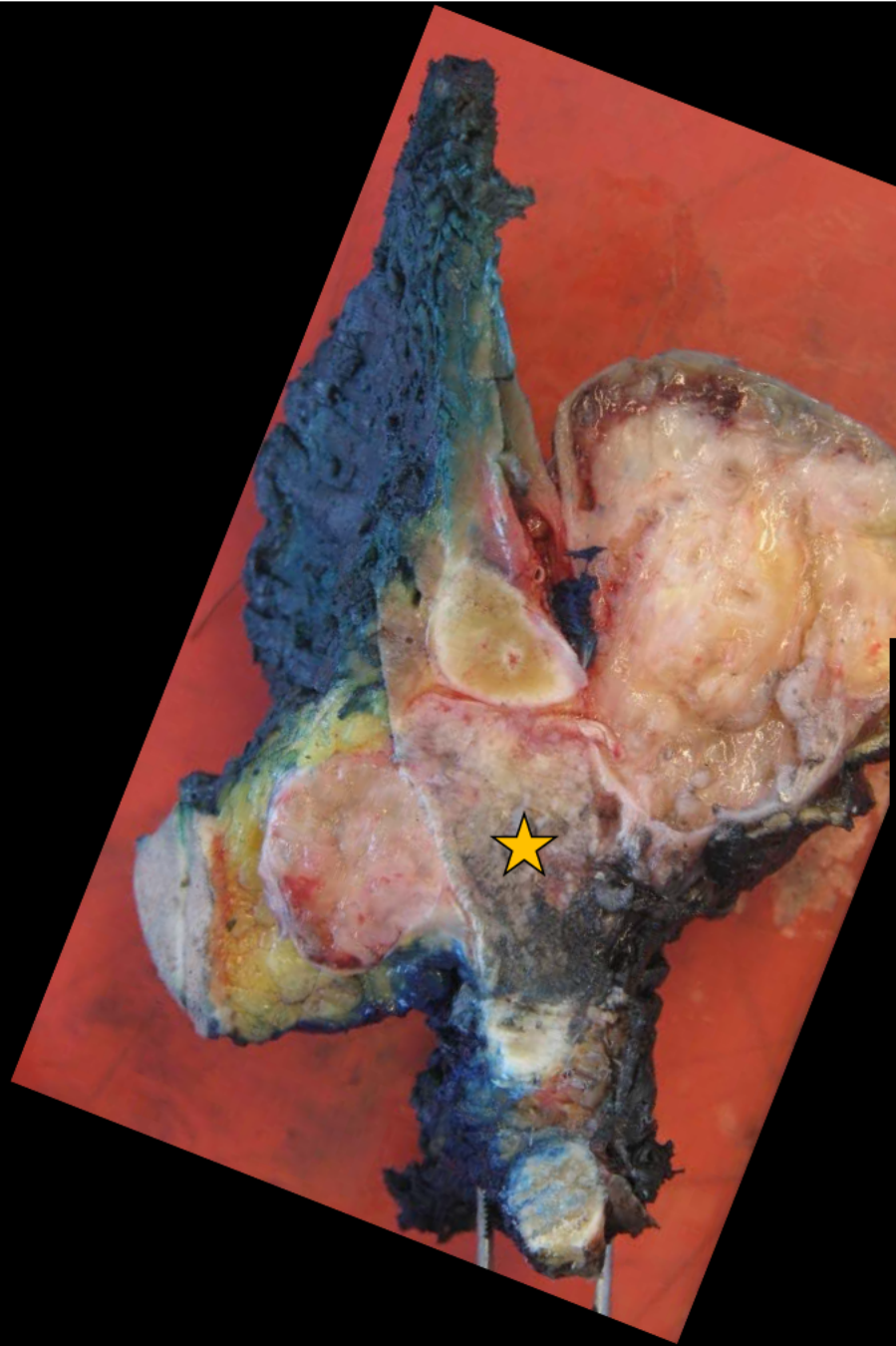


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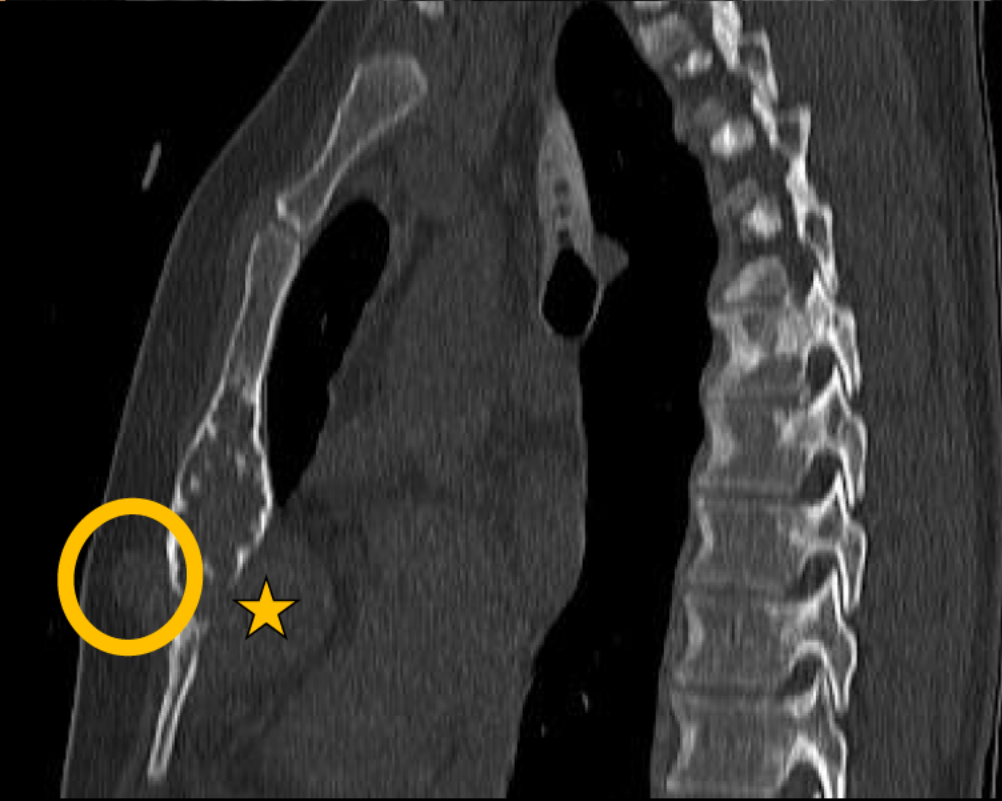
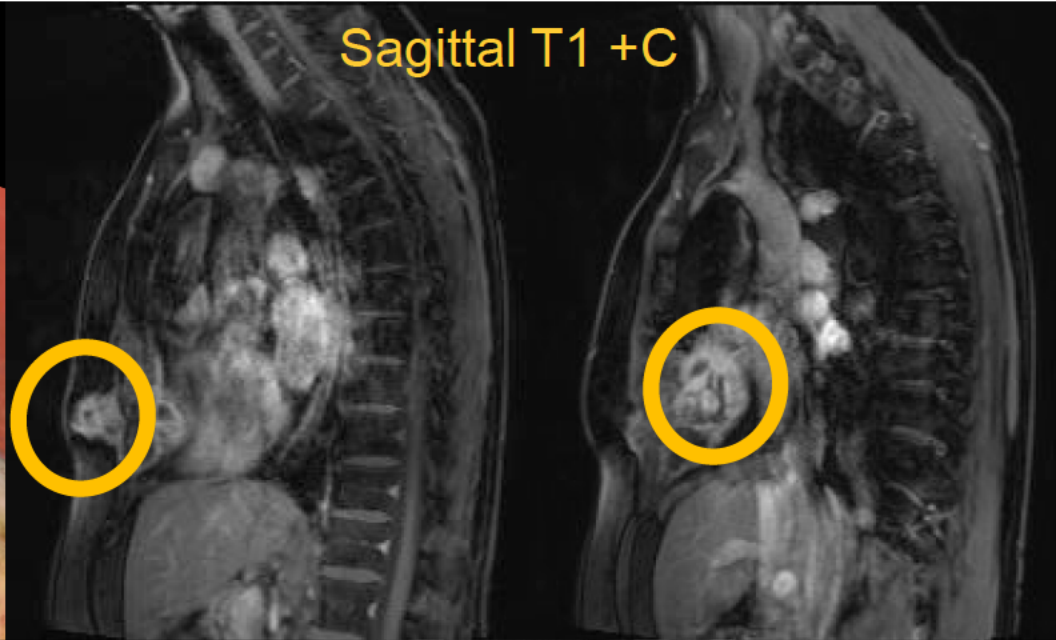
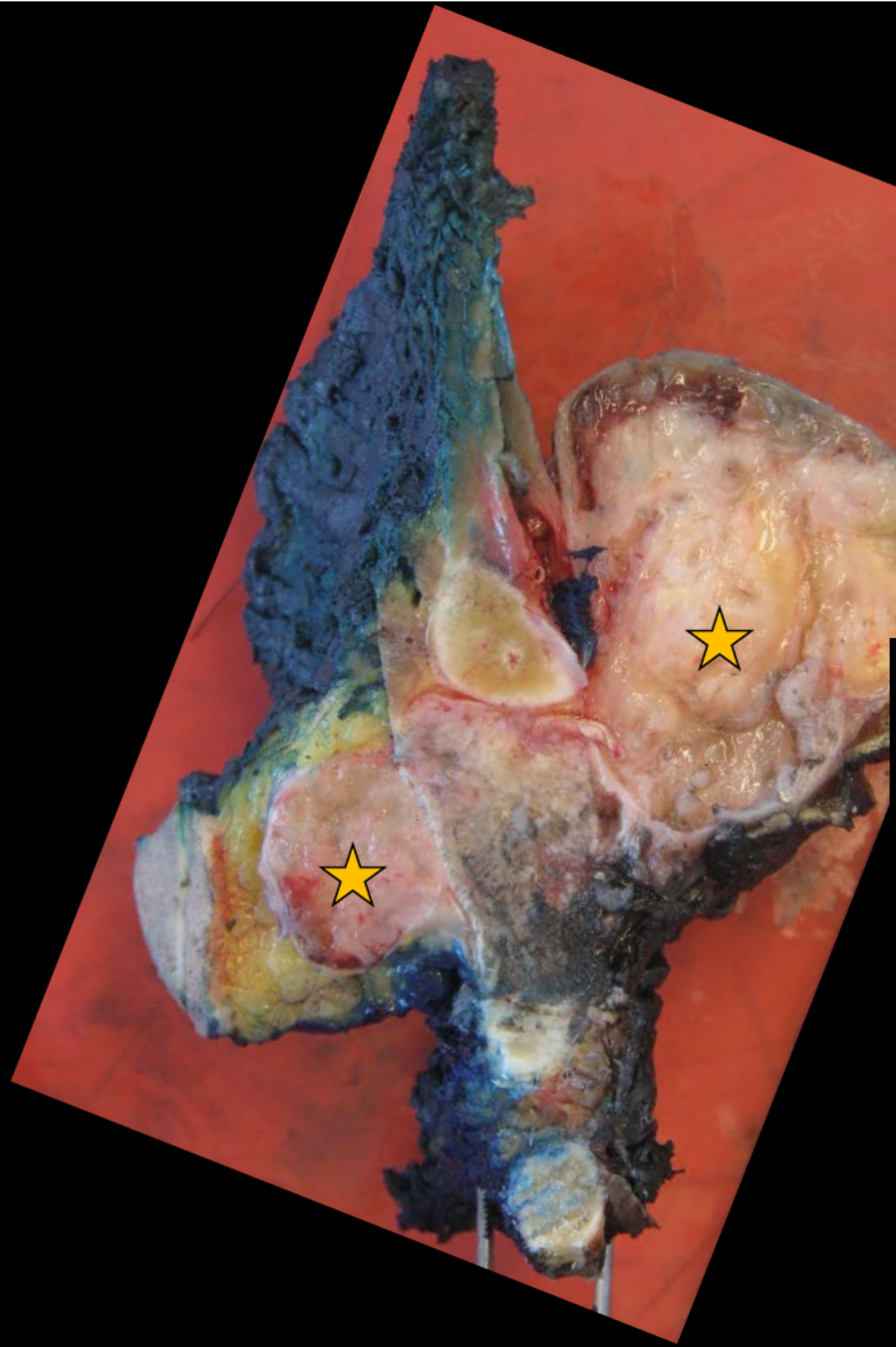




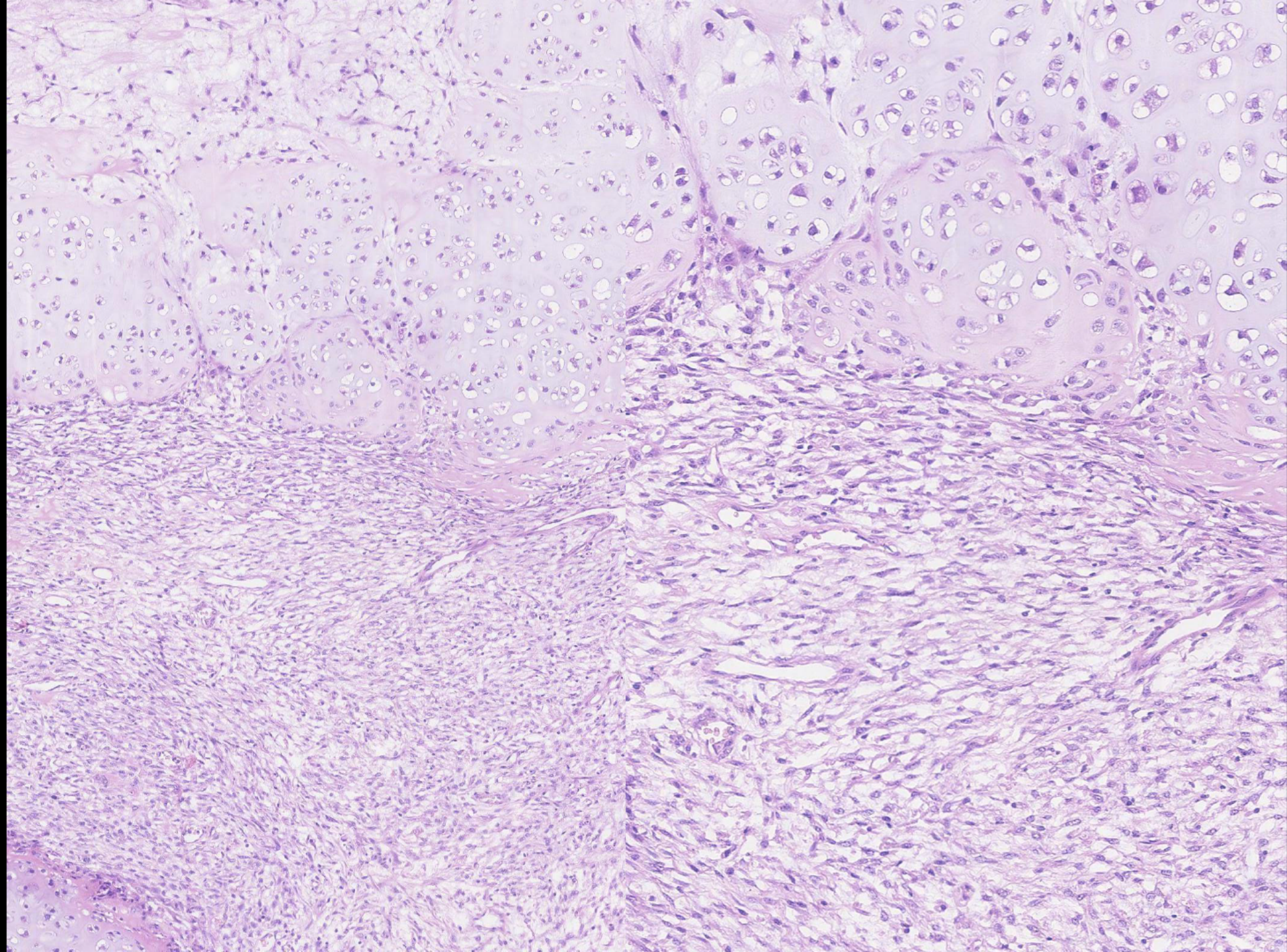




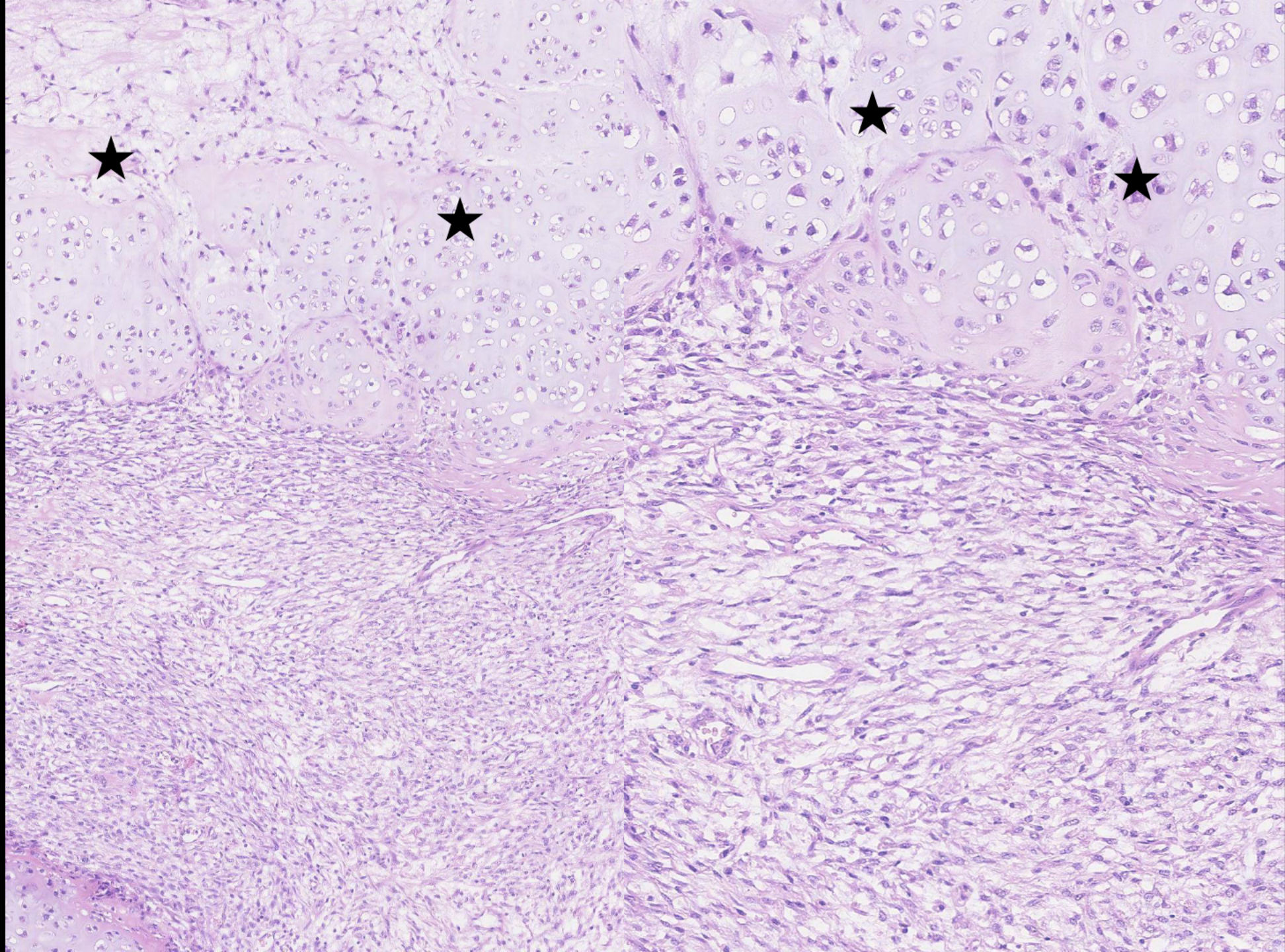




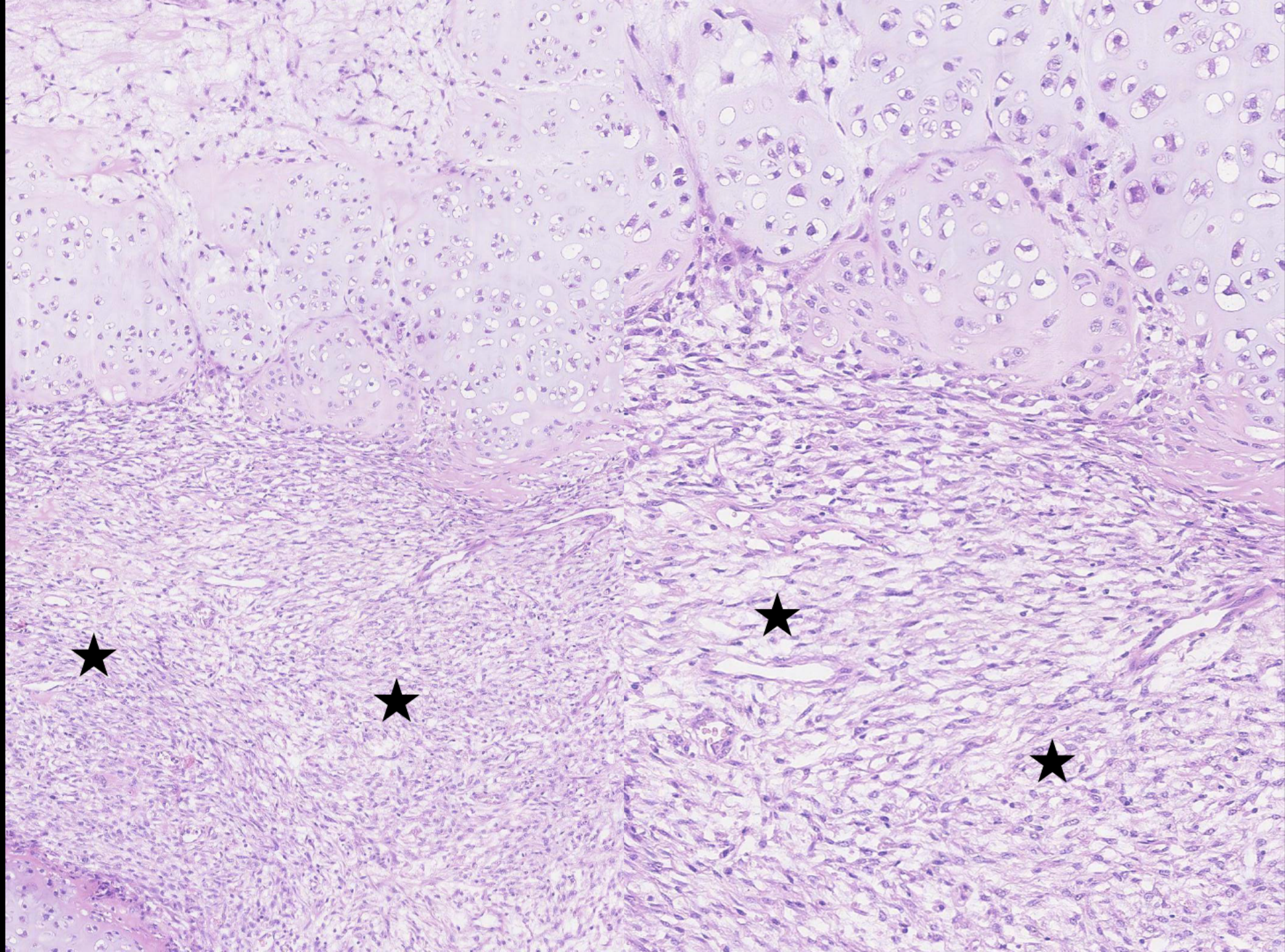














# DEDIFFERENTIATED CHONDROSARCOMA

**Dr. Anna-Maria Eurich**  
**Institut für Radiologie**  
**Aargau, Switzerland**

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# Honorable Mention

## MSK

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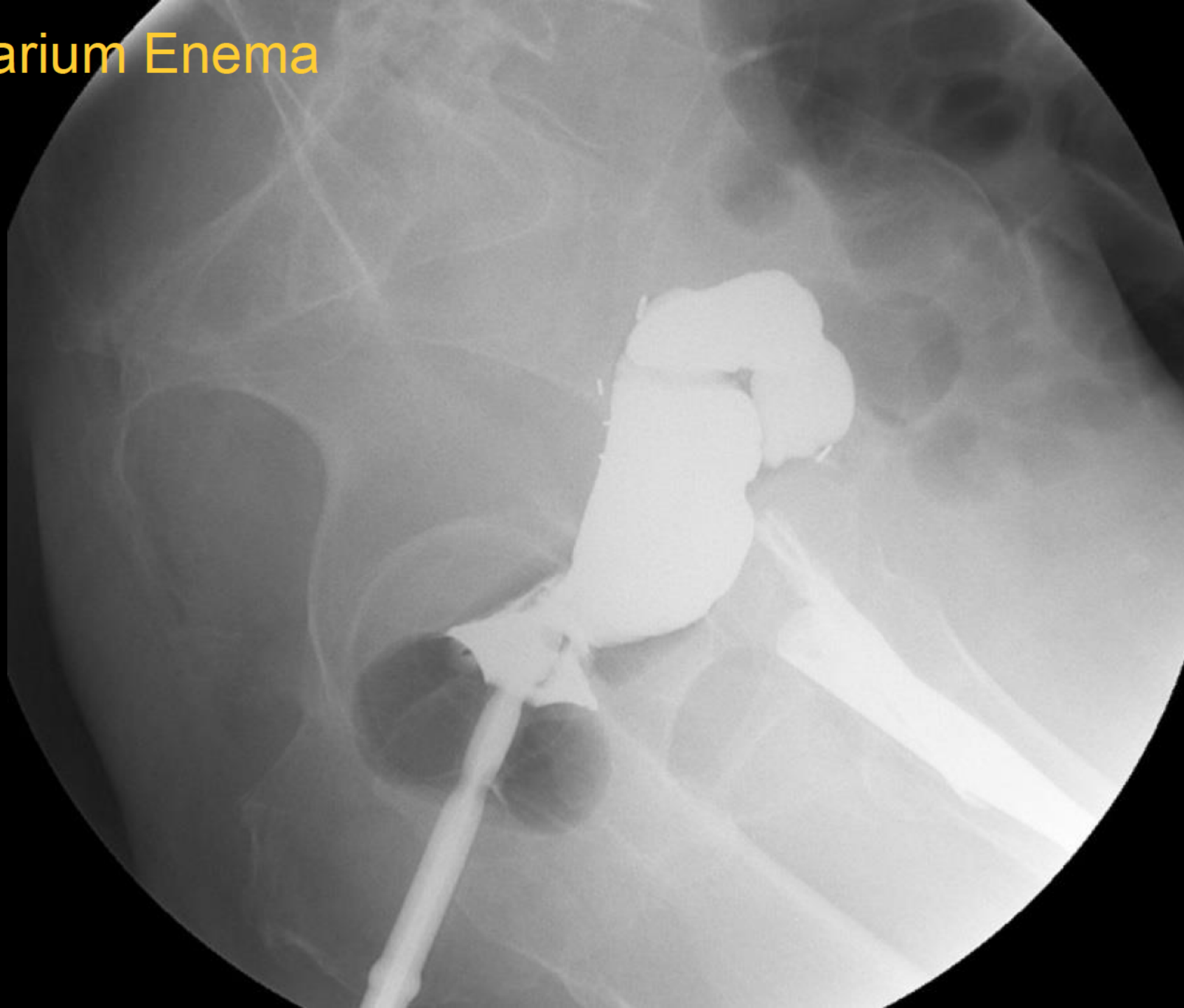
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# Clinical Information

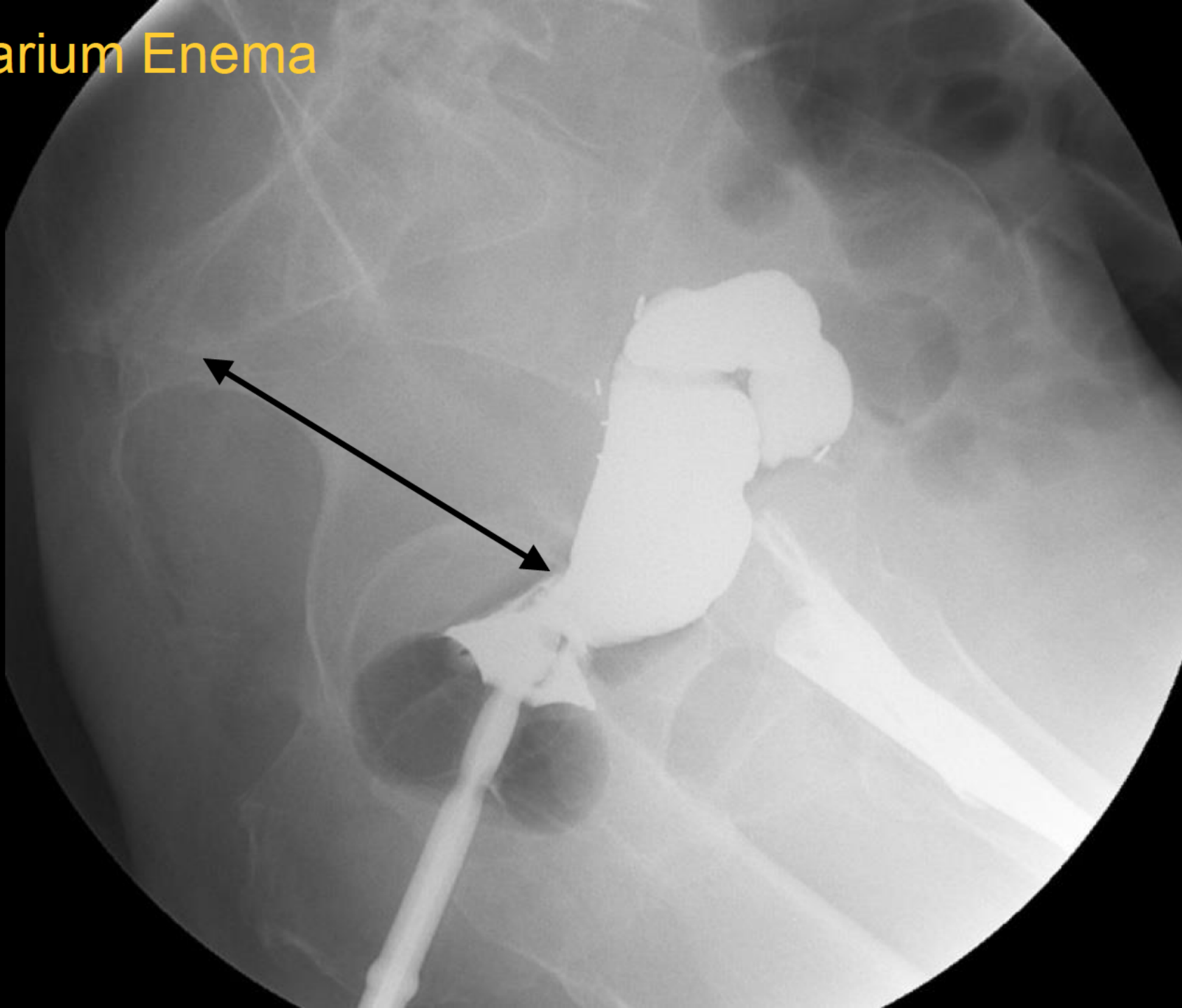
**71 year old female hospitalized for congestive heart failure and atrial fibrillation.**

**Incidentally, she complained of worsening constipation which raised clinical concern for a bowel obstruction.**

# Barium Enema



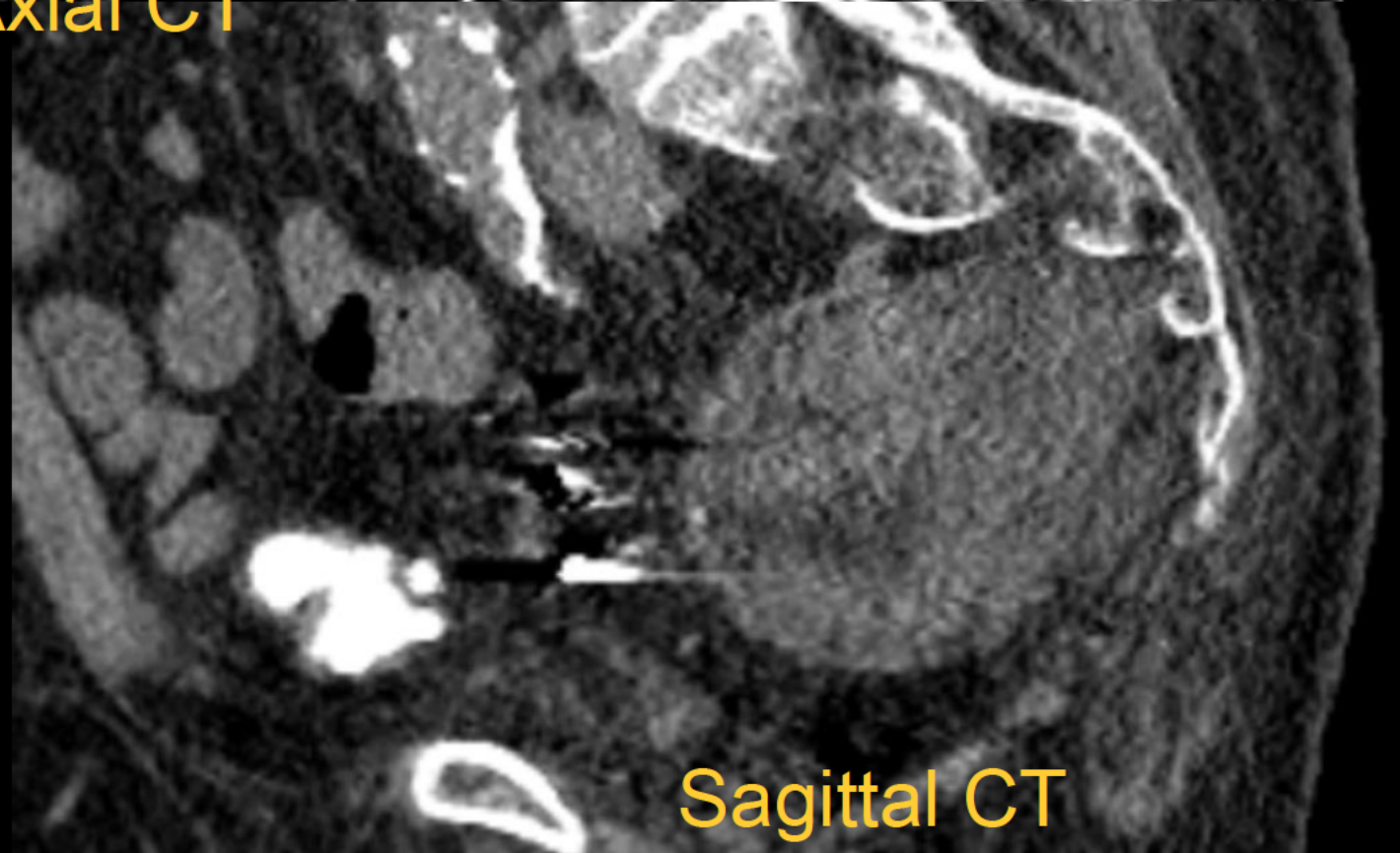
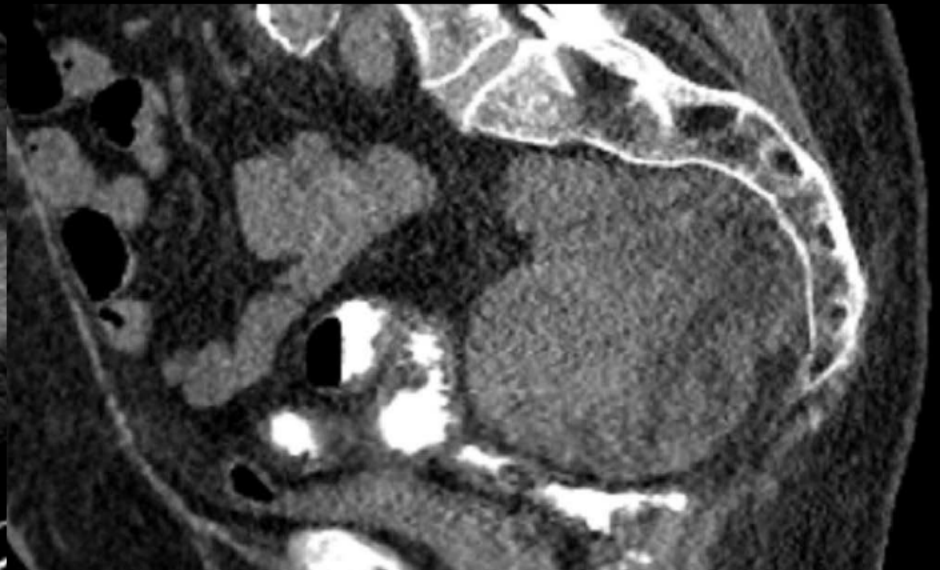
# Barium Enema







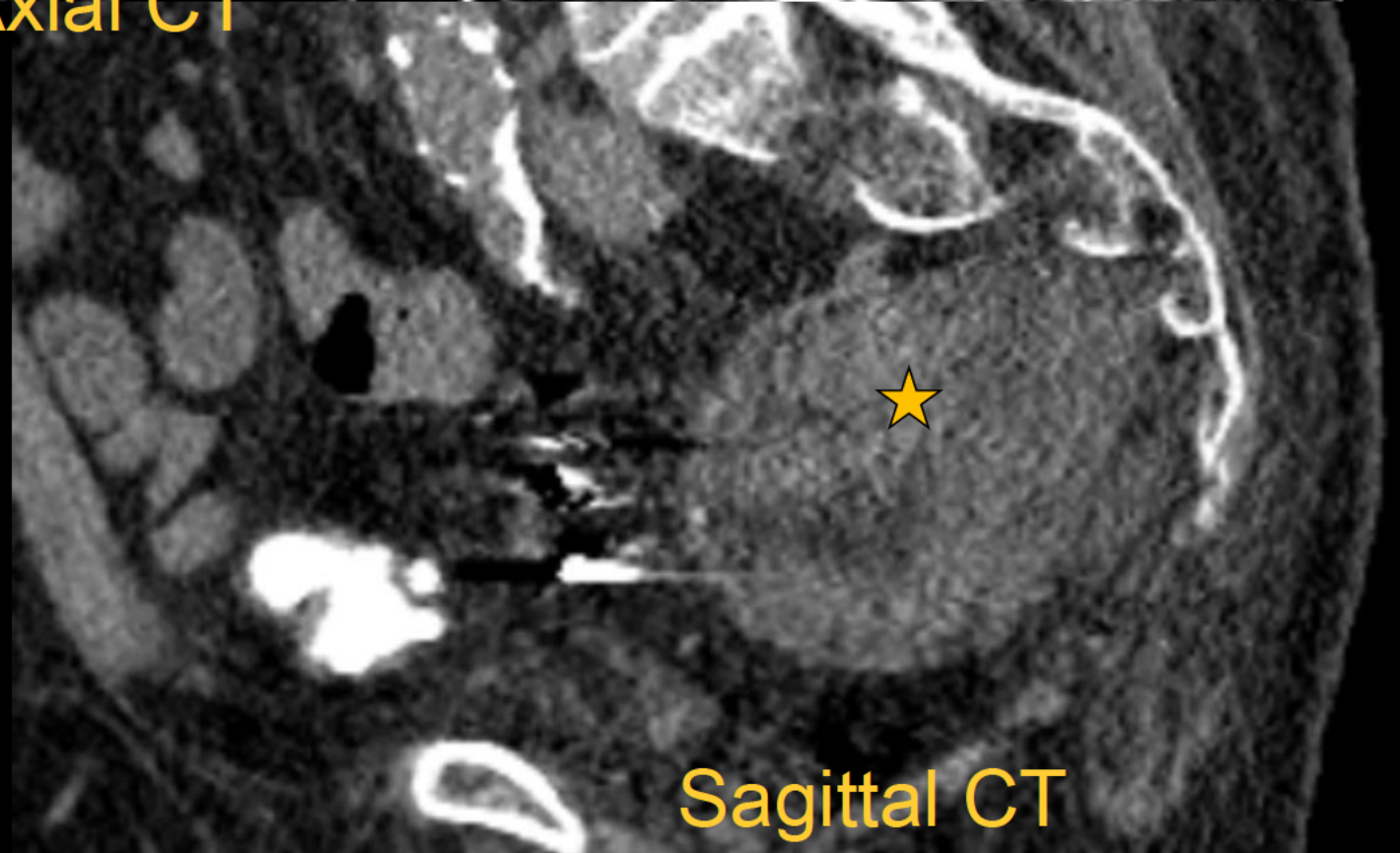
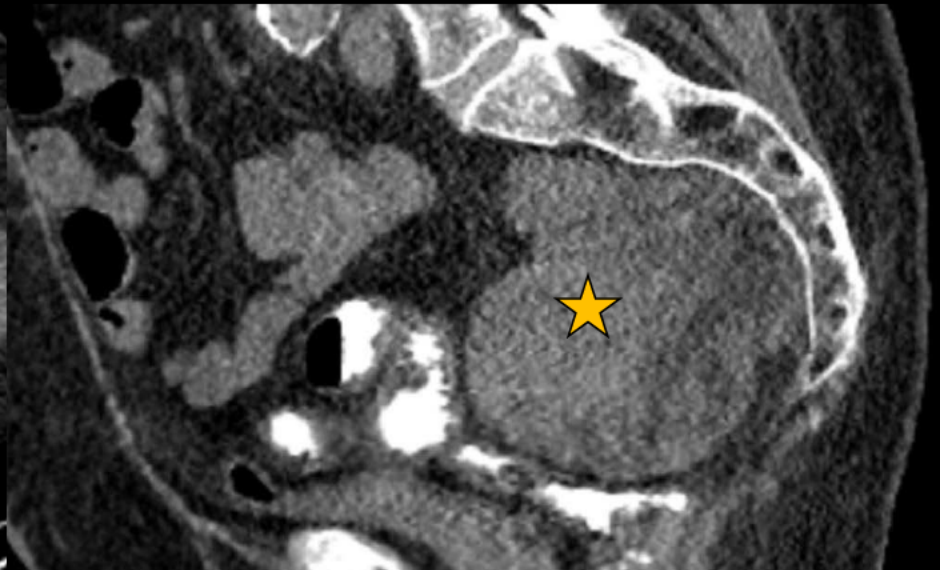
Noncontrast Axial CT



Sagittal CT



Noncontrast Axial CT



Sagittal CT





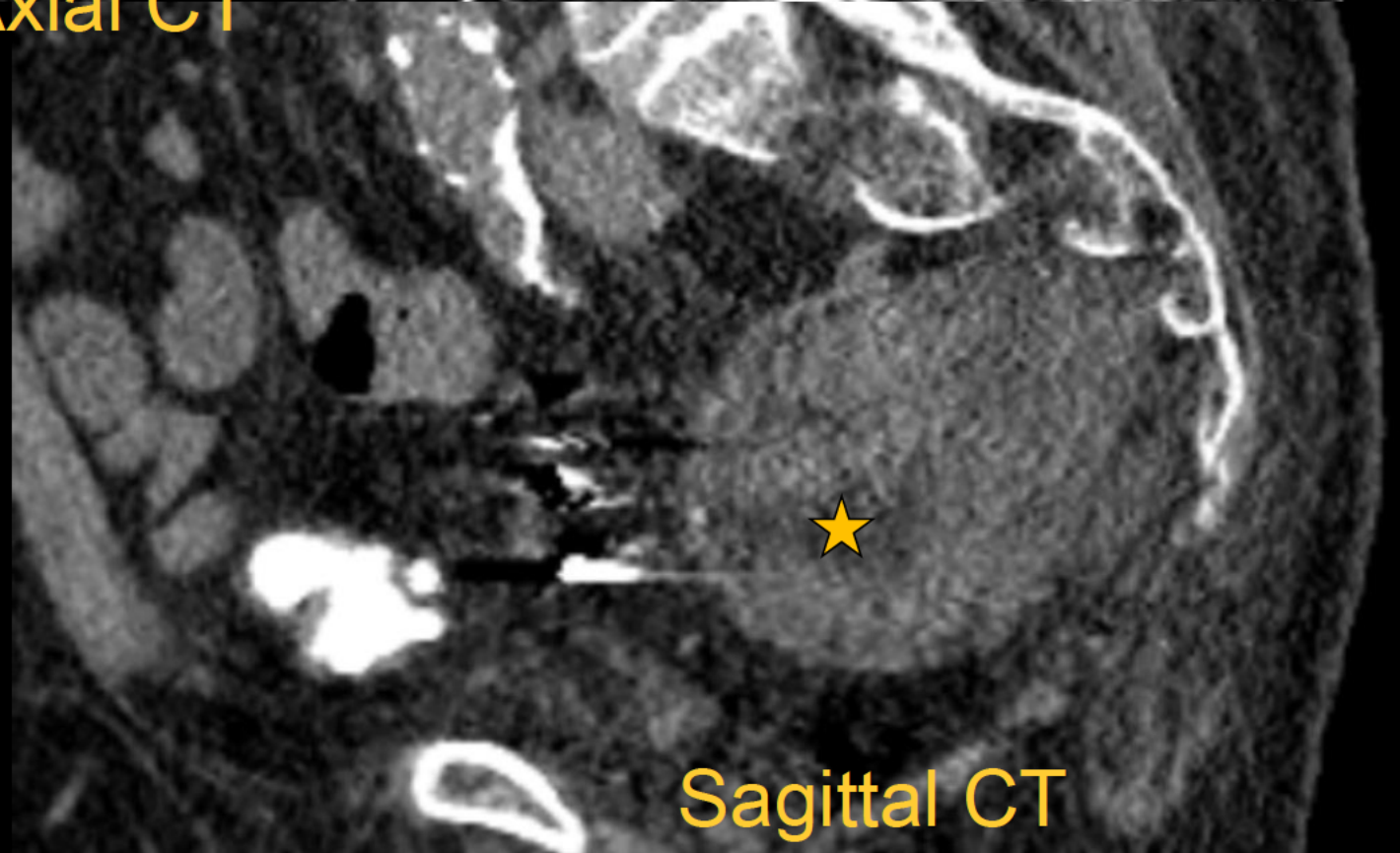
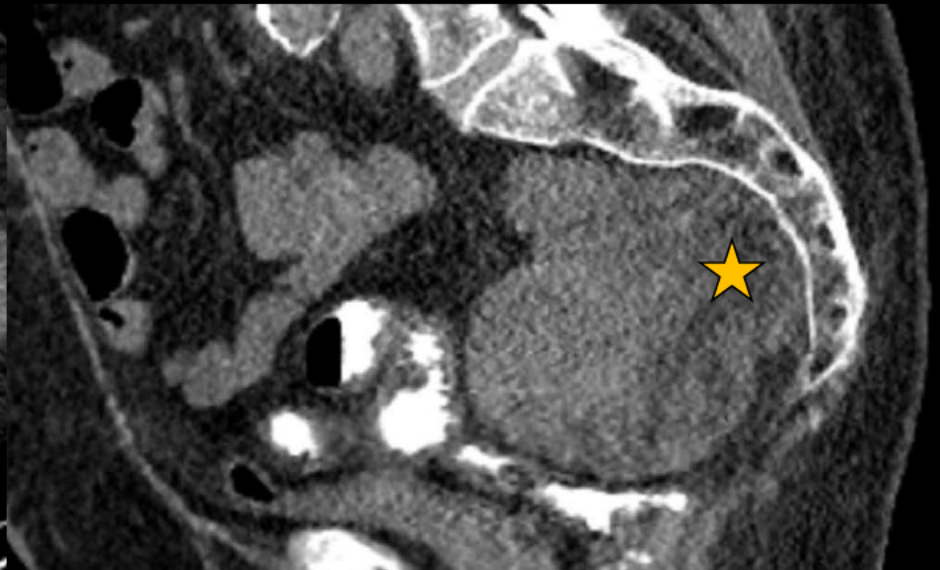
Noncontrast Axial CT



Sagittal CT



Noncontrast Axial CT



Sagittal CT







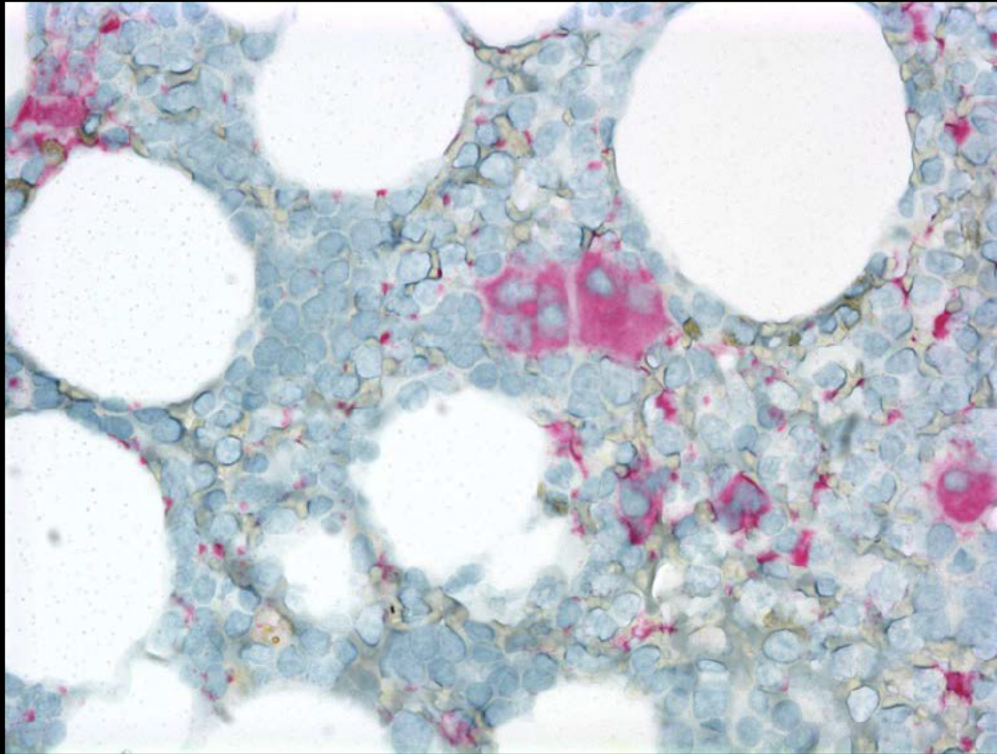




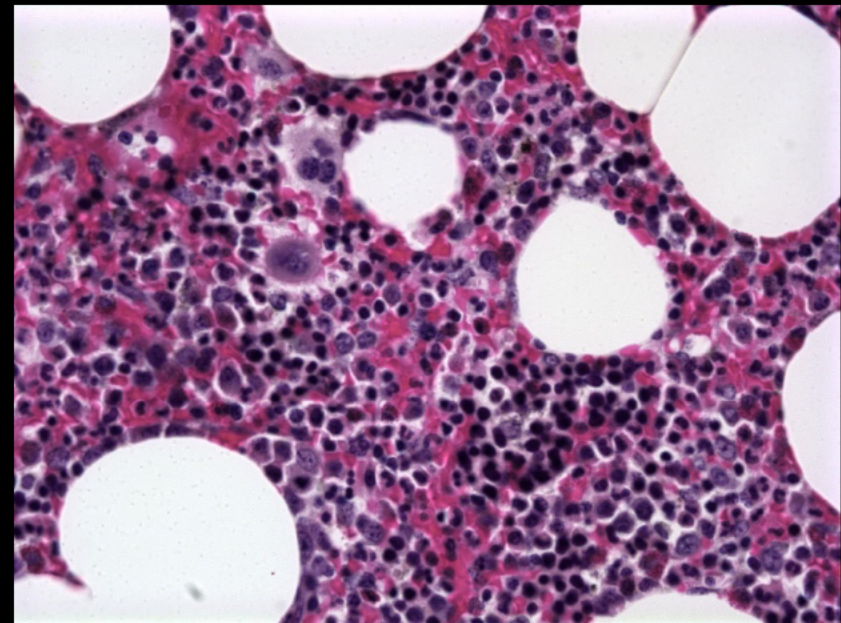
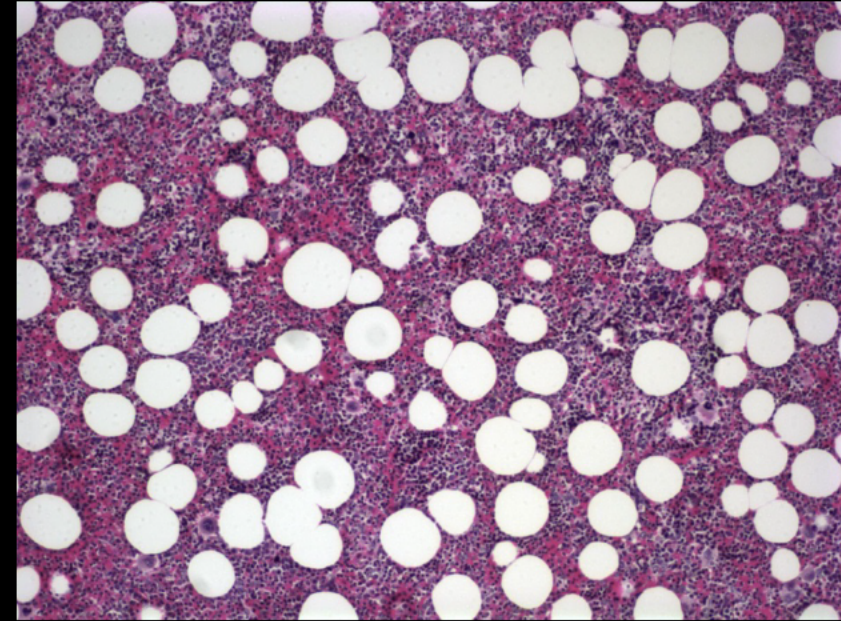




CD61 stain

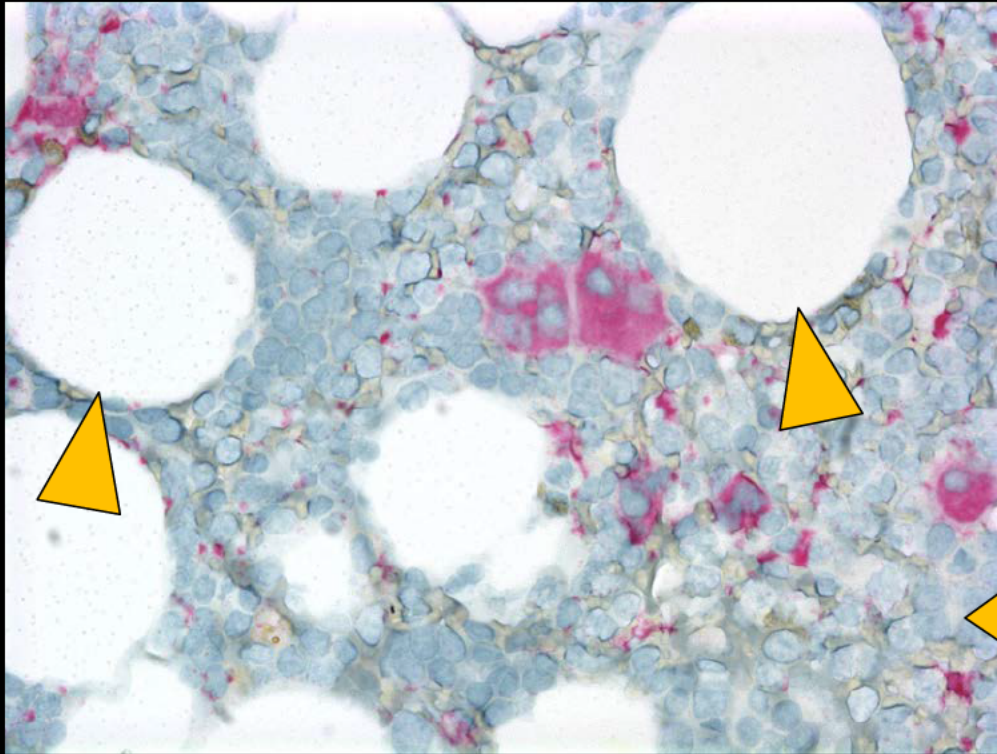


H & E stain

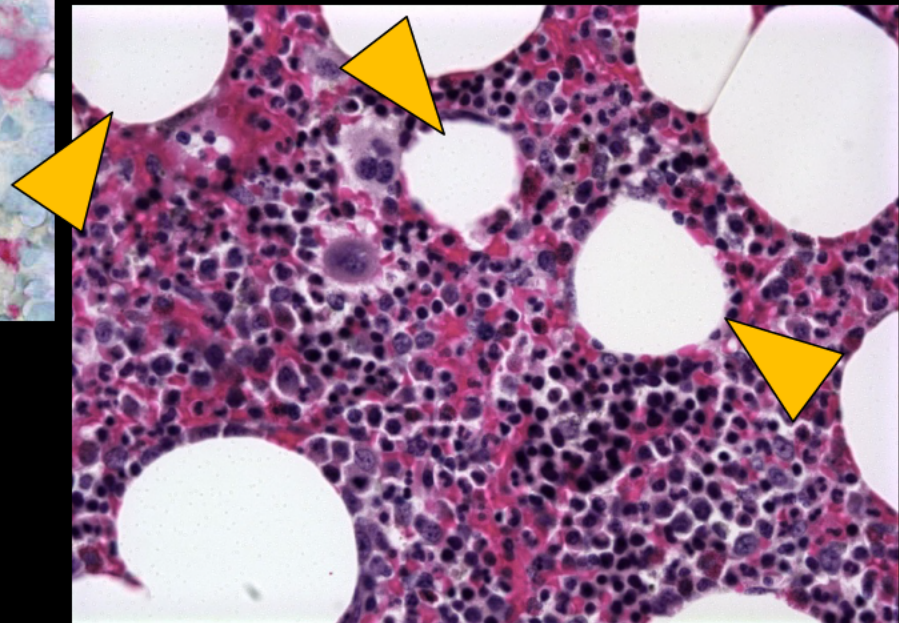
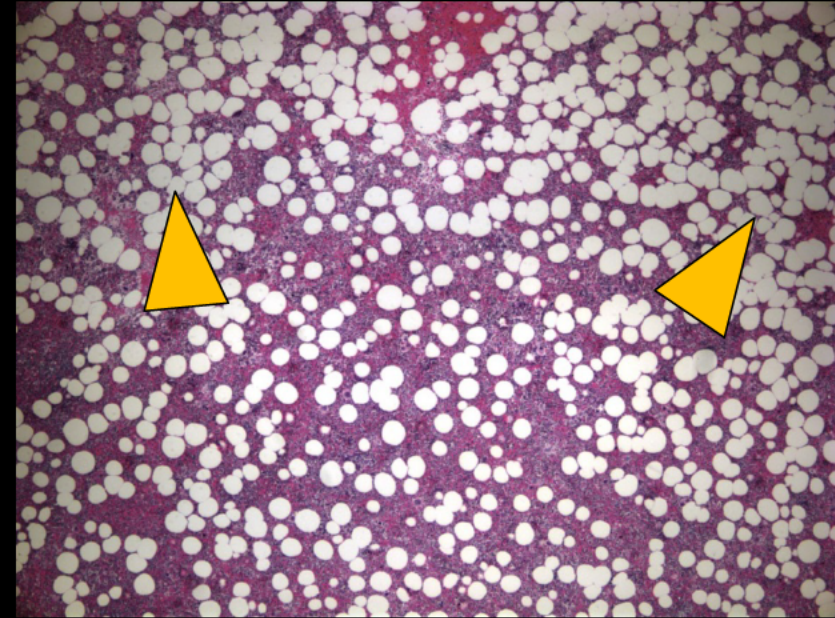




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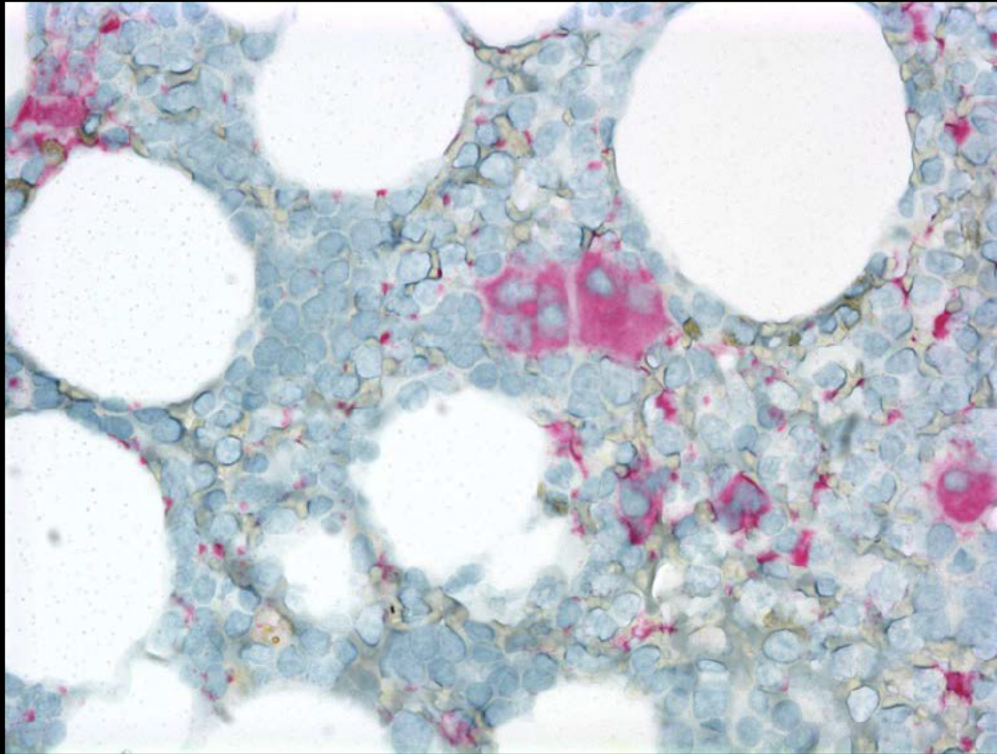


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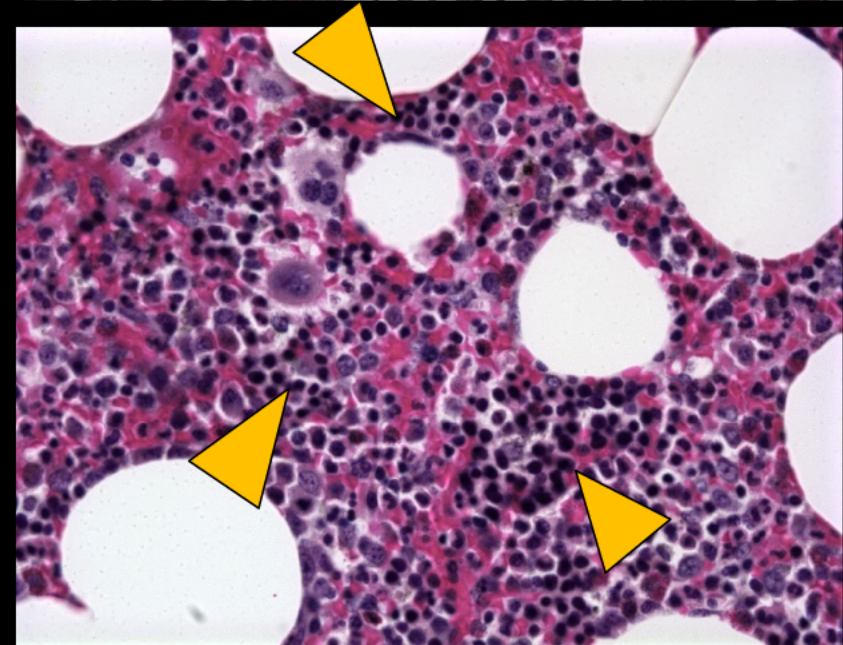
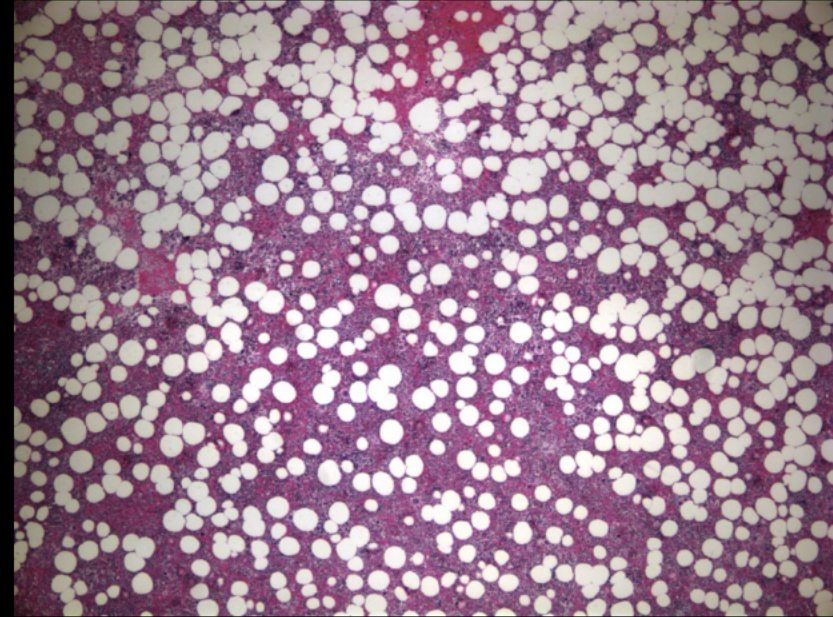




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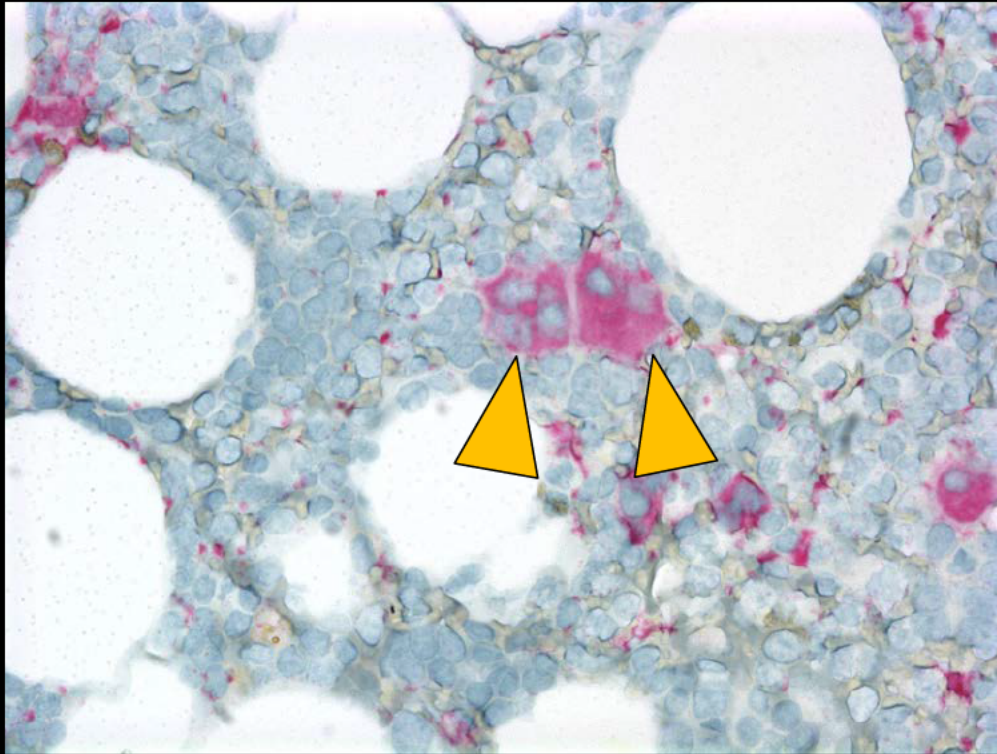


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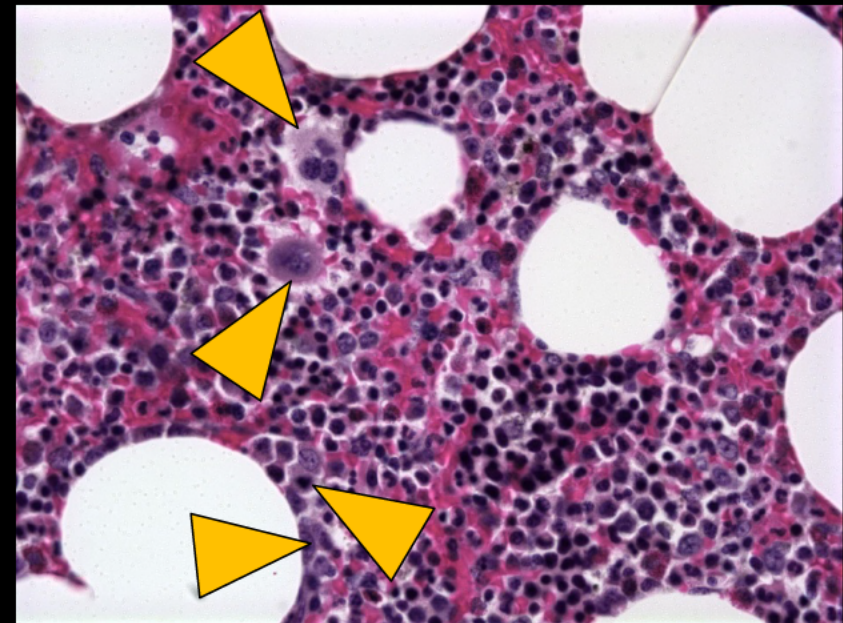
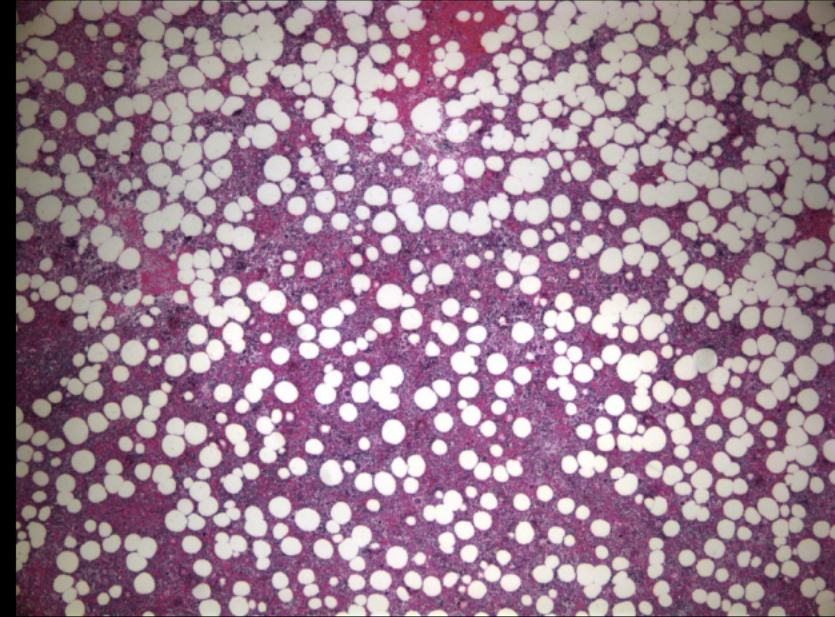




CD61 stain



H & E stain



# PRESACRAL MYELOLIPOMA

Dr. Jeremy Jones  
University of Kansas  
Wichita, Kansas

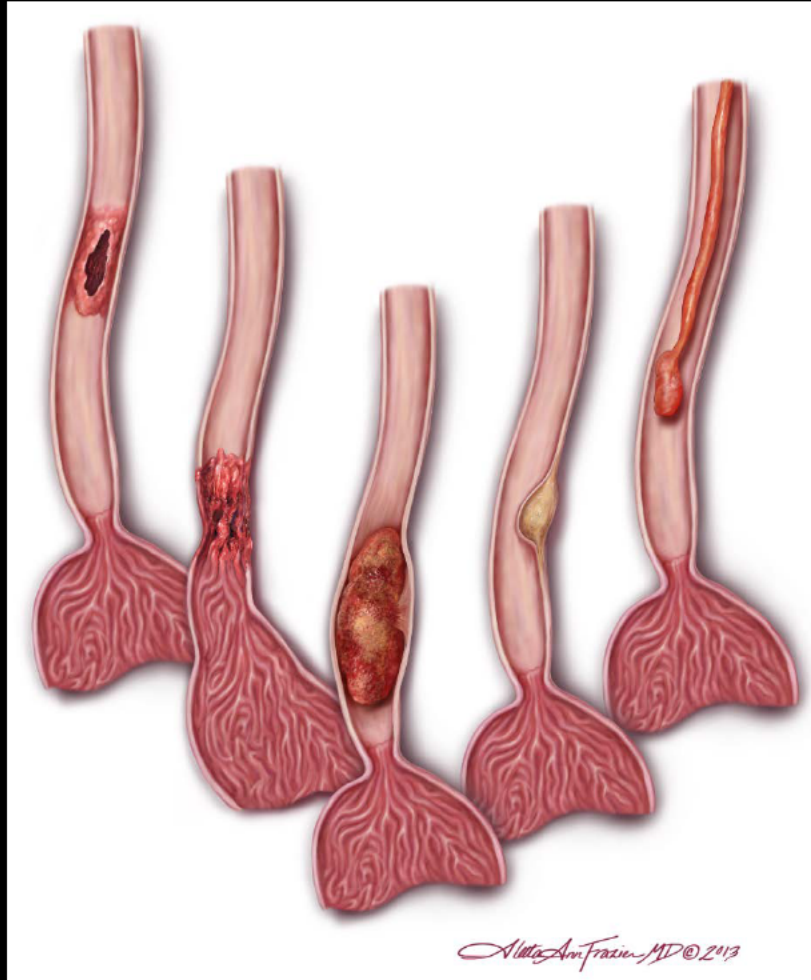


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# Gastrointestinal Best Case



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# Clinical information

**18-year-old woman with intermittent right lower quadrant pain associated with non-bloody diarrhea for one day. She reported intermittent bloody diarrhea for the prior 6 months, with negative sigmoidoscopy, attributed to hemorrhoids.**



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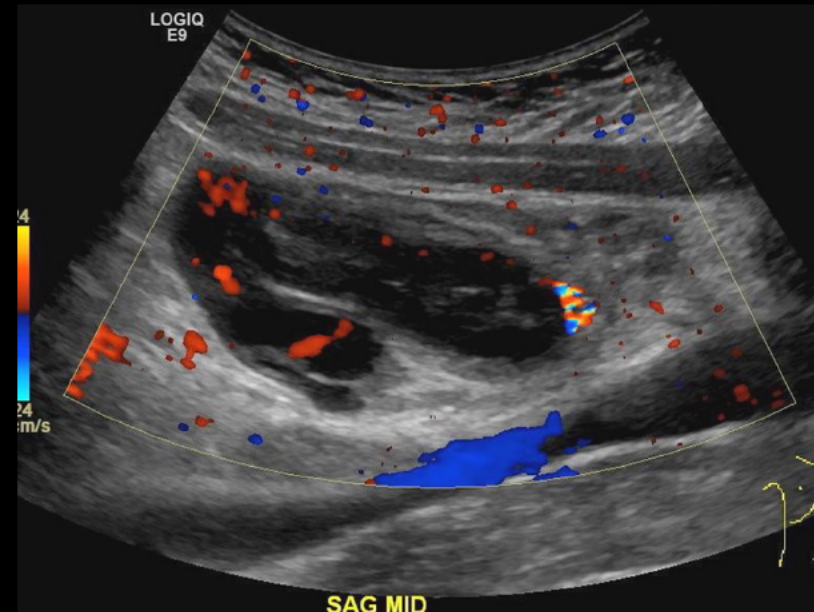
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SAG MID R-L



TRANS MID



SAG MID

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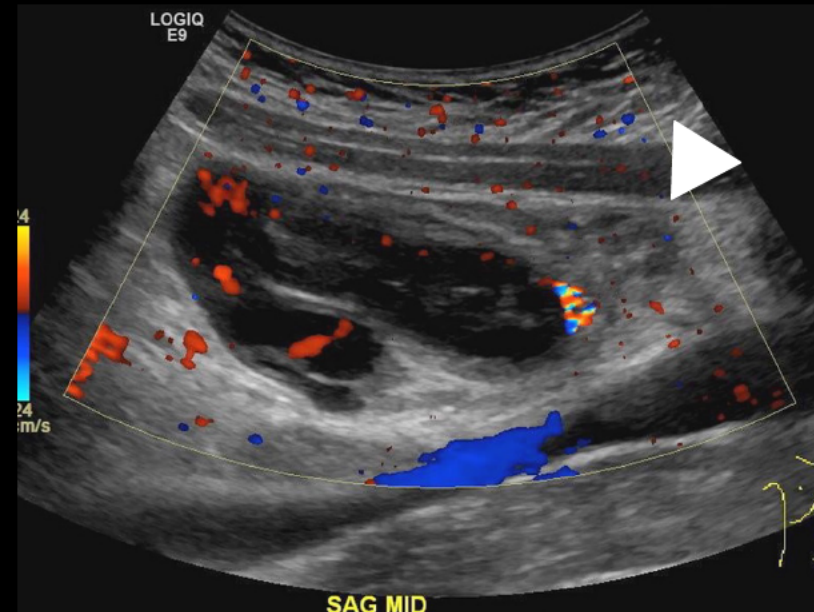




SAG MID R-L



TRANS MID

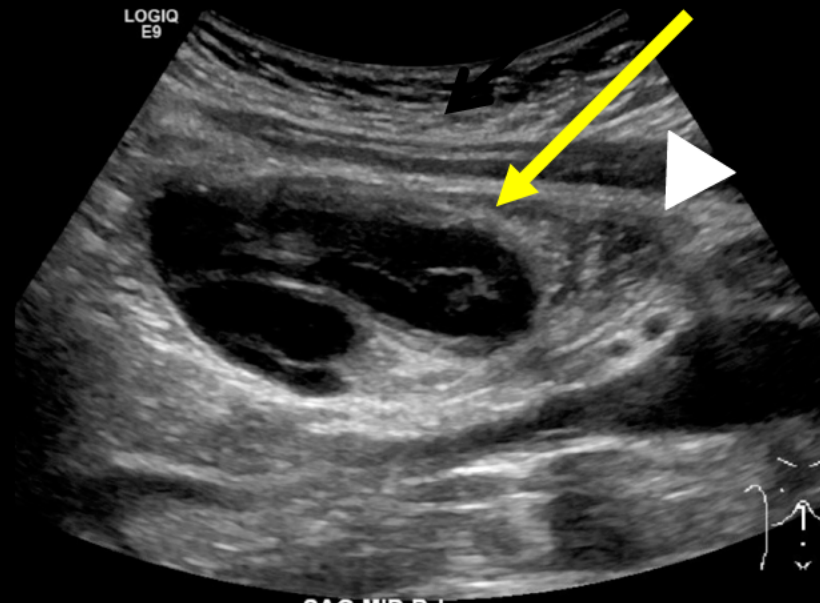


SAG MID

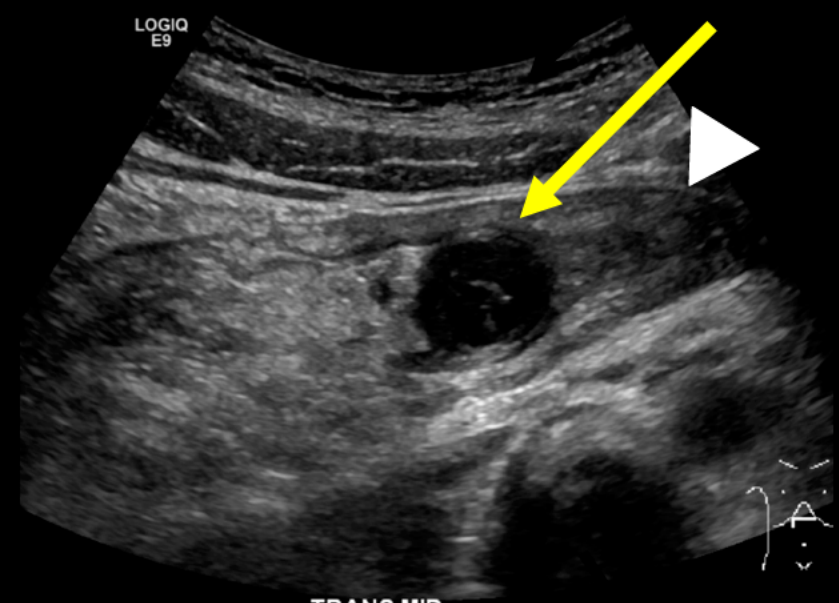
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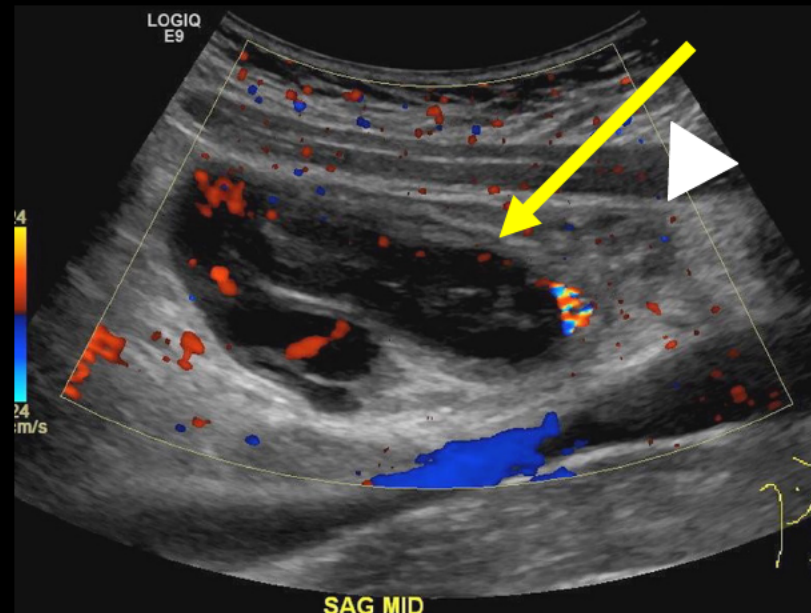
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SAG MID R-L



TRANS MID



SAG MID

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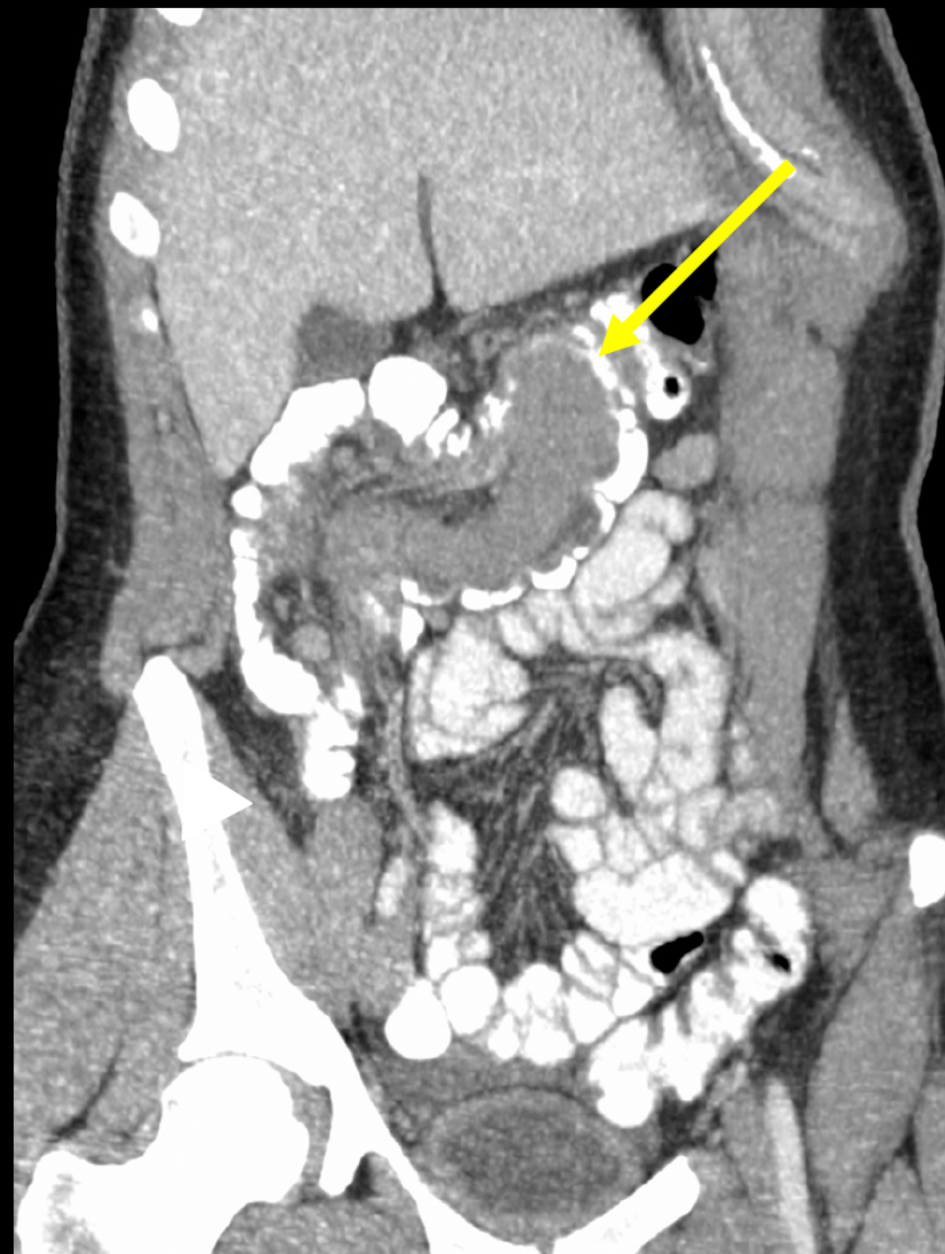
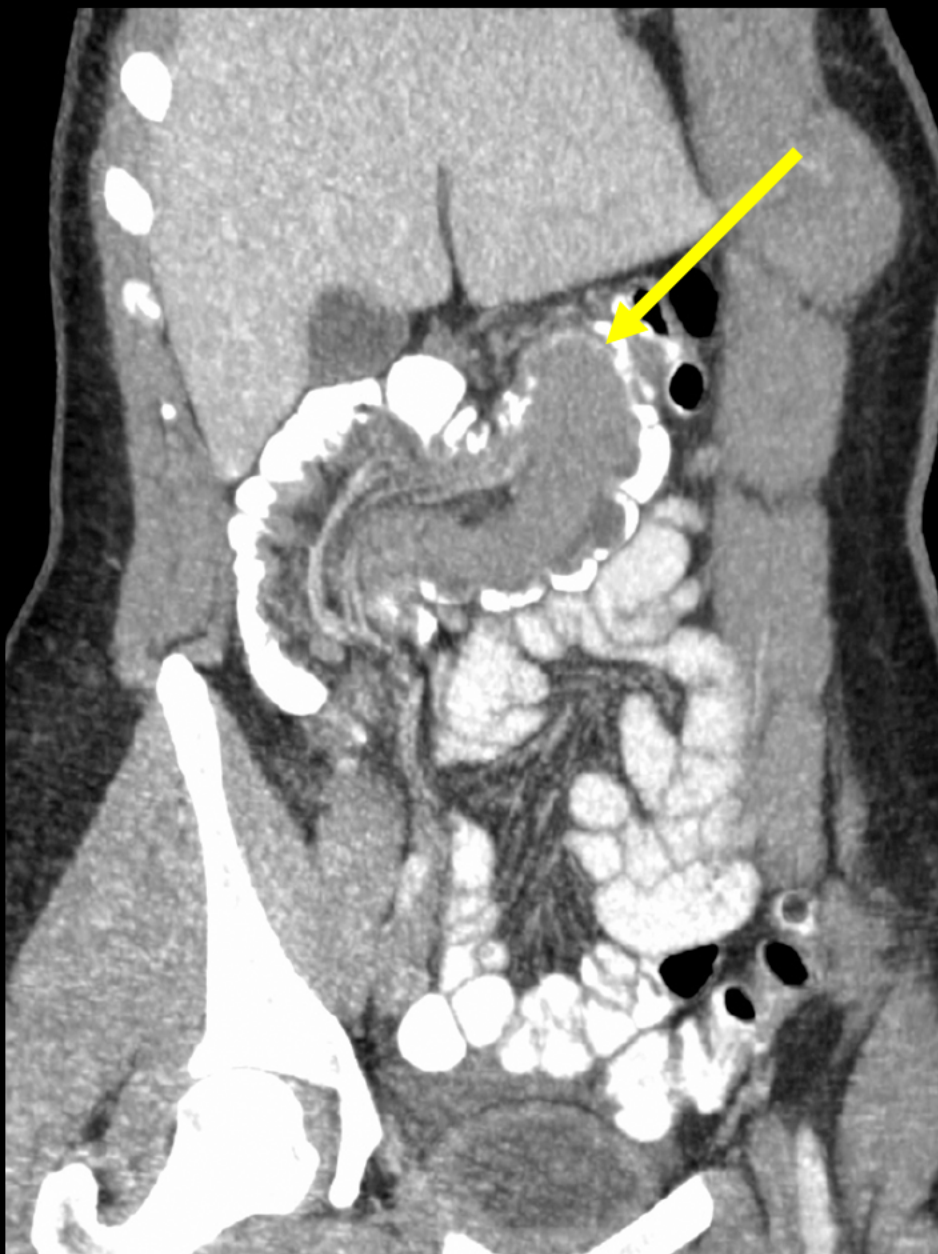
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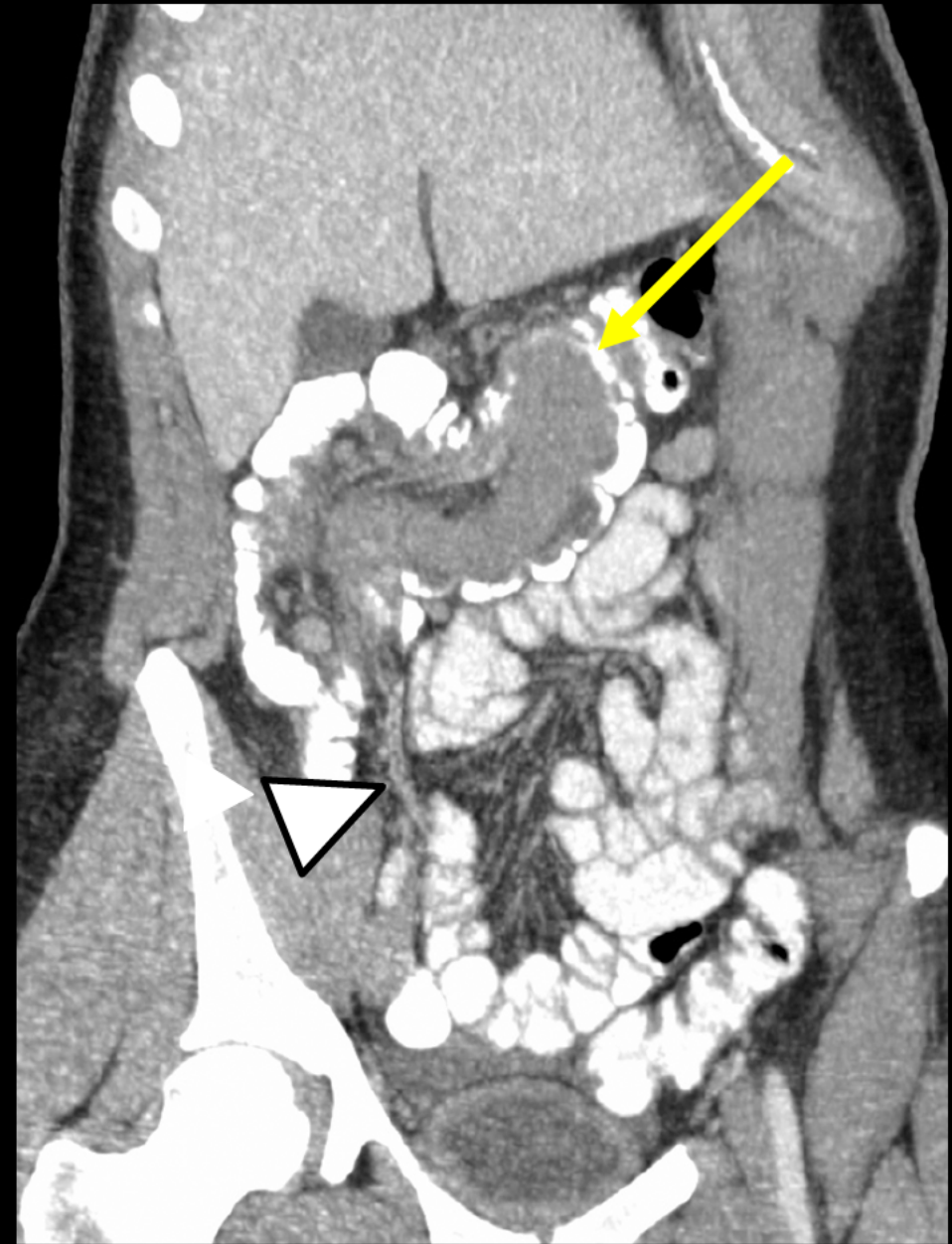
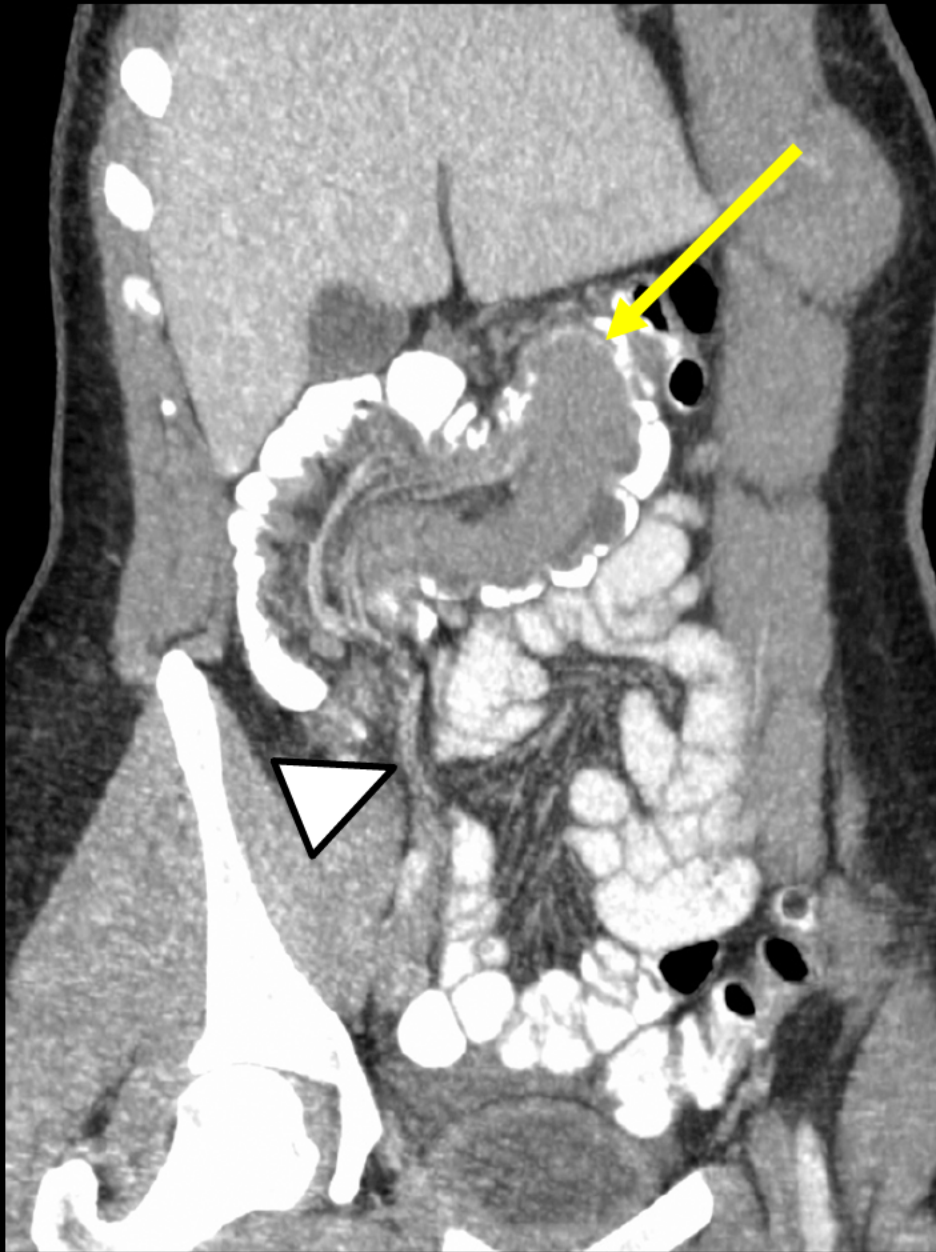




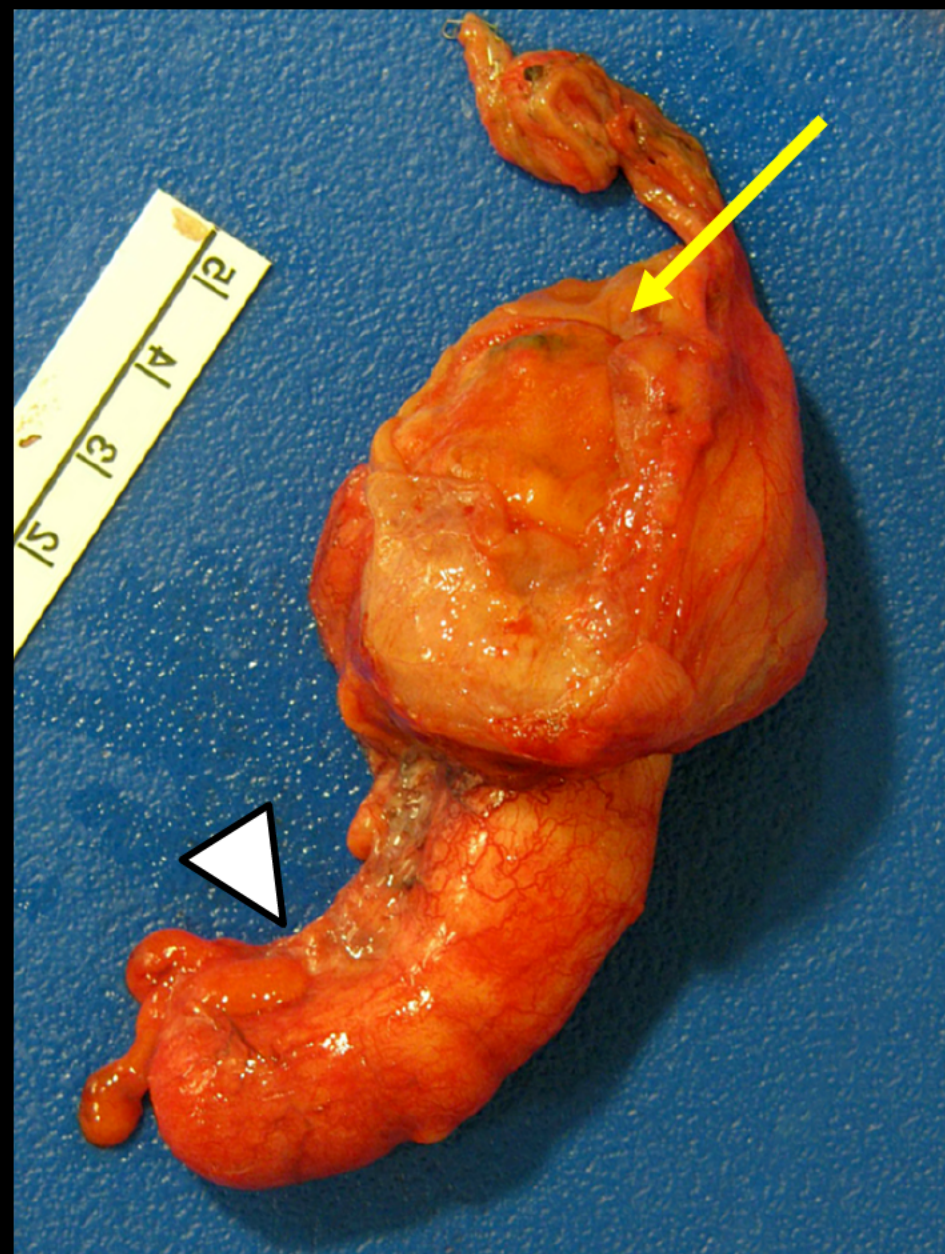
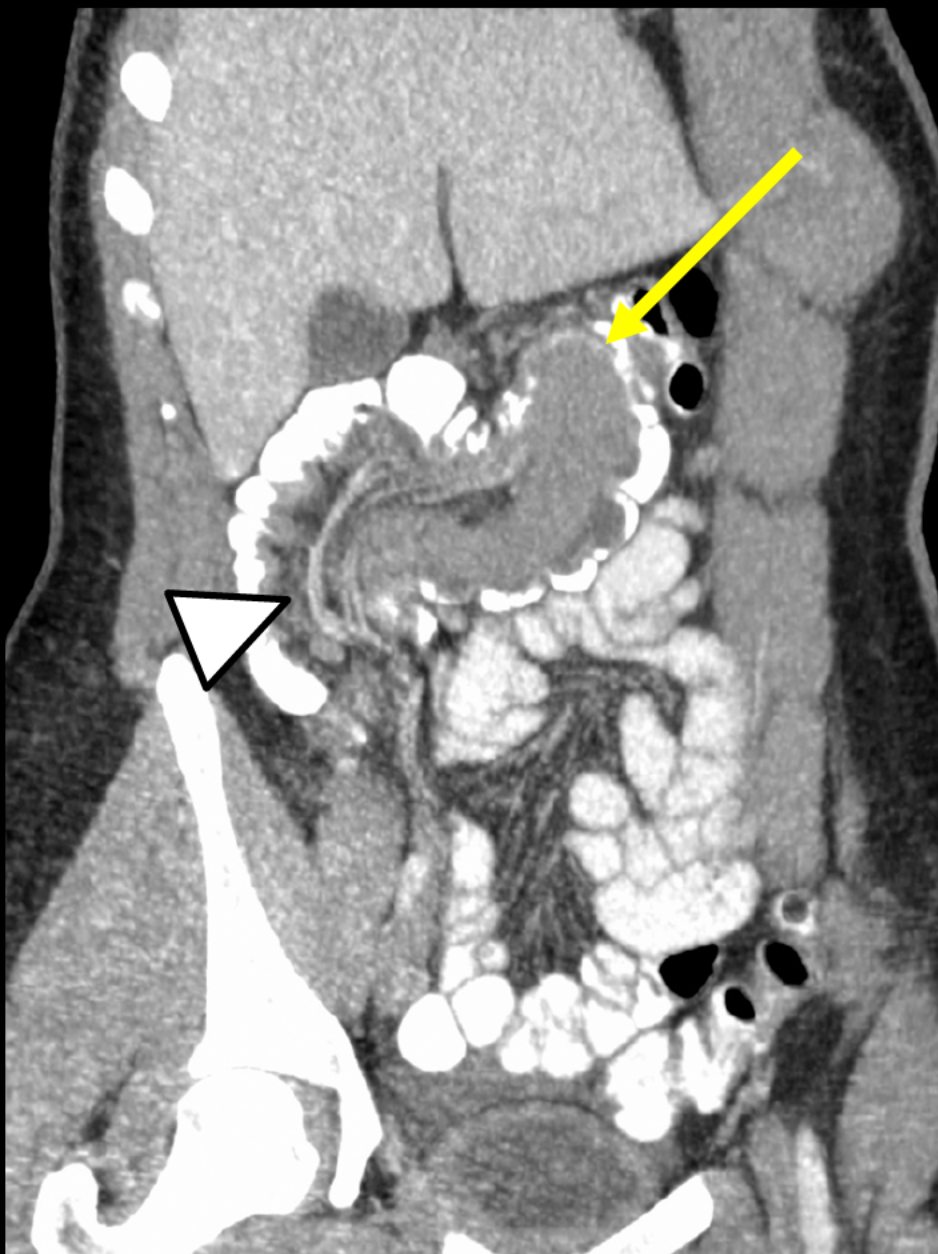
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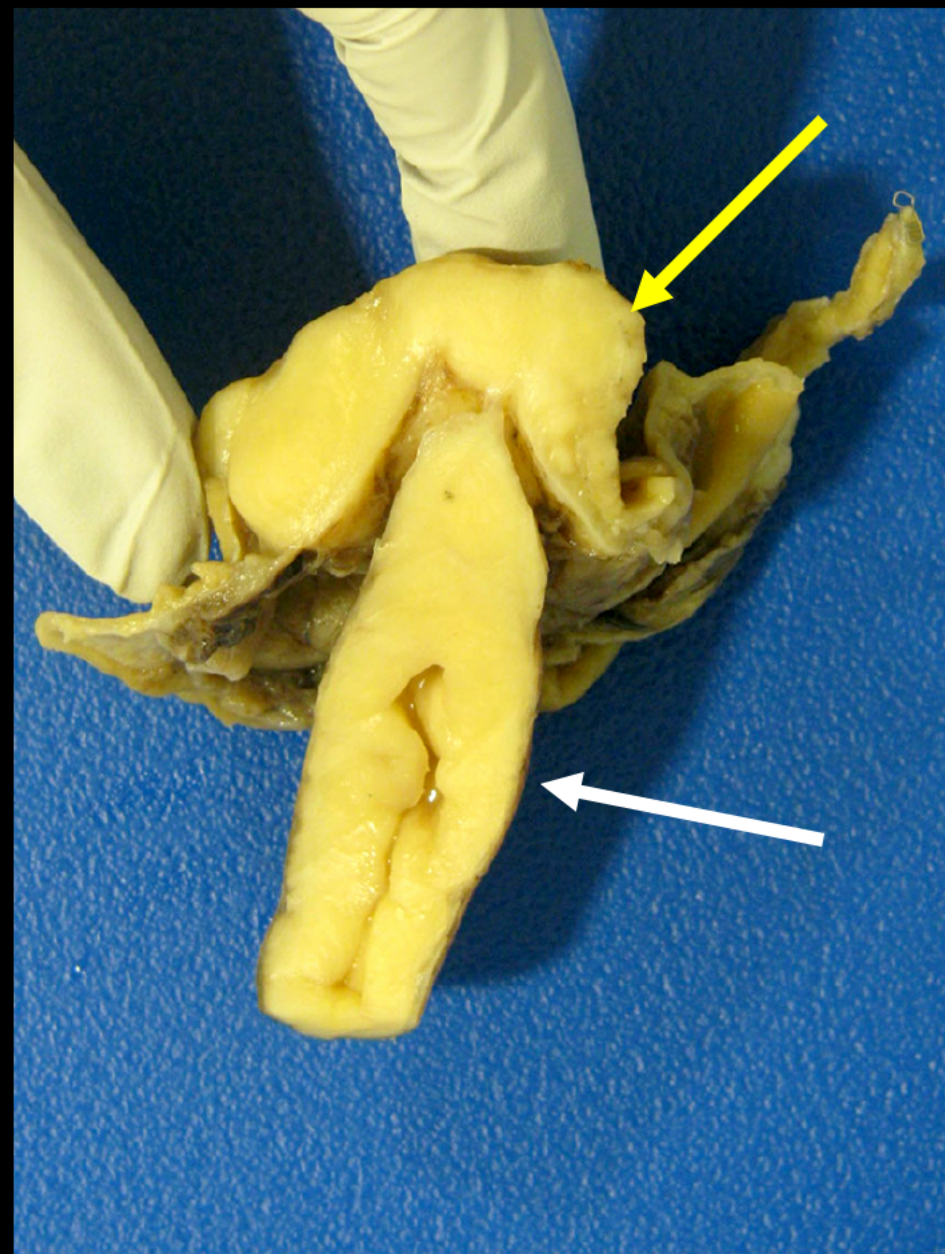
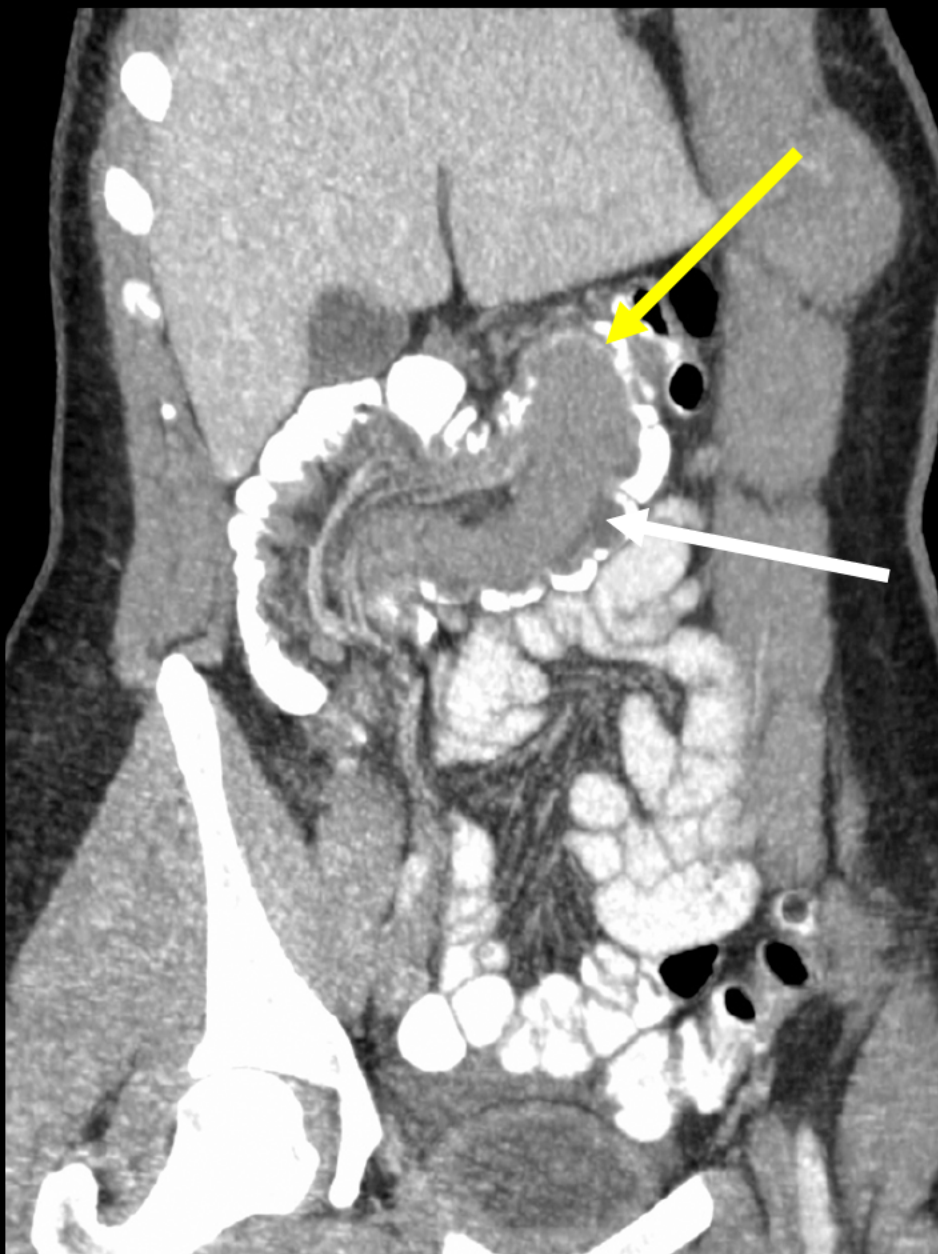
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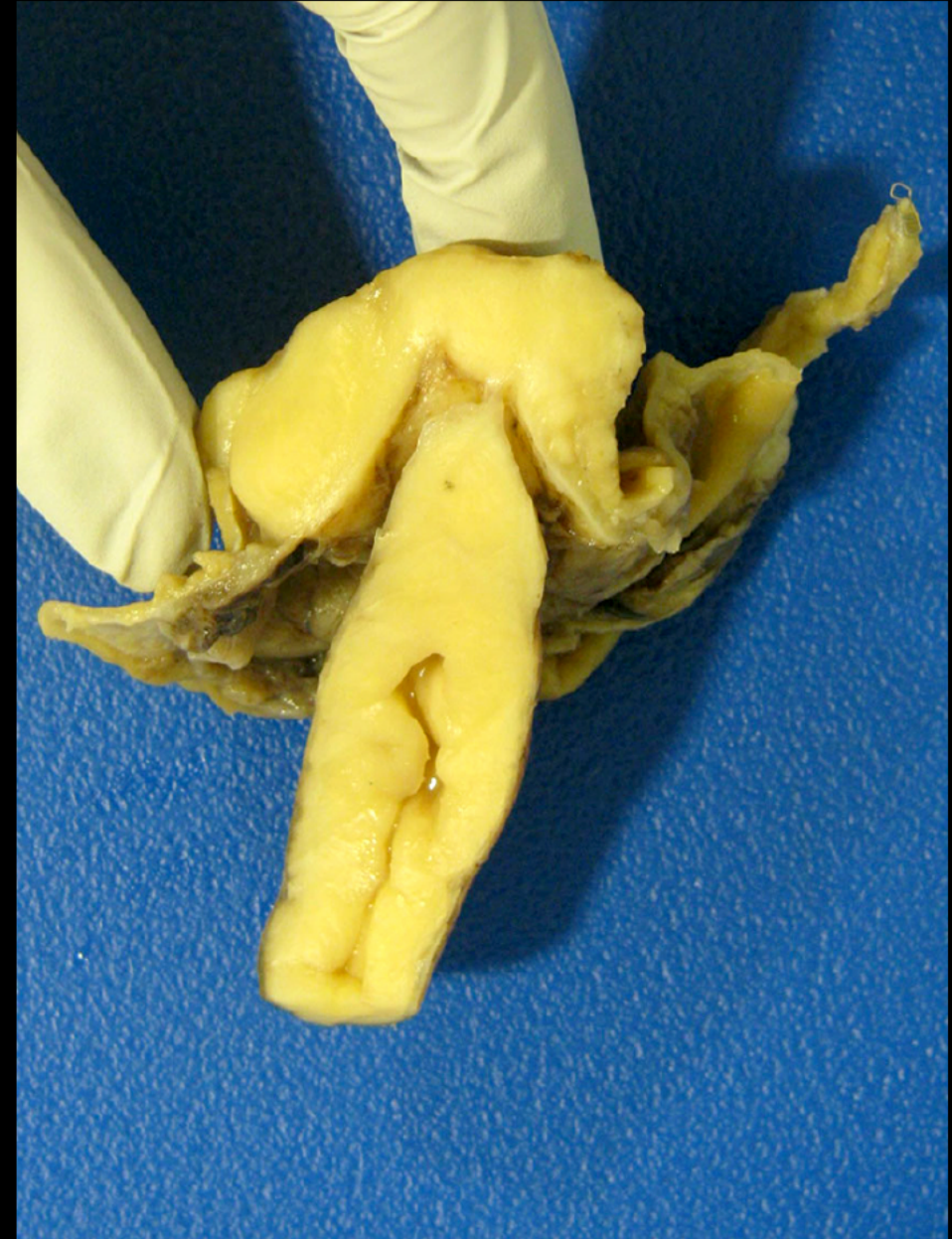
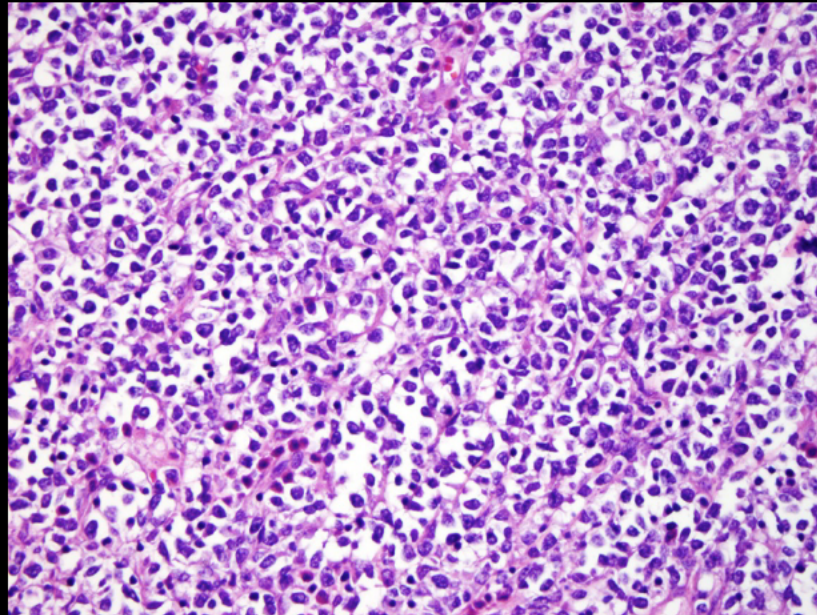
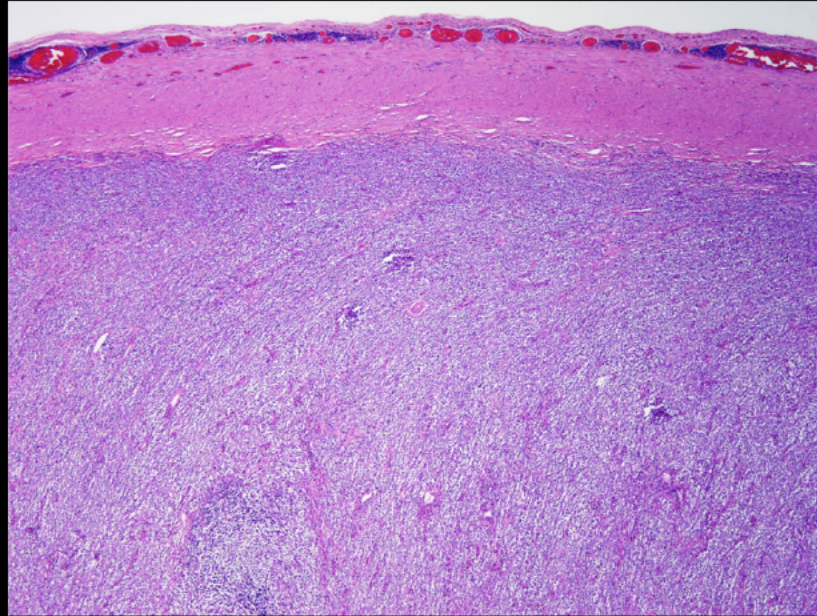




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# **Diffuse large B-cell lymphoma of the appendix, causing appendicocecal intussusception**

**Jenny Qian**

**New York Presbyterian – Weill Cornell**

**New York, NY**



# Neuroradiology Best Case



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# Clinical Information

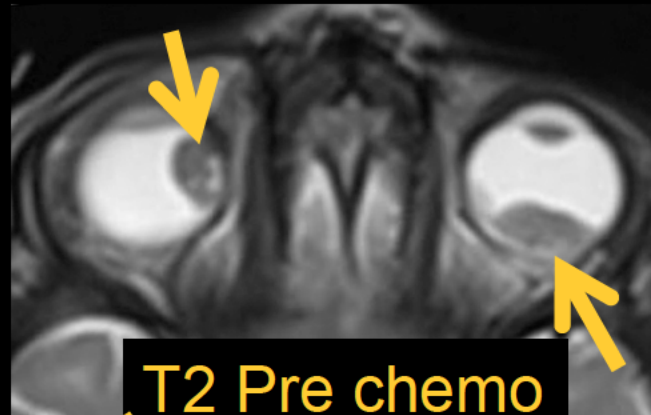
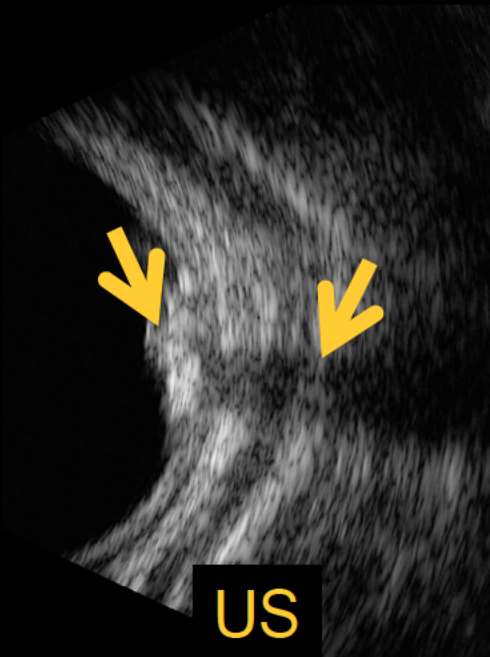
**18-month-old female with bilateral  
leukocoria**



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Ophthalmic artery angio  
(as part of chemotherapy)



Nodule separate  
from optic nerve



Leukocoria



Nodule

# Bilateral Retinoblastomas

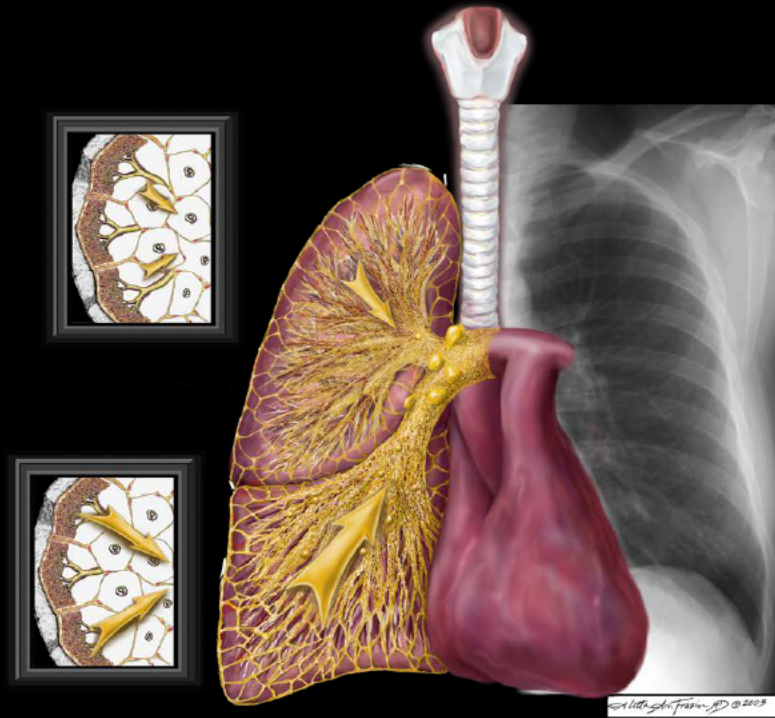
**Adam Dmytriw, M.D.**  
**University of Toronto**  
**Toronto, Canada**



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# Pulmonary and Mediastinal Best Case



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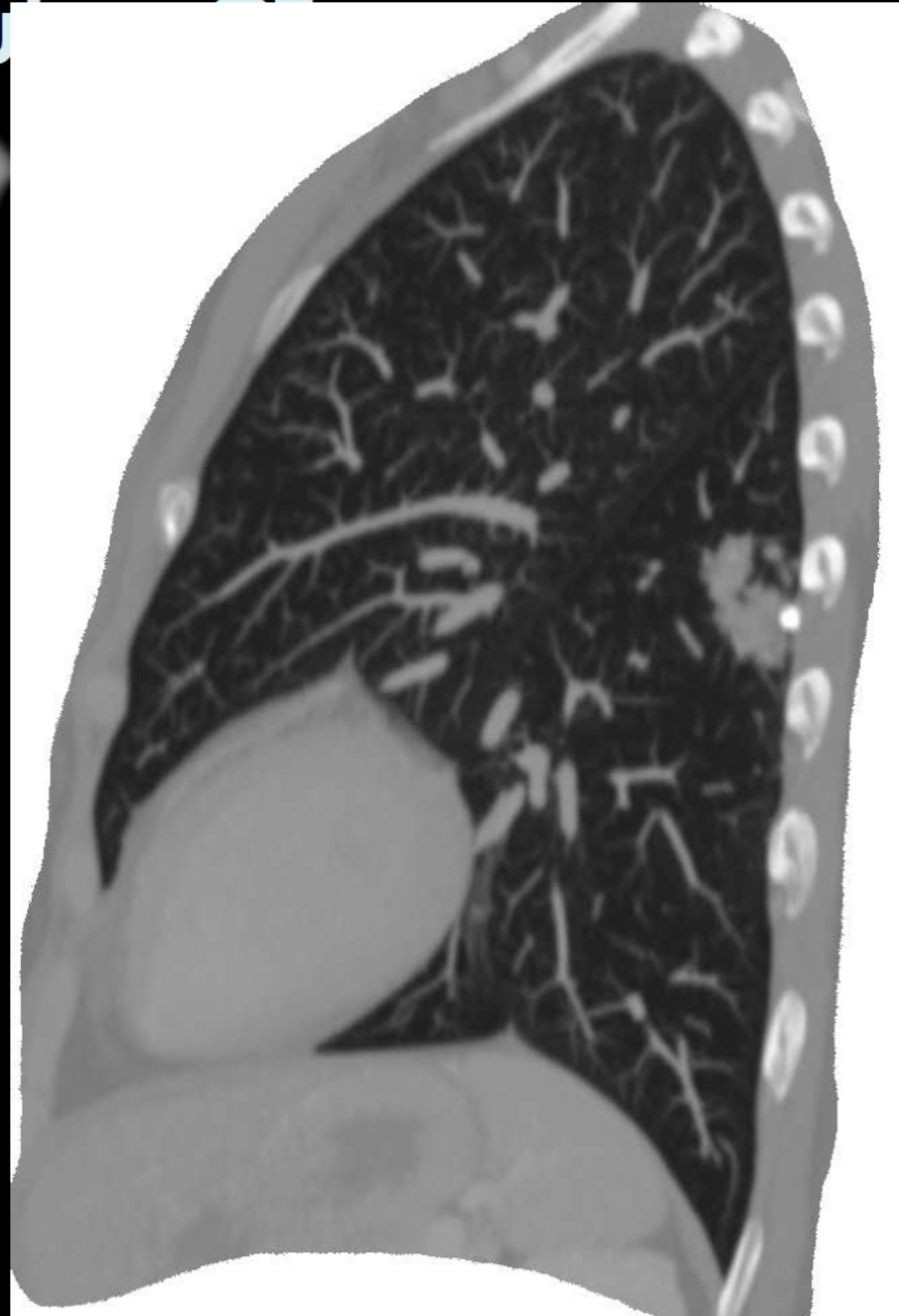
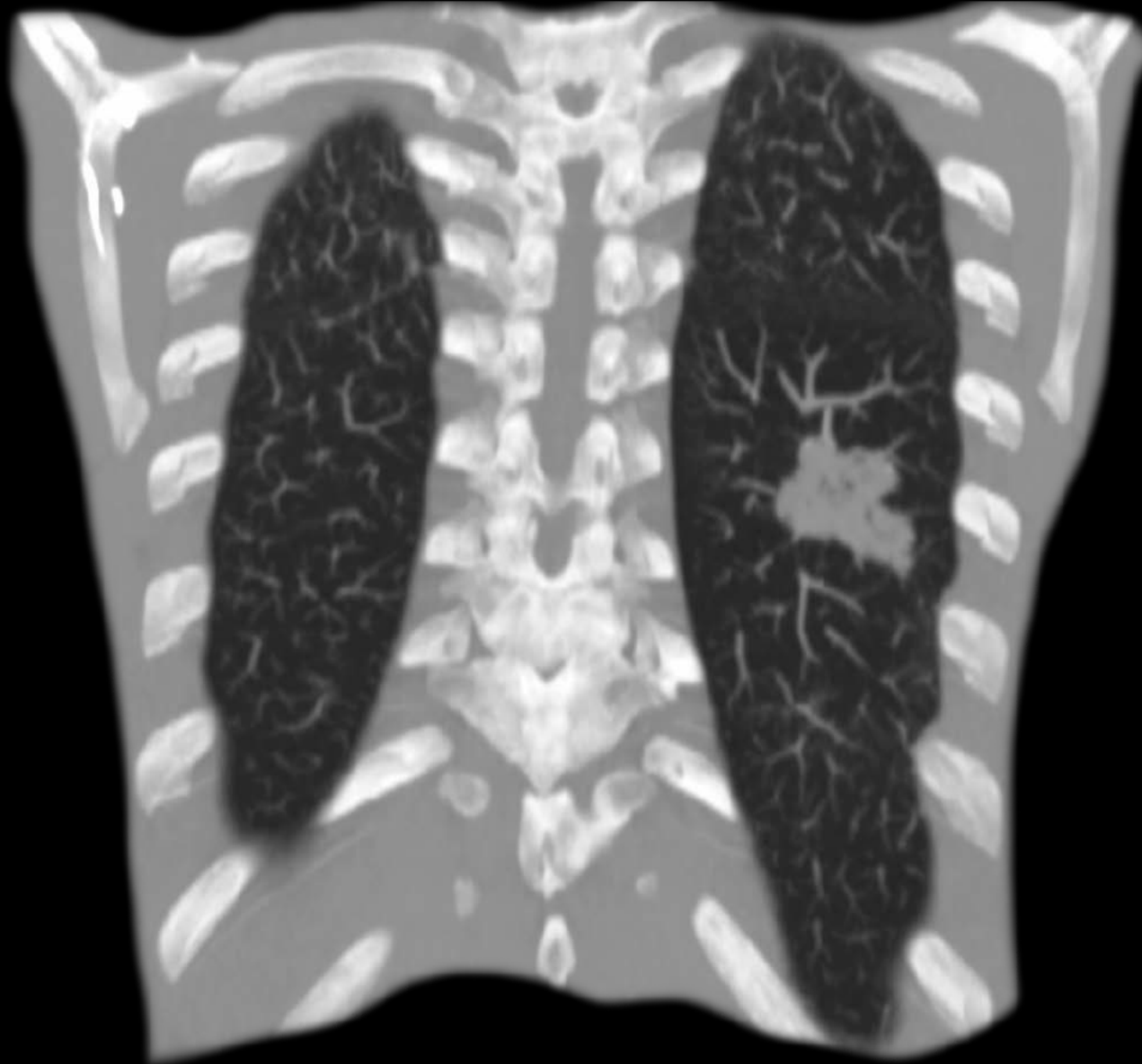
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# Clinical Information

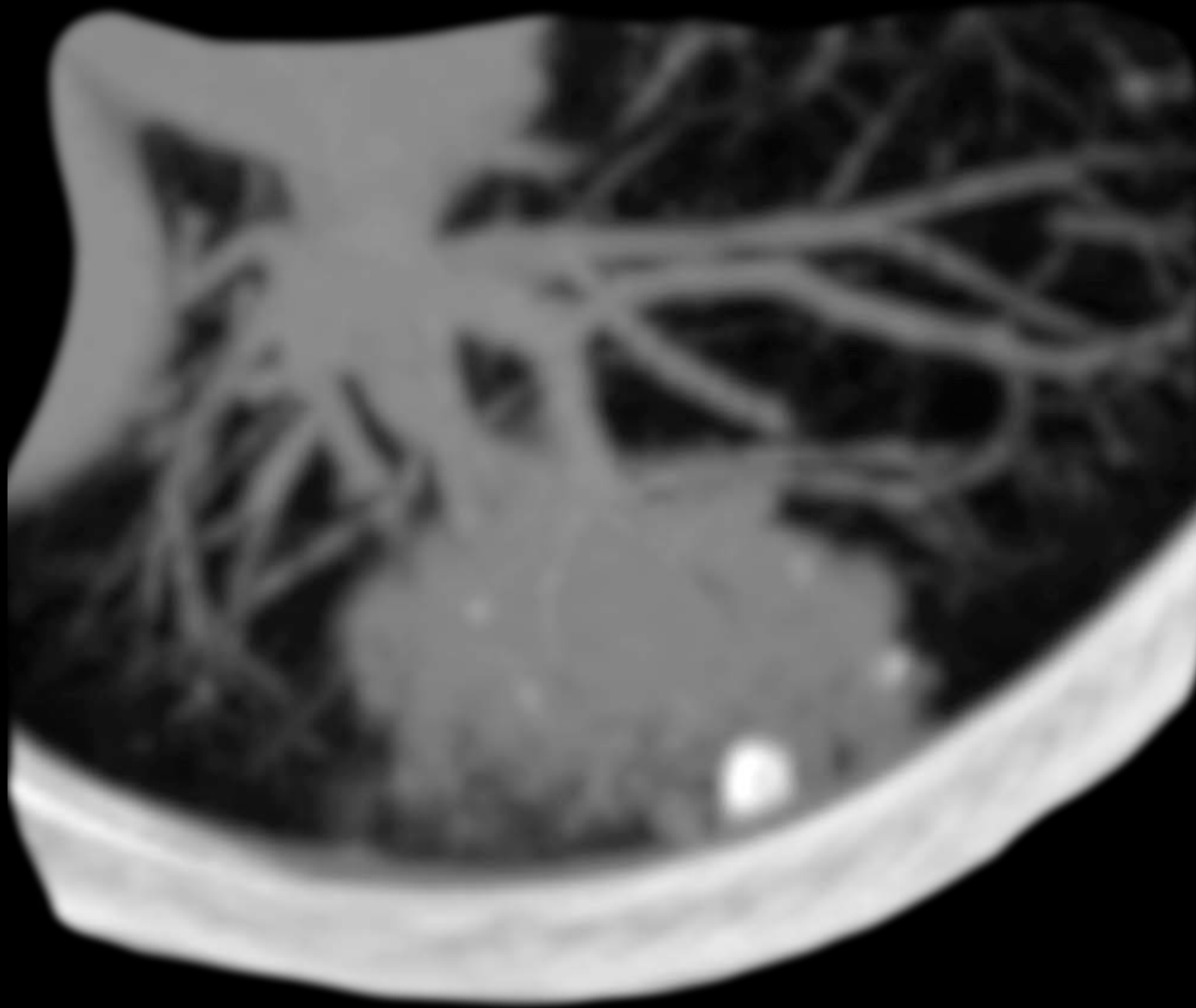
**46 year-old-female with opacity in her left lower lobe.  
The patient has no respiratory symptoms.**



# Irregular left lower lobe nodule

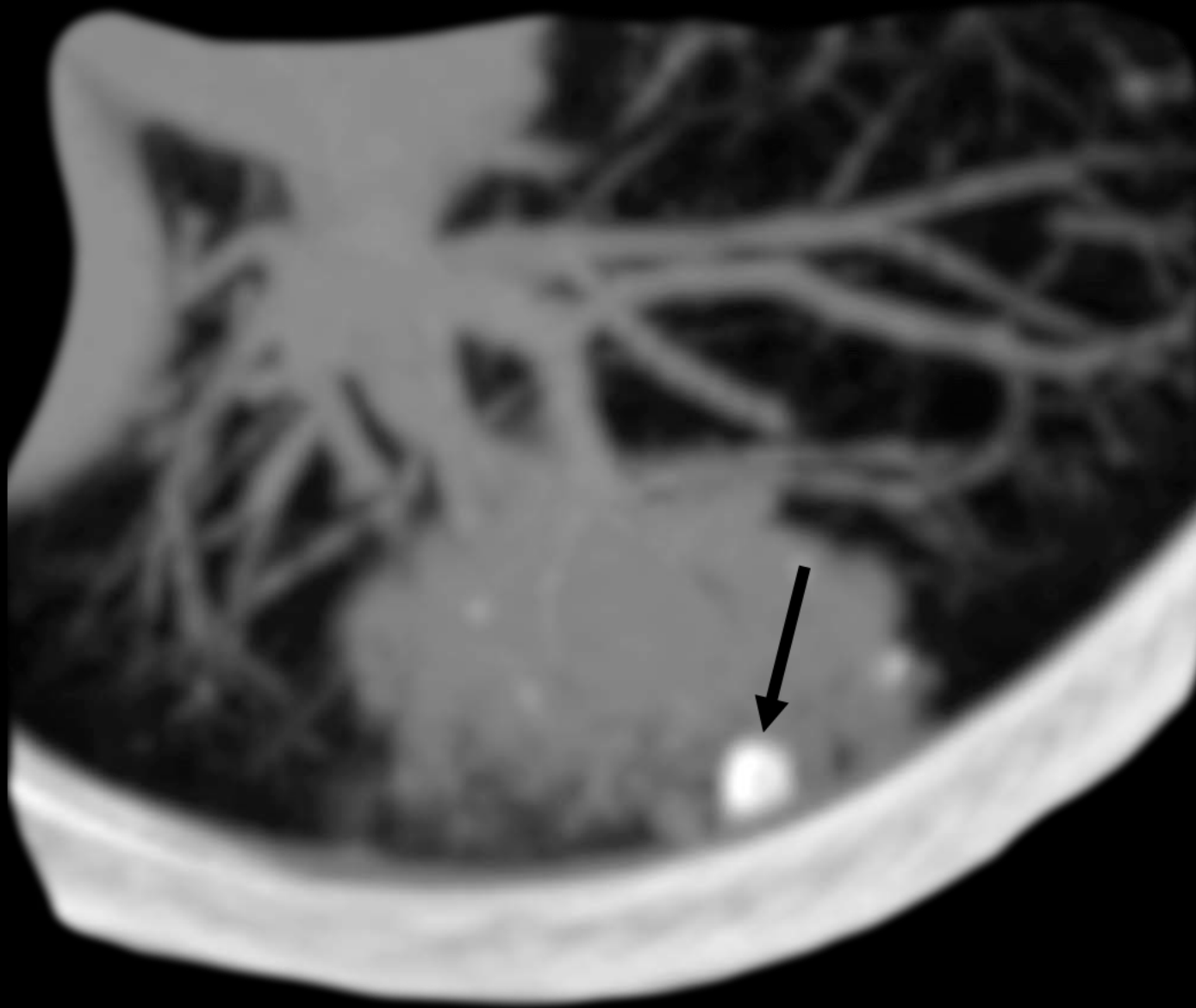


# Irregular left lower lobe nodule - CT

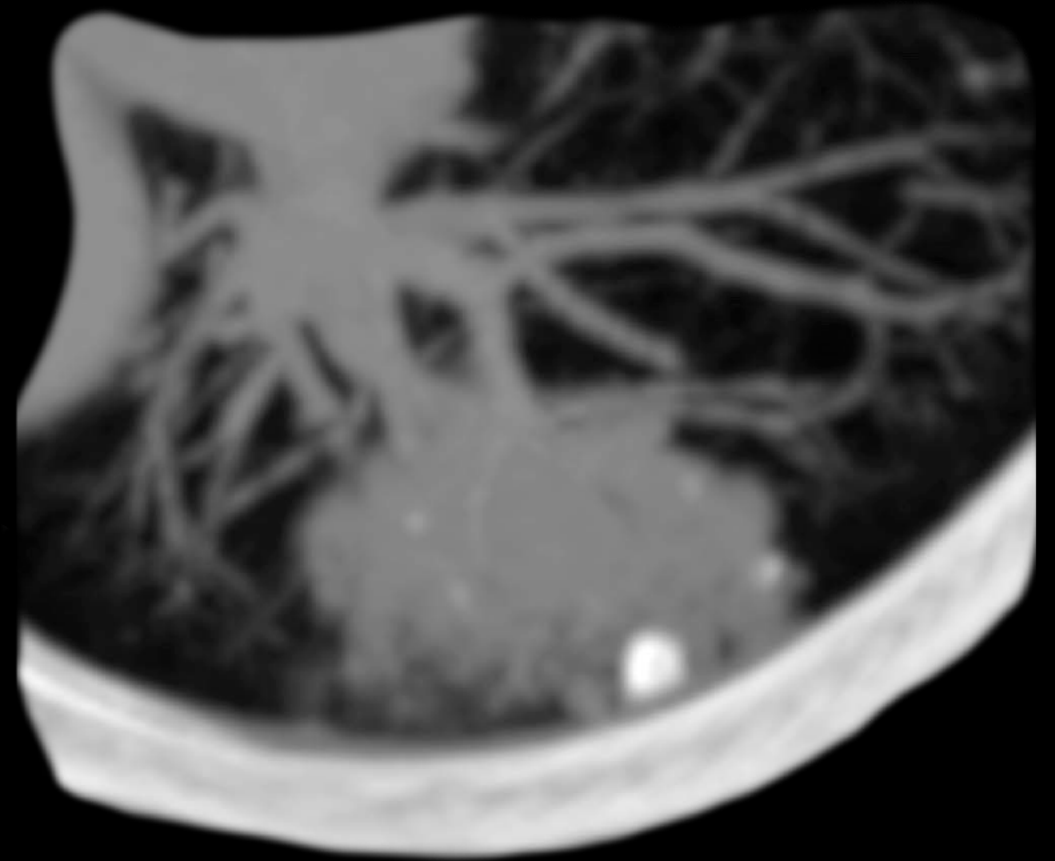
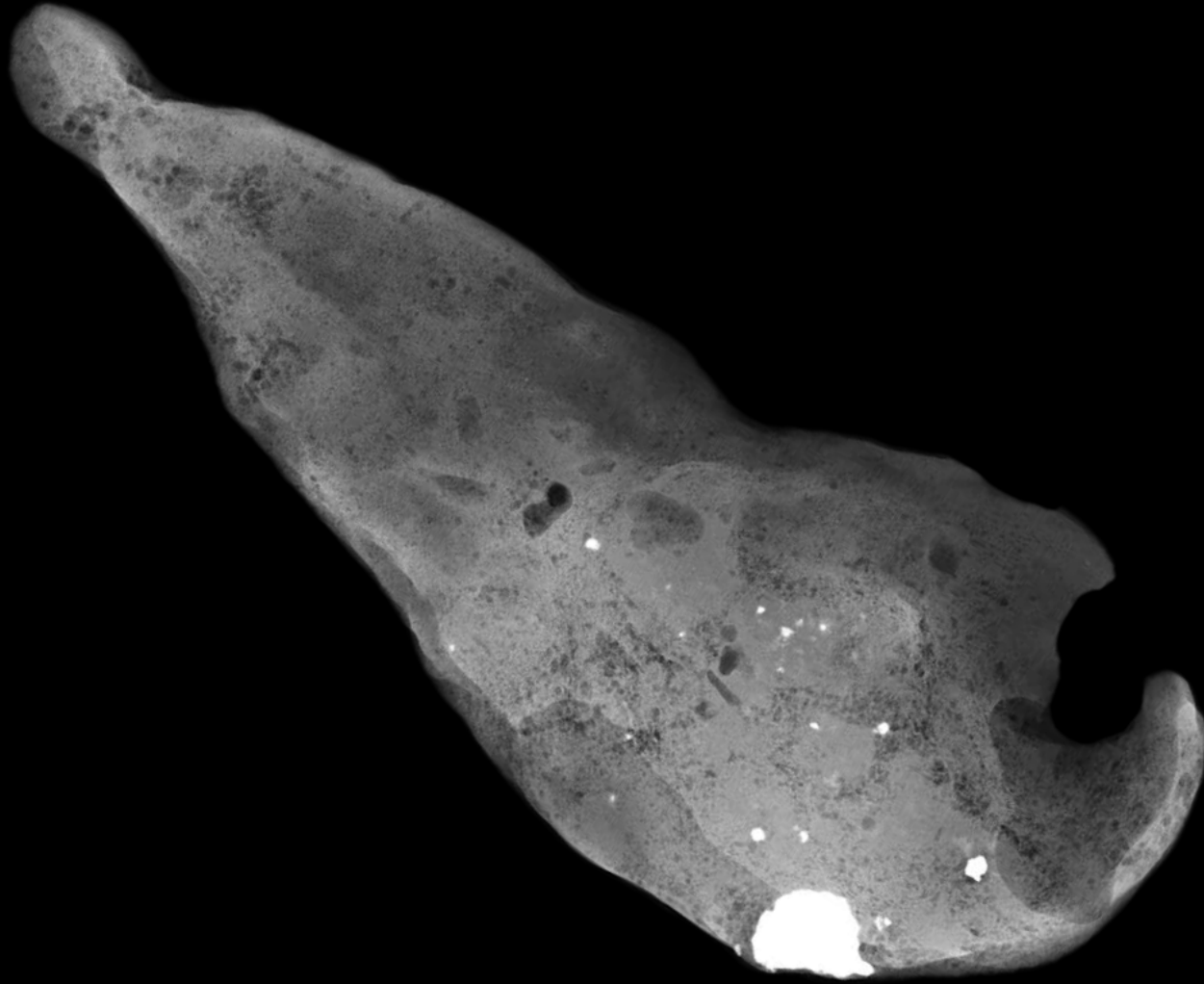




# Irregular left lower lobe nodule - CT

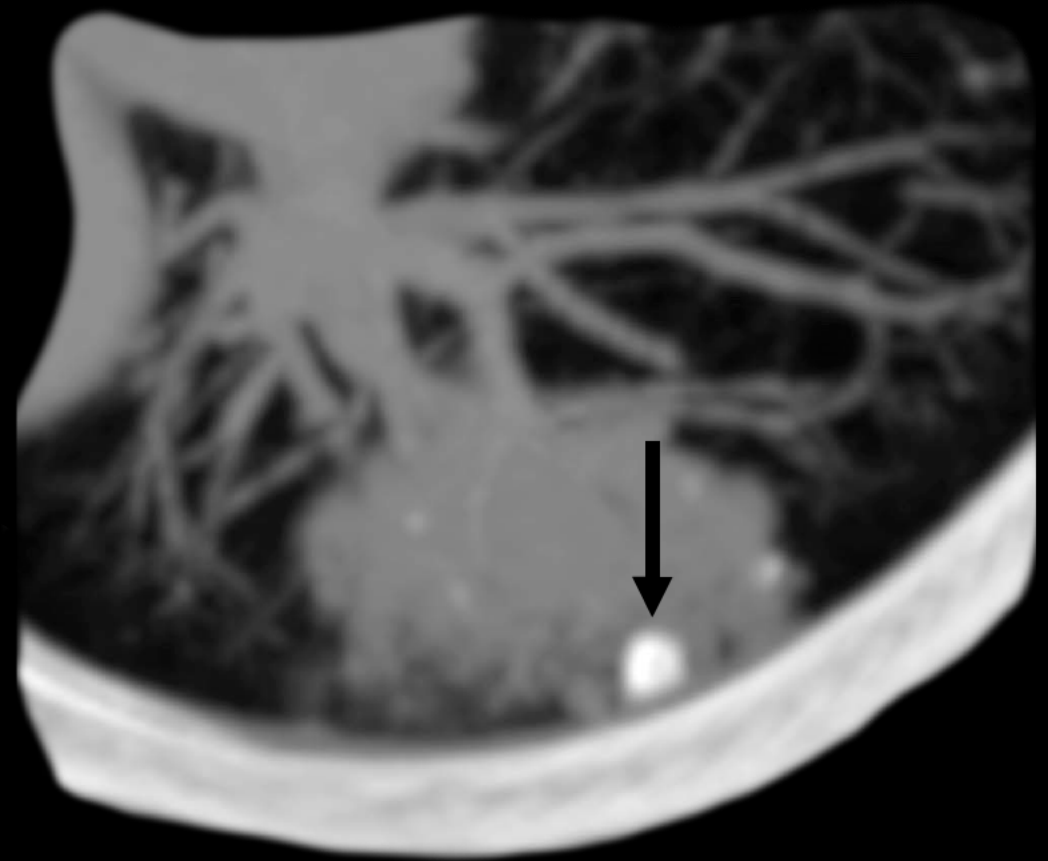
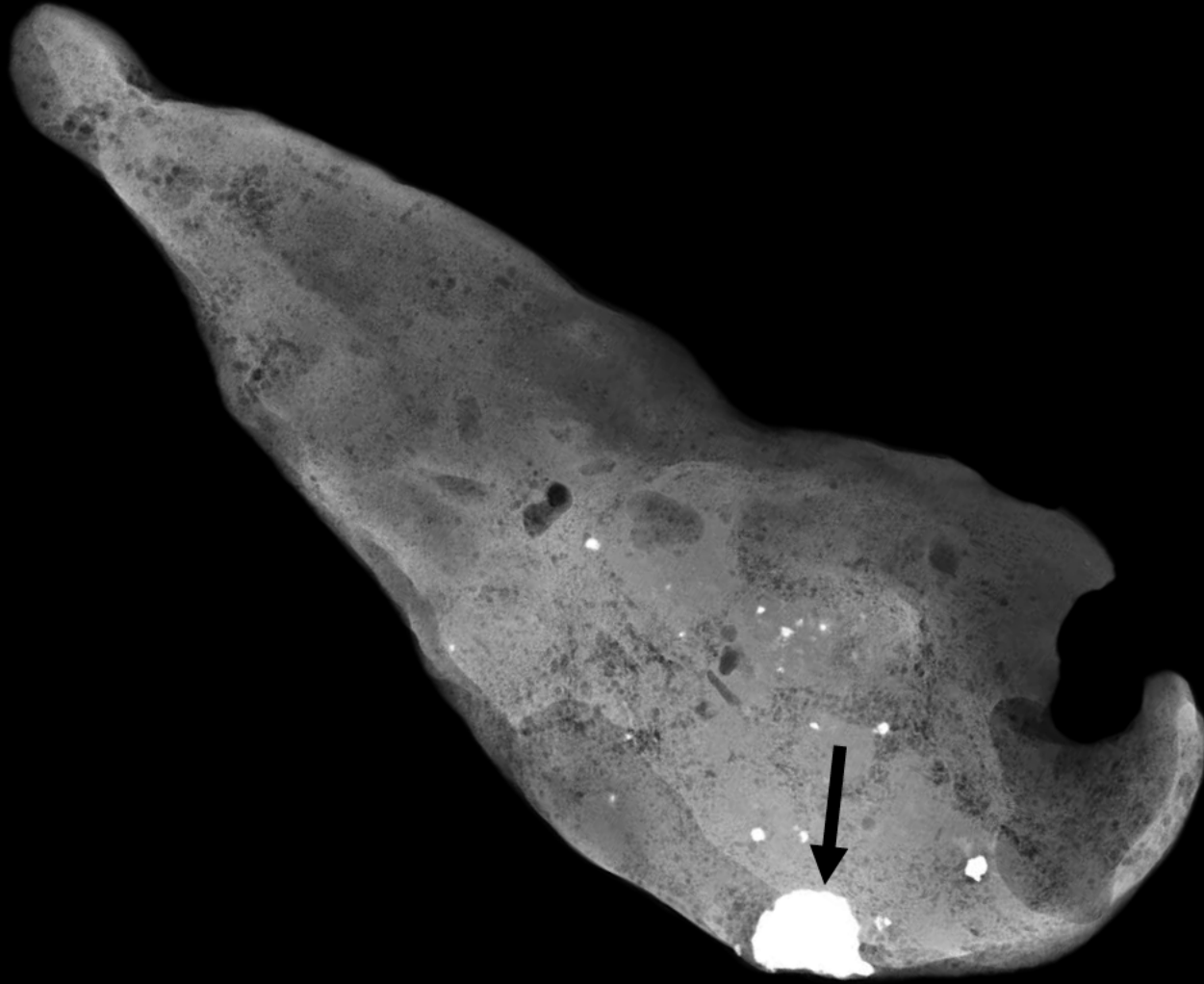


# Irregular left lower lobe nodule – specimen radiograph

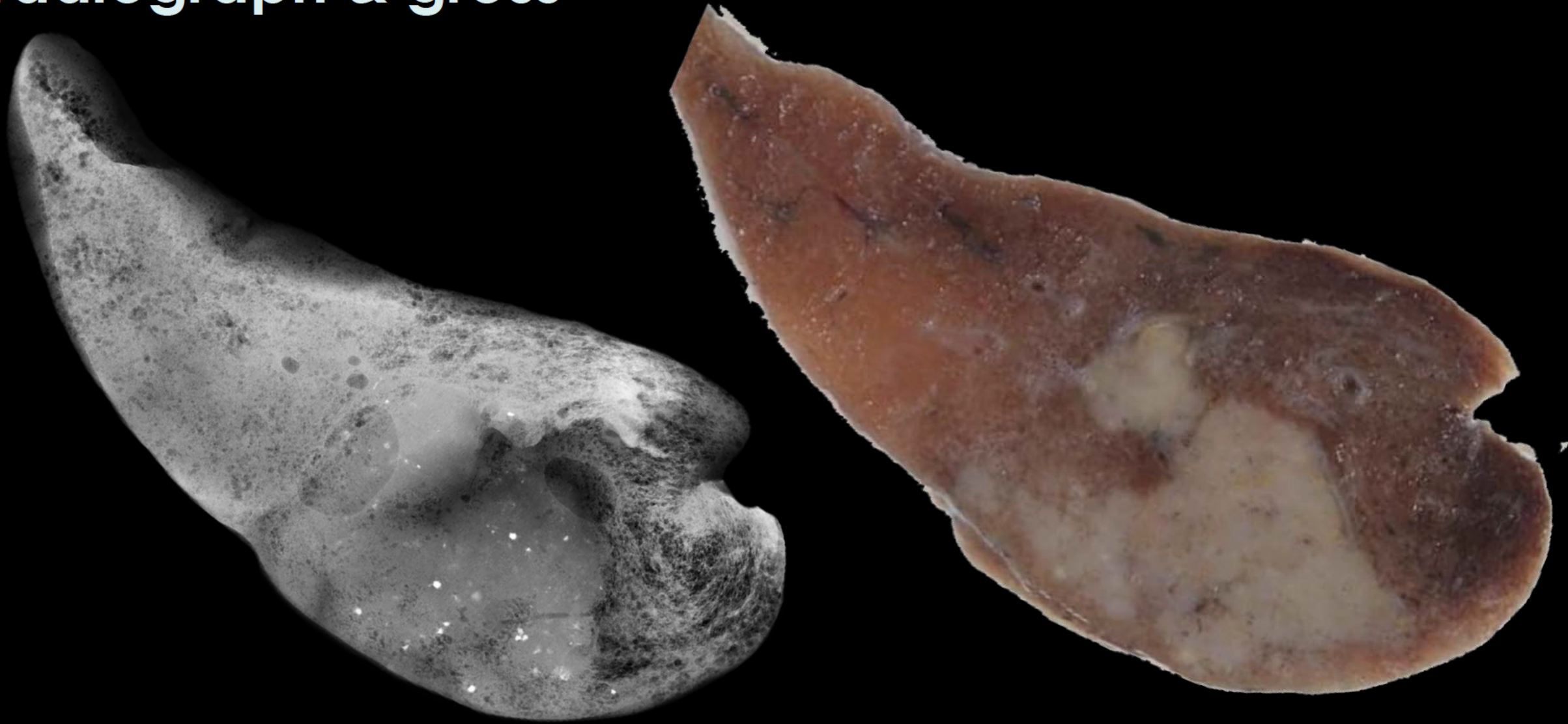




# Irregular left lower lobe nodule – specimen radiograph

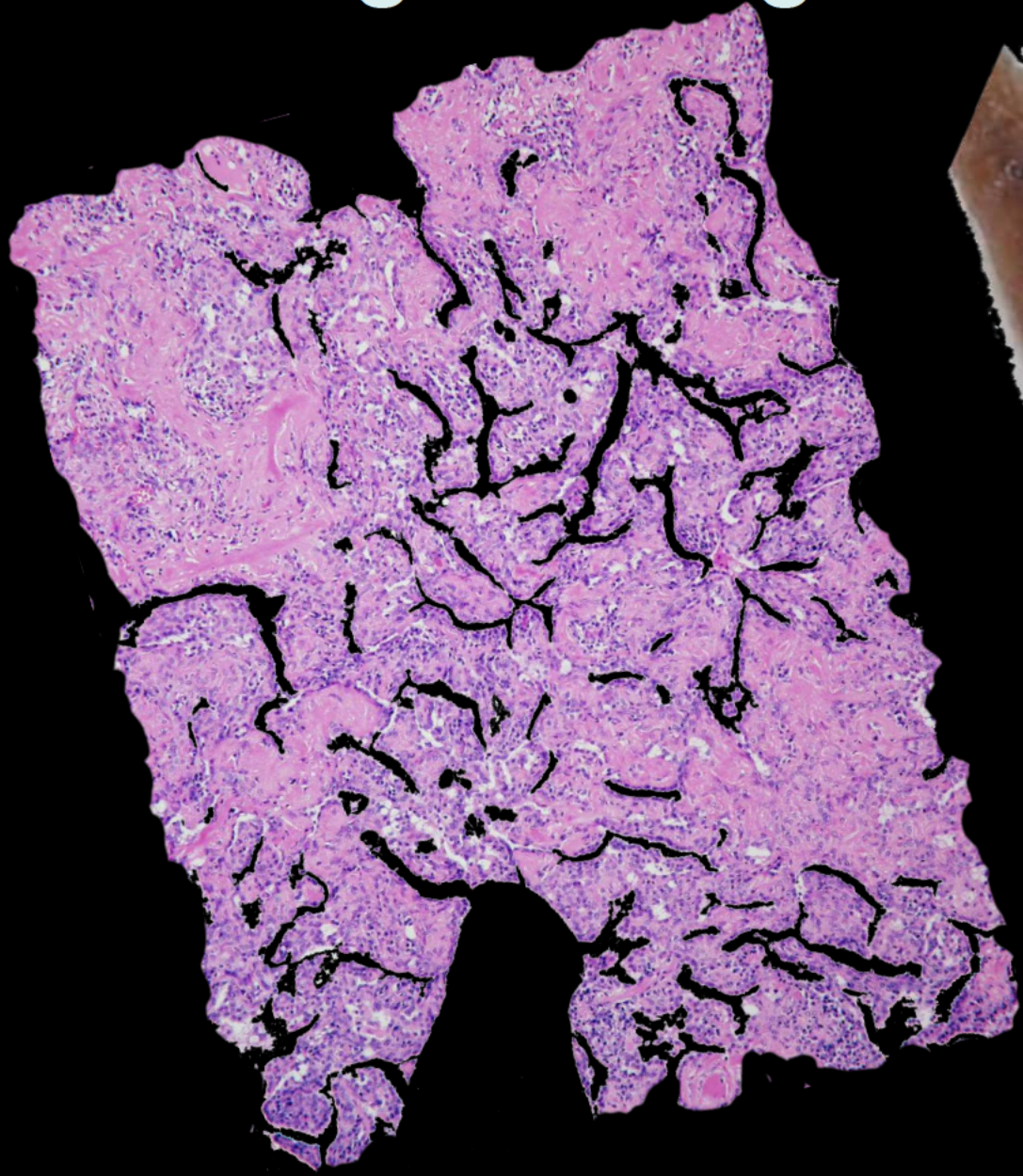


# Irregular left lower lobe nodule – specimen radiograph & gross





# Sclerosing Hemangioma





# Sclerosing Hemangioma

**Ryo Miyazawa, MD**

**St. Luke's International Hospital**

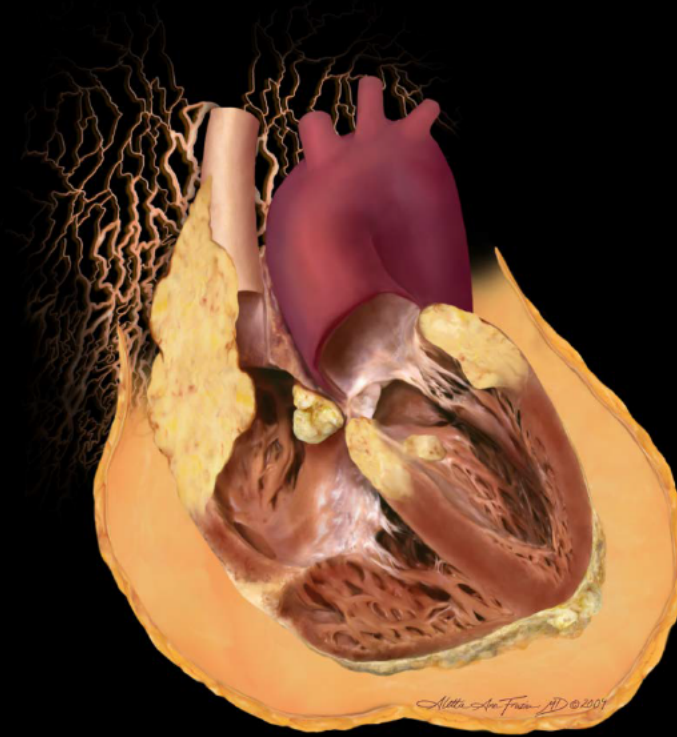
**Tokyo, Japan**

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# Cardiovascular Best Case



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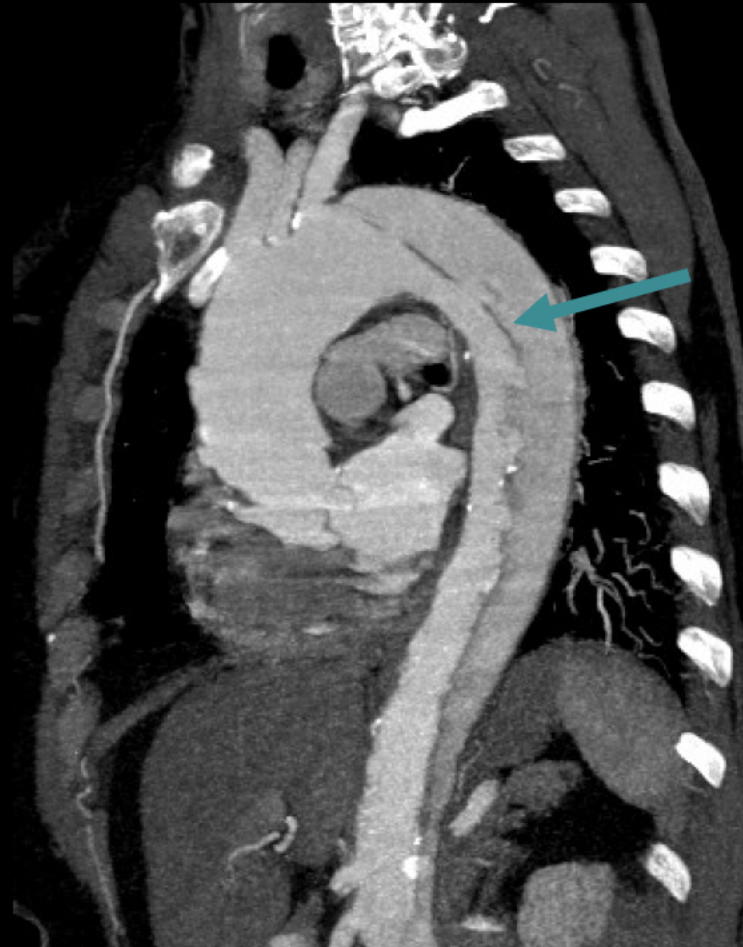
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**63 year old female with history of hypertension and severe chest pain. A type B aortic dissection was diagnosed at presentation.**





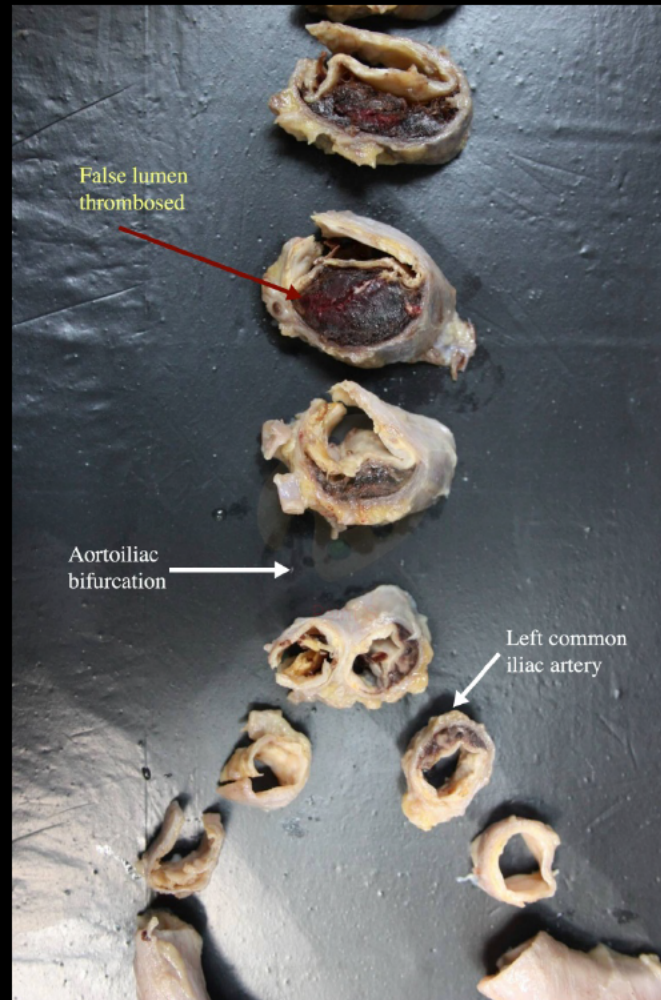
**63 year old female with history of hypertension and severe chest pain. A type B aortic dissection was diagnosed at presentation.**



**The type B aortic dissection was treated with endovascular stent and carotid-carotid bypass.**



**Despite interventions, the patient died.  
Autopsy findings showed:**



**THROMBOSED false lumen of Type B dissection**

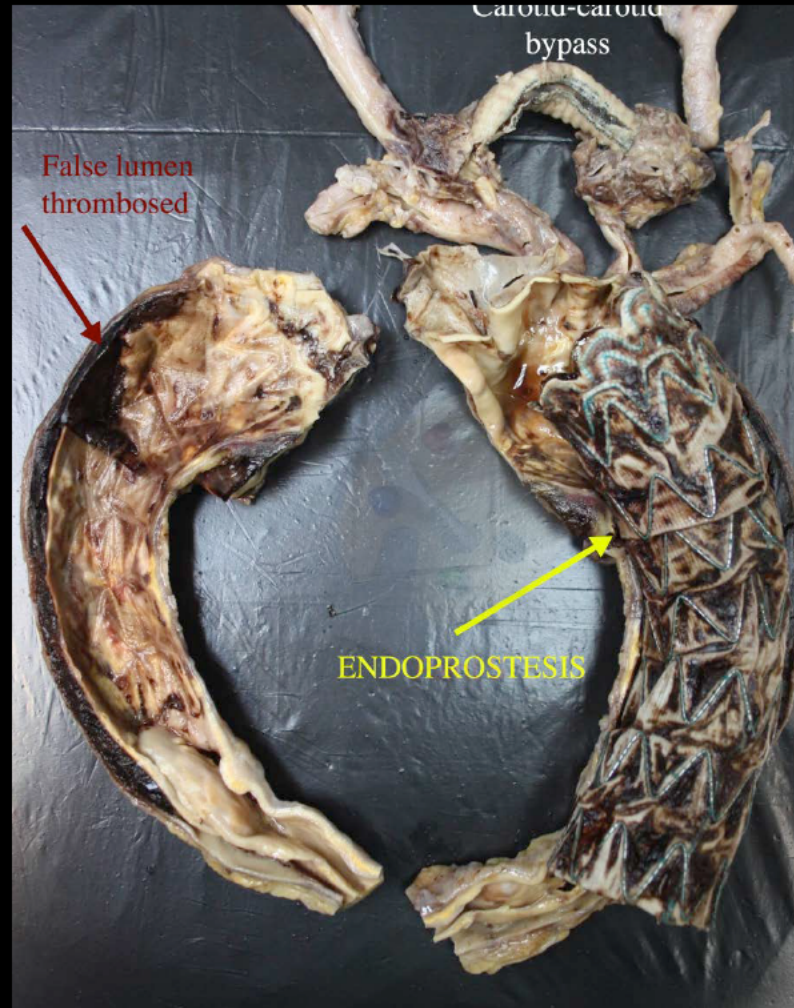


**Despite interventions, the patient died.  
Autopsy findings showed:**



**THROMBOSED false lumen of Type B dissection**

**Despite interventions, the patient died.  
Autopsy findings showed:**



**ANTEGRADE propagation of dissection into ascending aorta**



**Despite interventions, the patient died.  
Autopsy findings showed:**



**Type A aortic dissection with partly thrombosed lumen**



**Despite interventions, the patient died.  
Autopsy findings showed:**



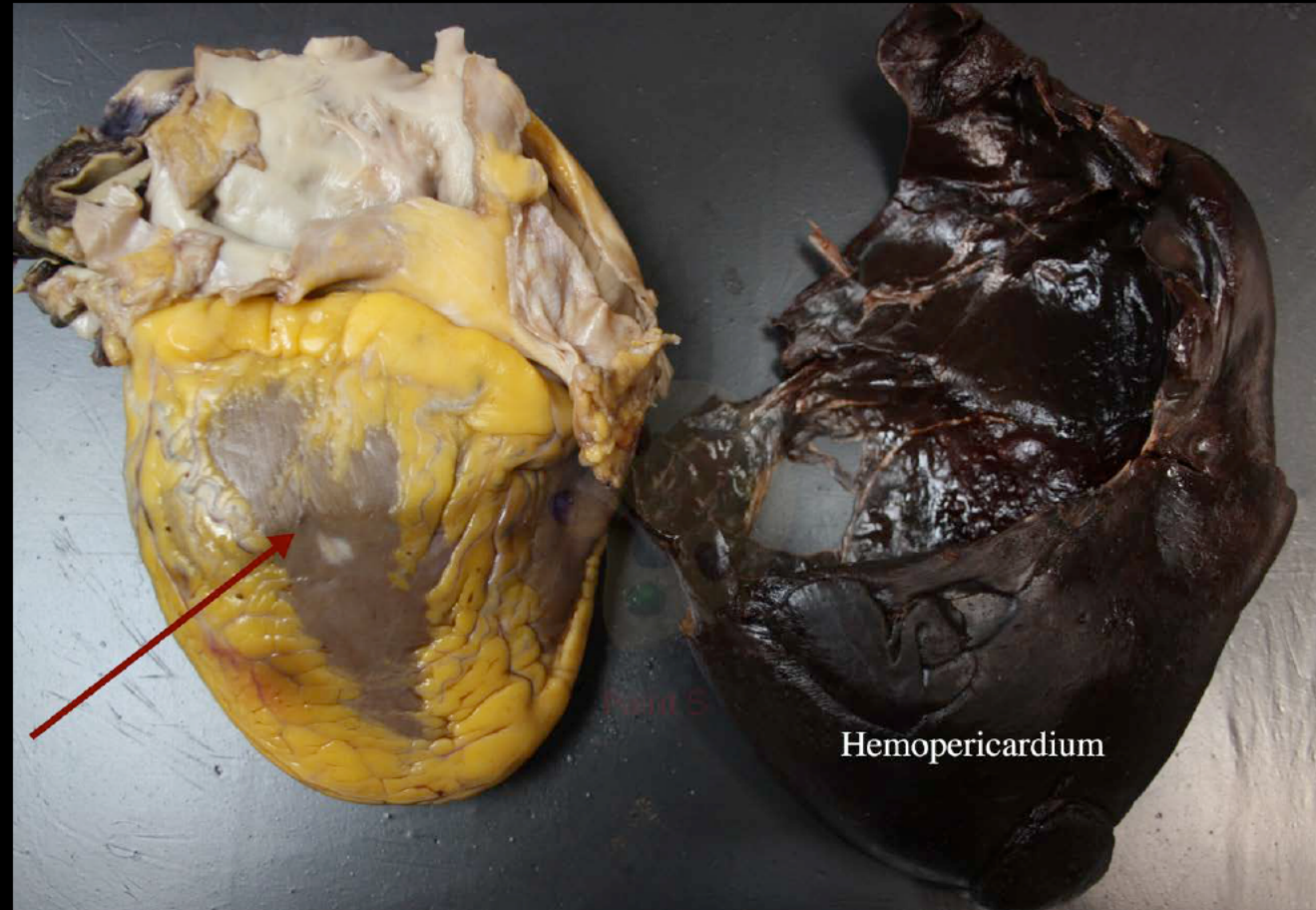
**Mural tear/rupture identified at the aortic root**

**Despite interventions, the patient died.  
Autopsy findings showed:**



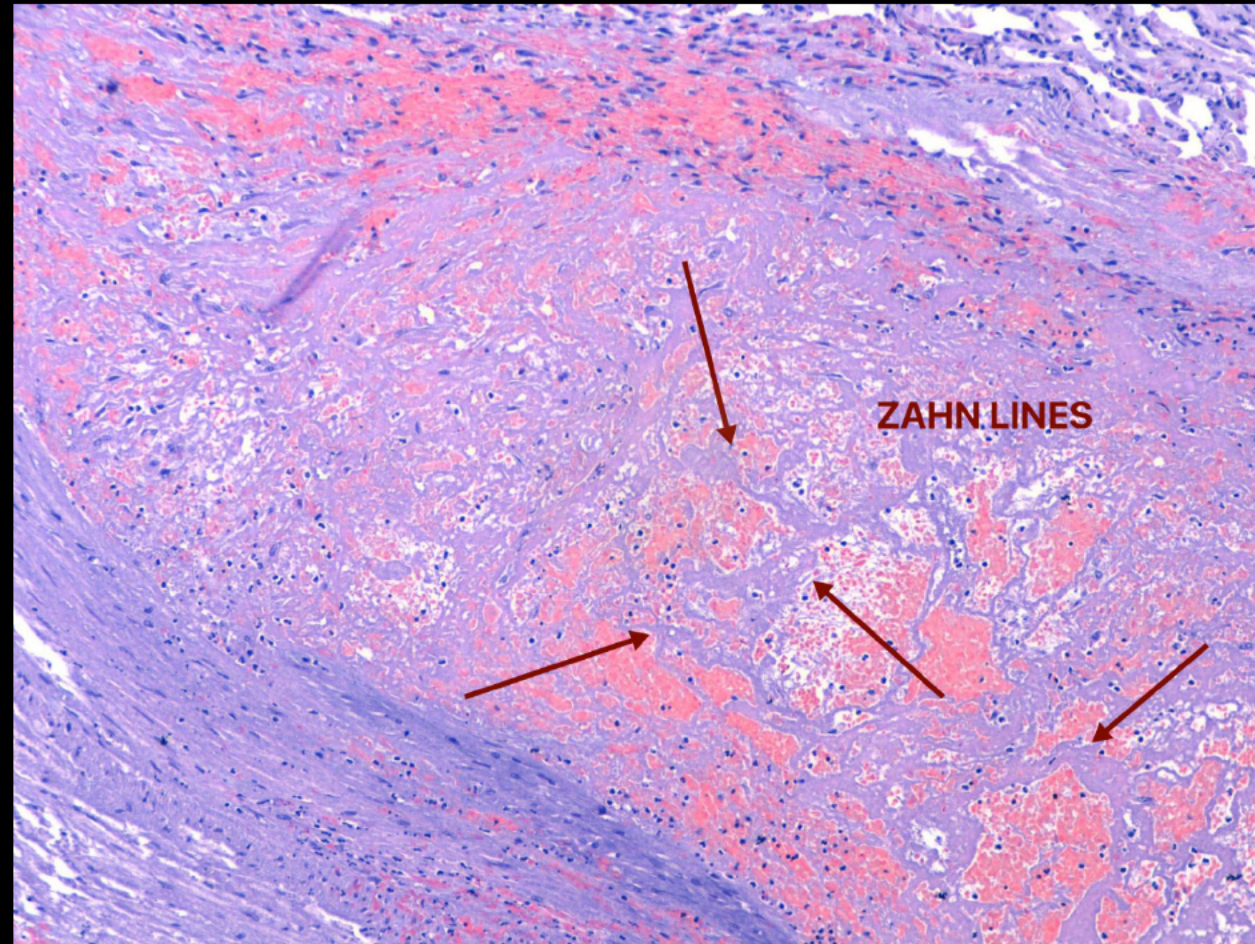
**Mural tear/rupture identified at the aortic root**

**Despite interventions, the patient died.  
Autopsy findings showed:**



**HEMOPERICARDIUM**





H&E stain shows separation of media from adventitia, with false lumen filled with partially thrombosed fibrinolytic material and thrombus (lines of Zahn: laminations of platelets mixed with fibrin).

# **Type B dissection transitioned to Type A dissection, complicated by aortic root rupture & hemopericardium**

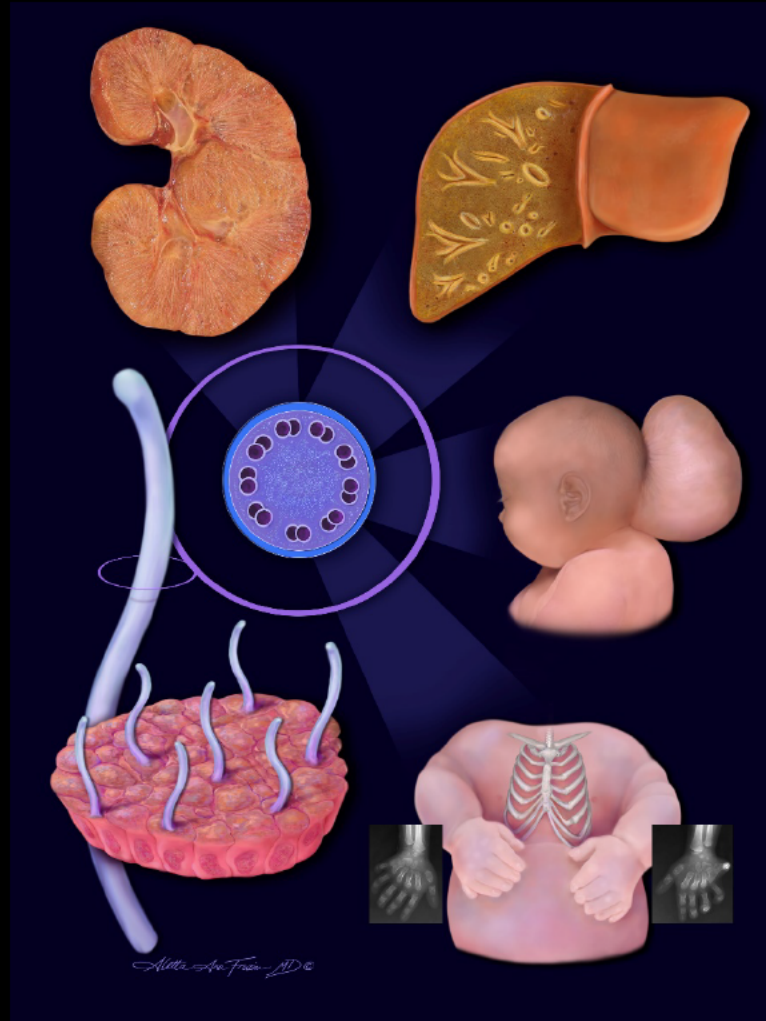
**Tania Diaz Antonio, MD**  
**H.U. Virgen de la Victoria**  
**Málaga, Spain**

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# Pediatric Best Case



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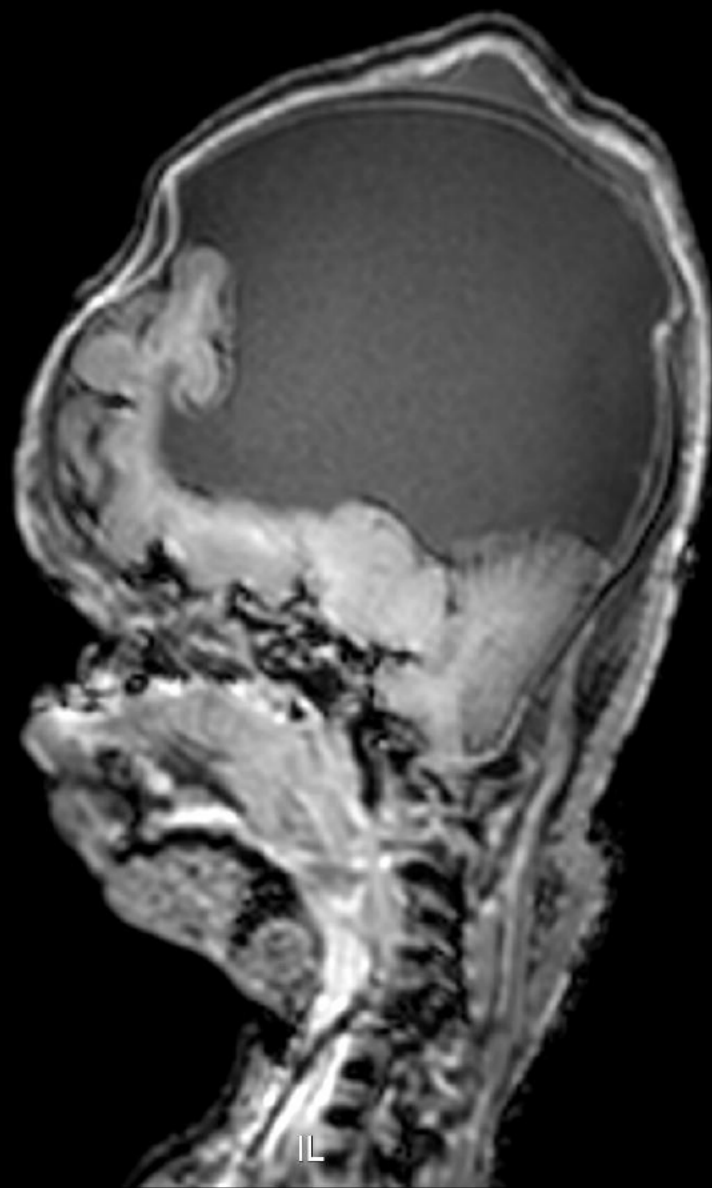
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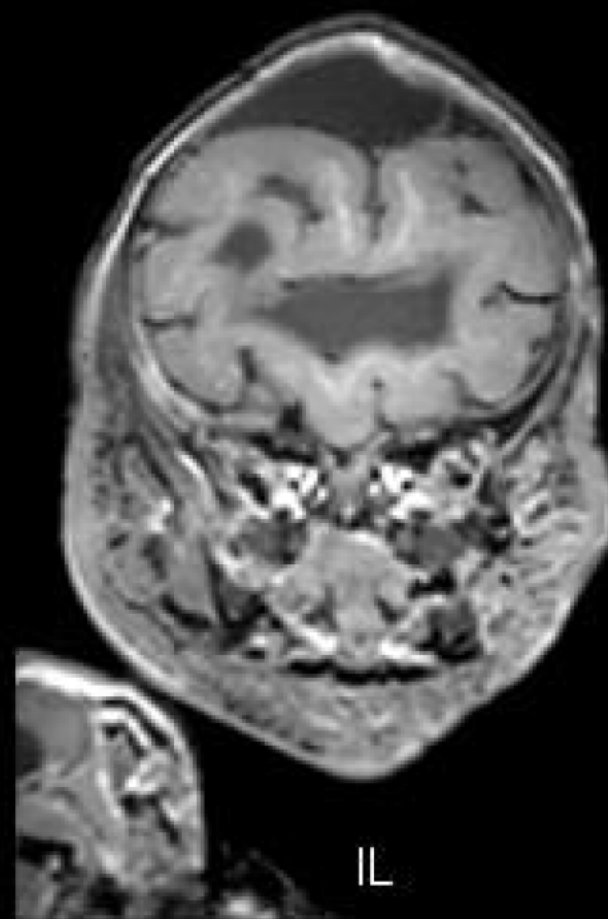
# Clinical Information

**32 year-old G5P2 woman with history of IDDM, Hep C  
(normal LFT and undetectable viral load) and  
depression, with positive exposure and positive test to  
ZIKA virus**

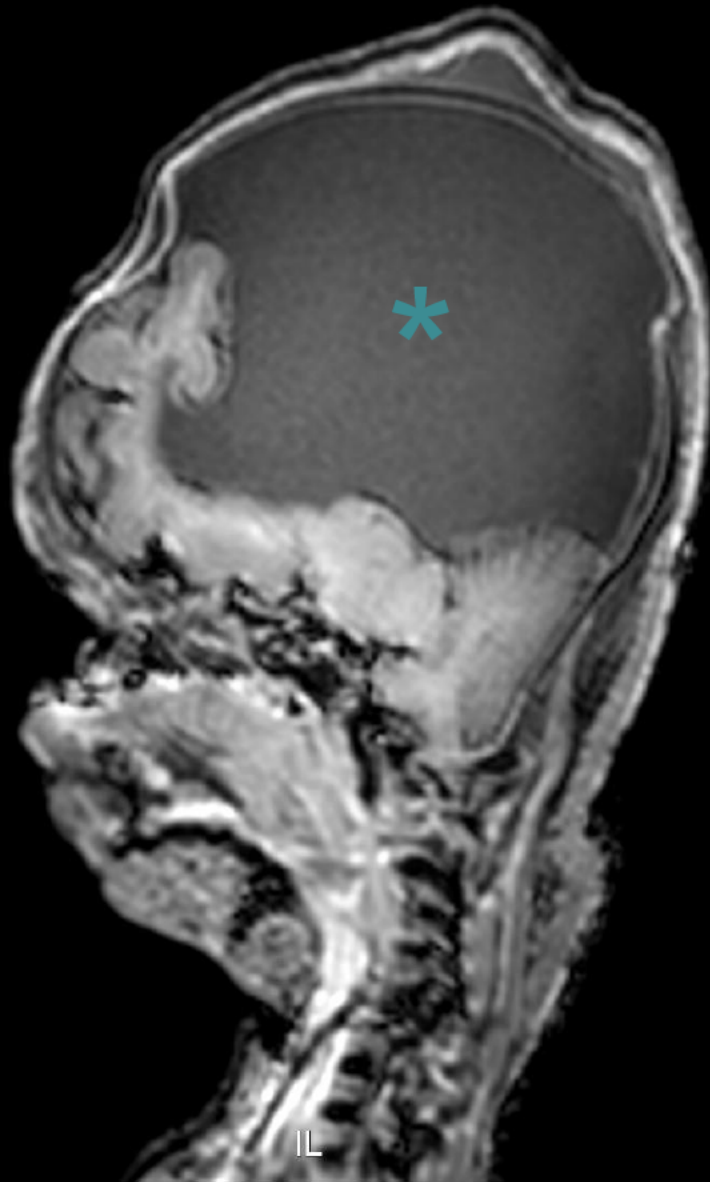
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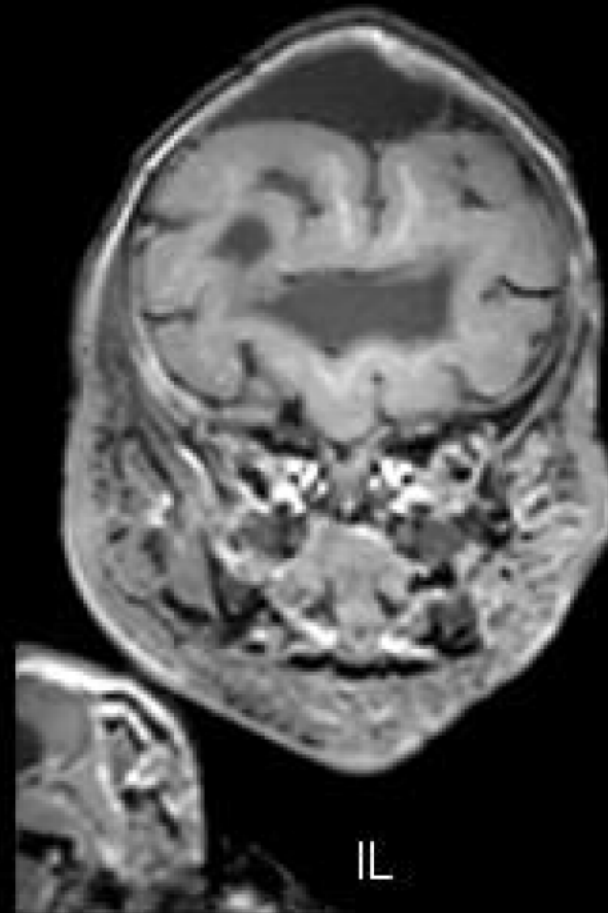
RP



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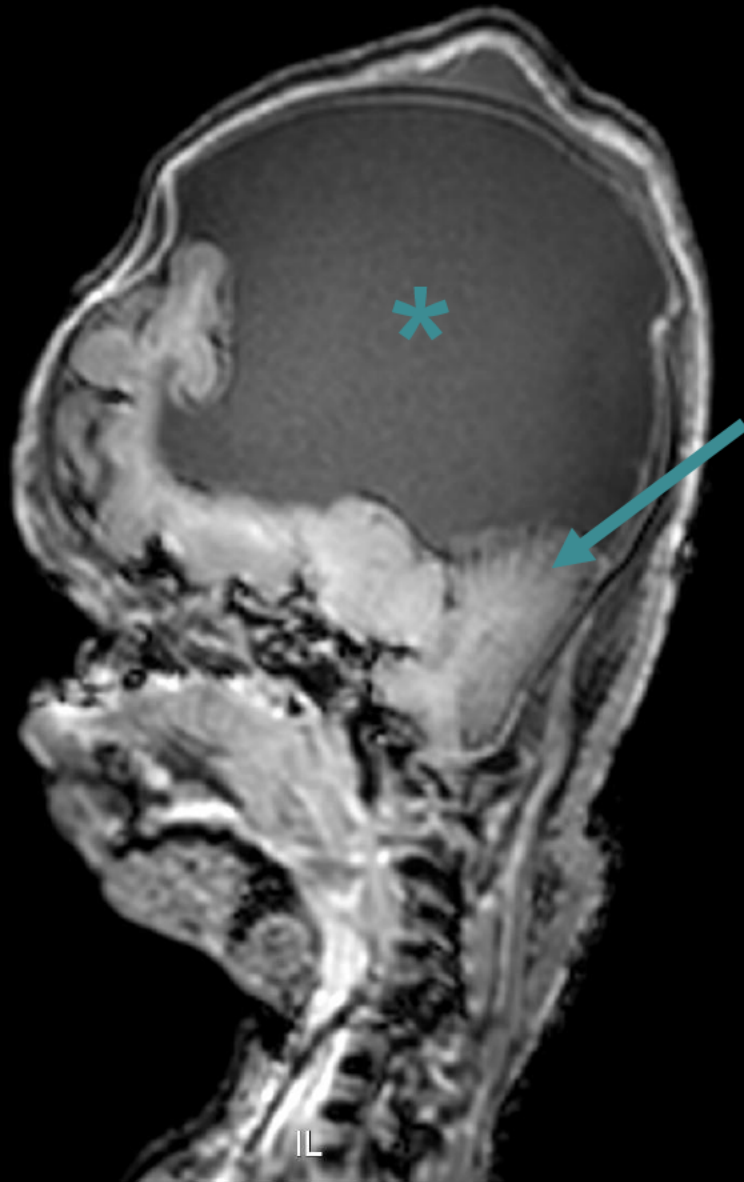


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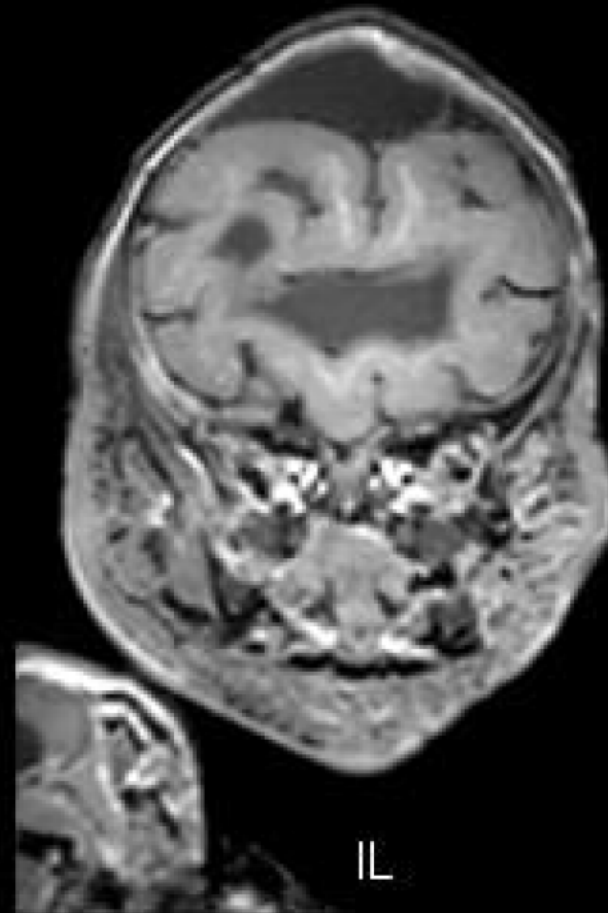


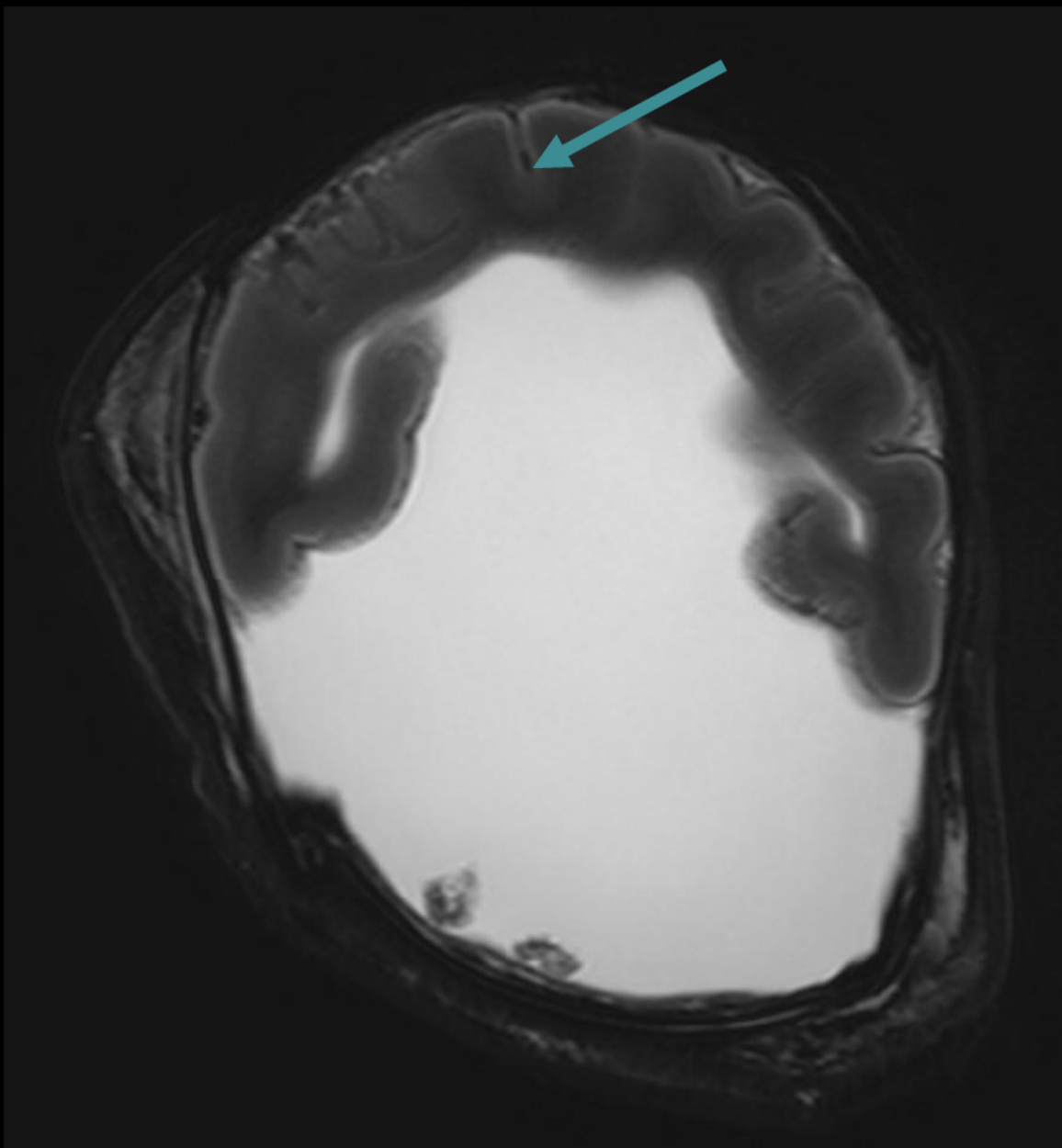


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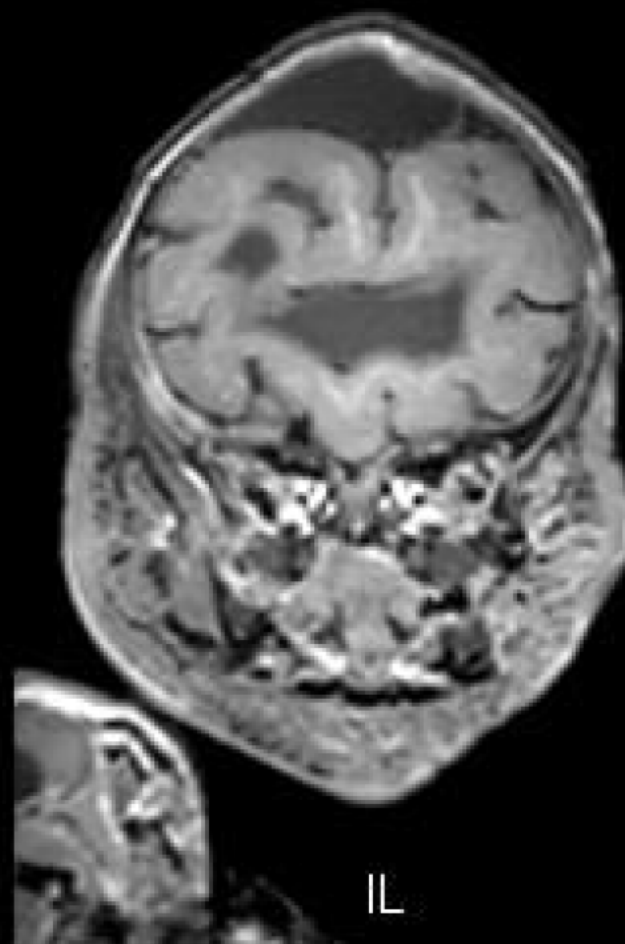
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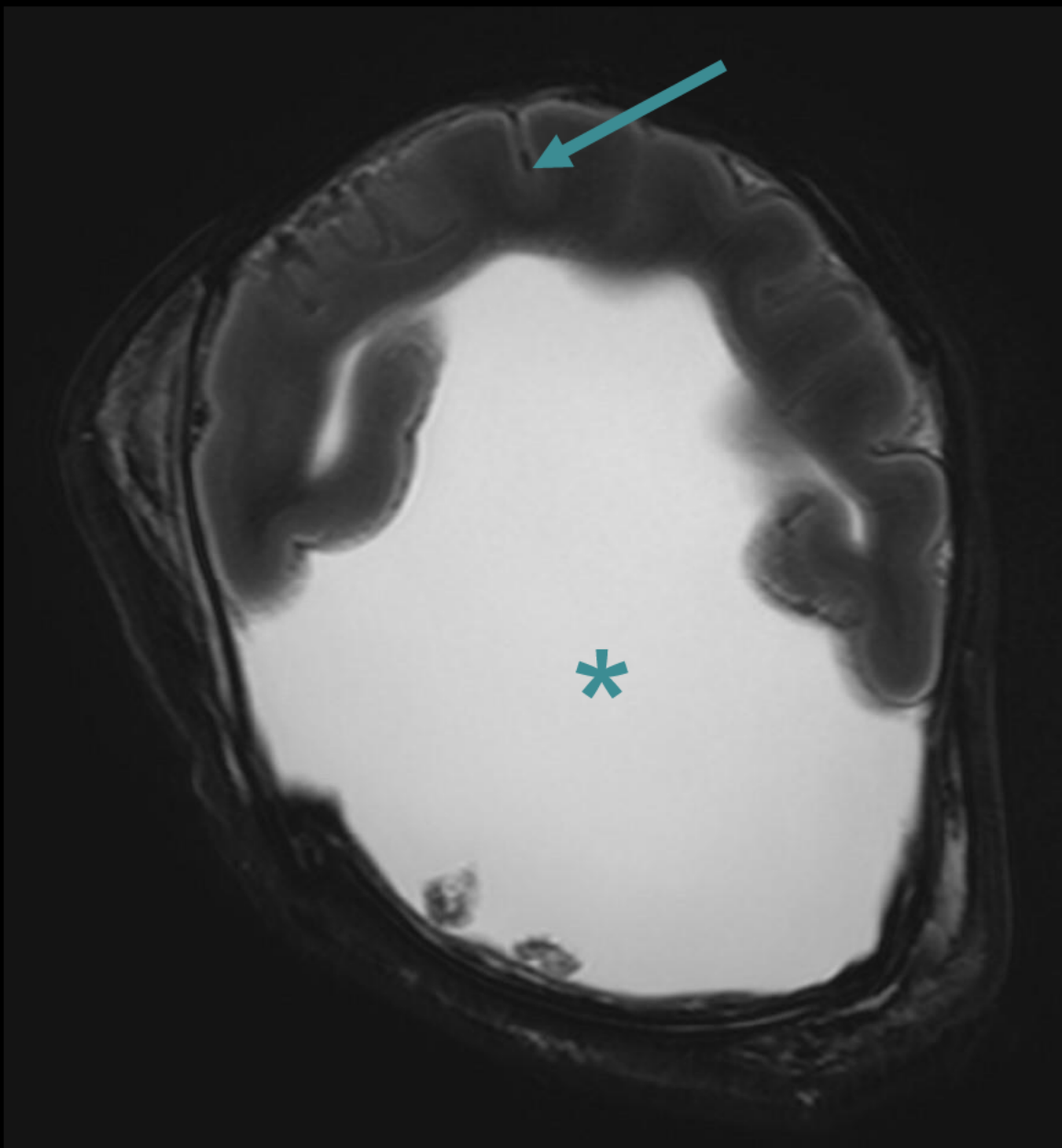


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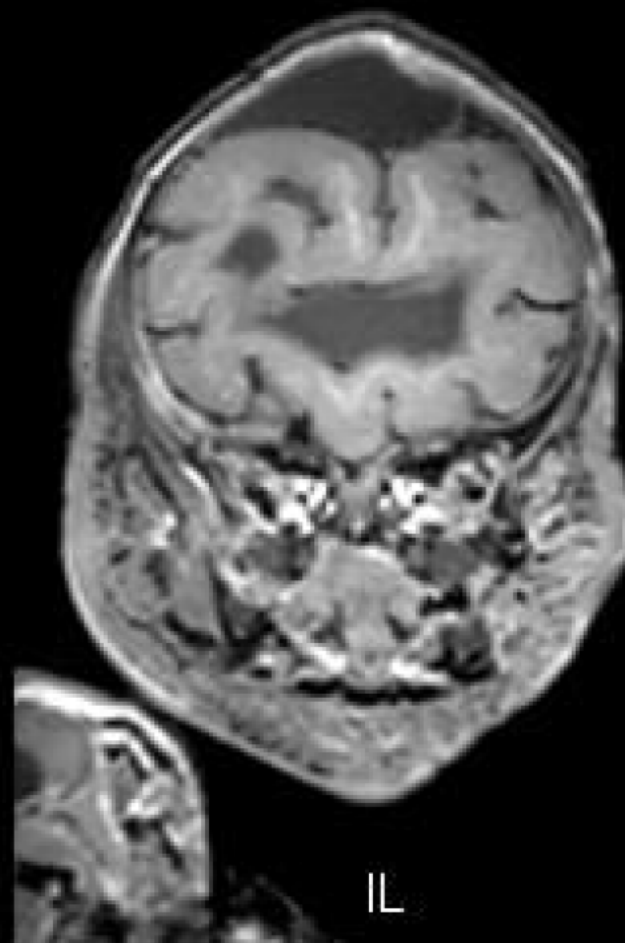


IL



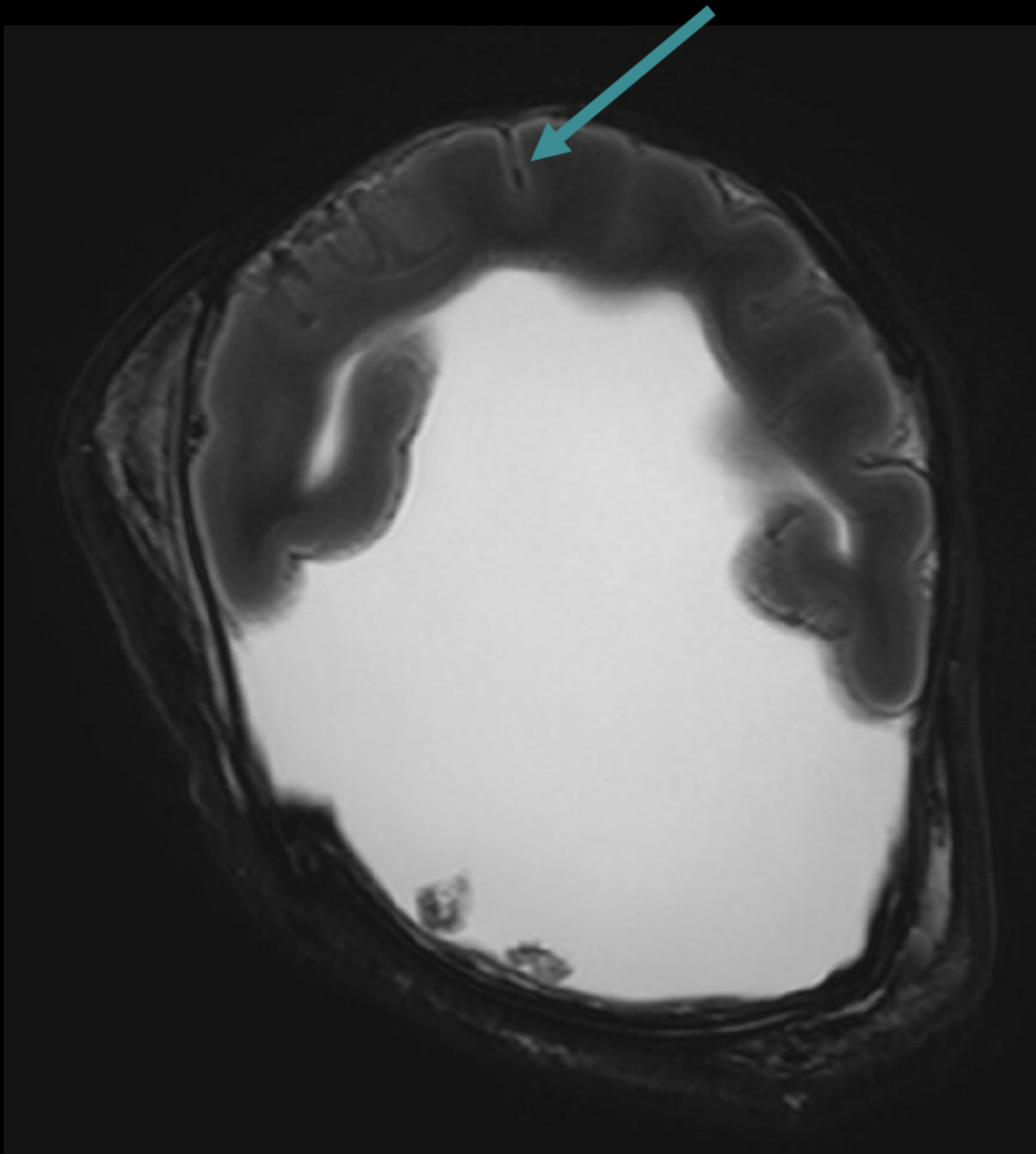
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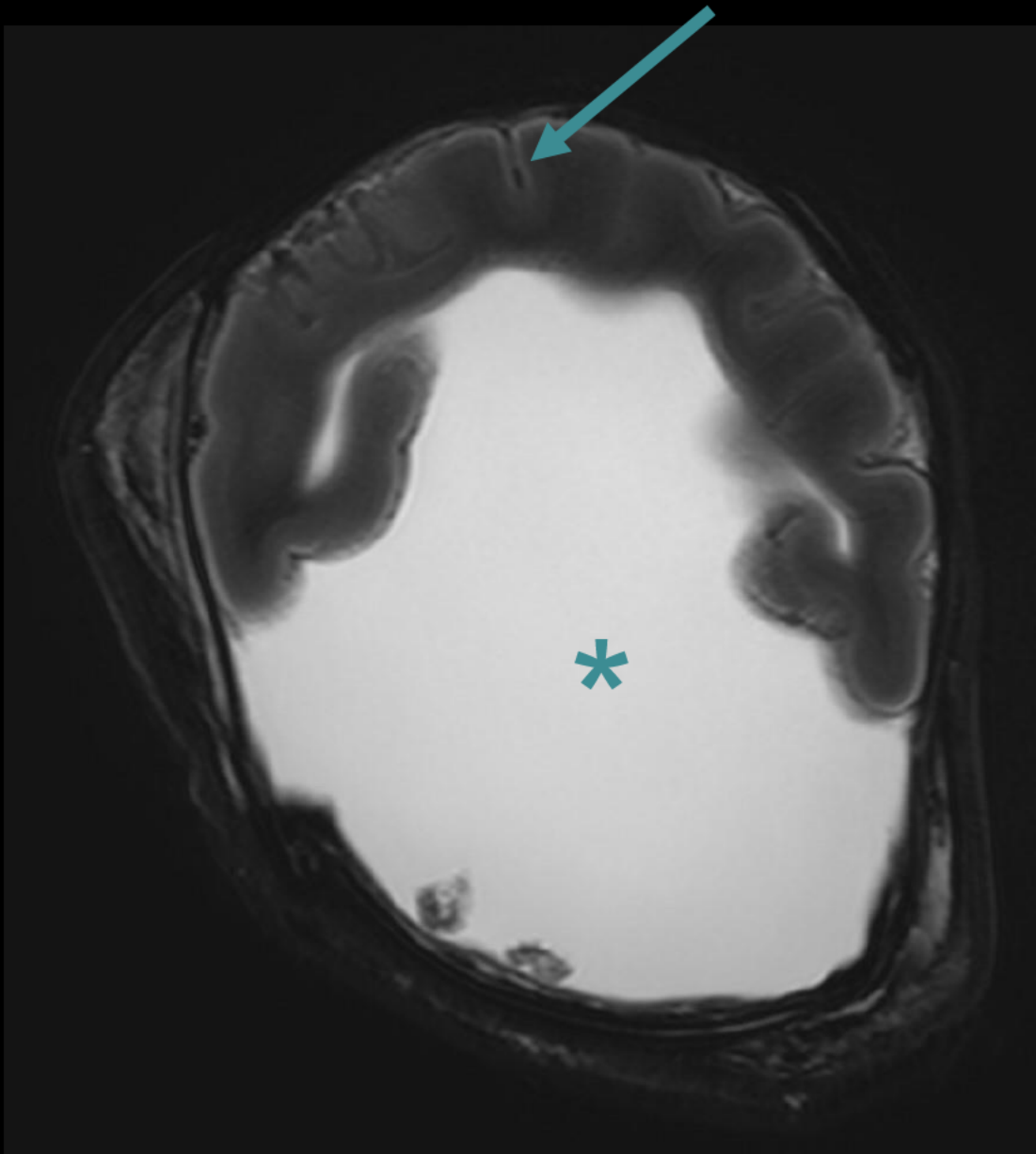
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IL



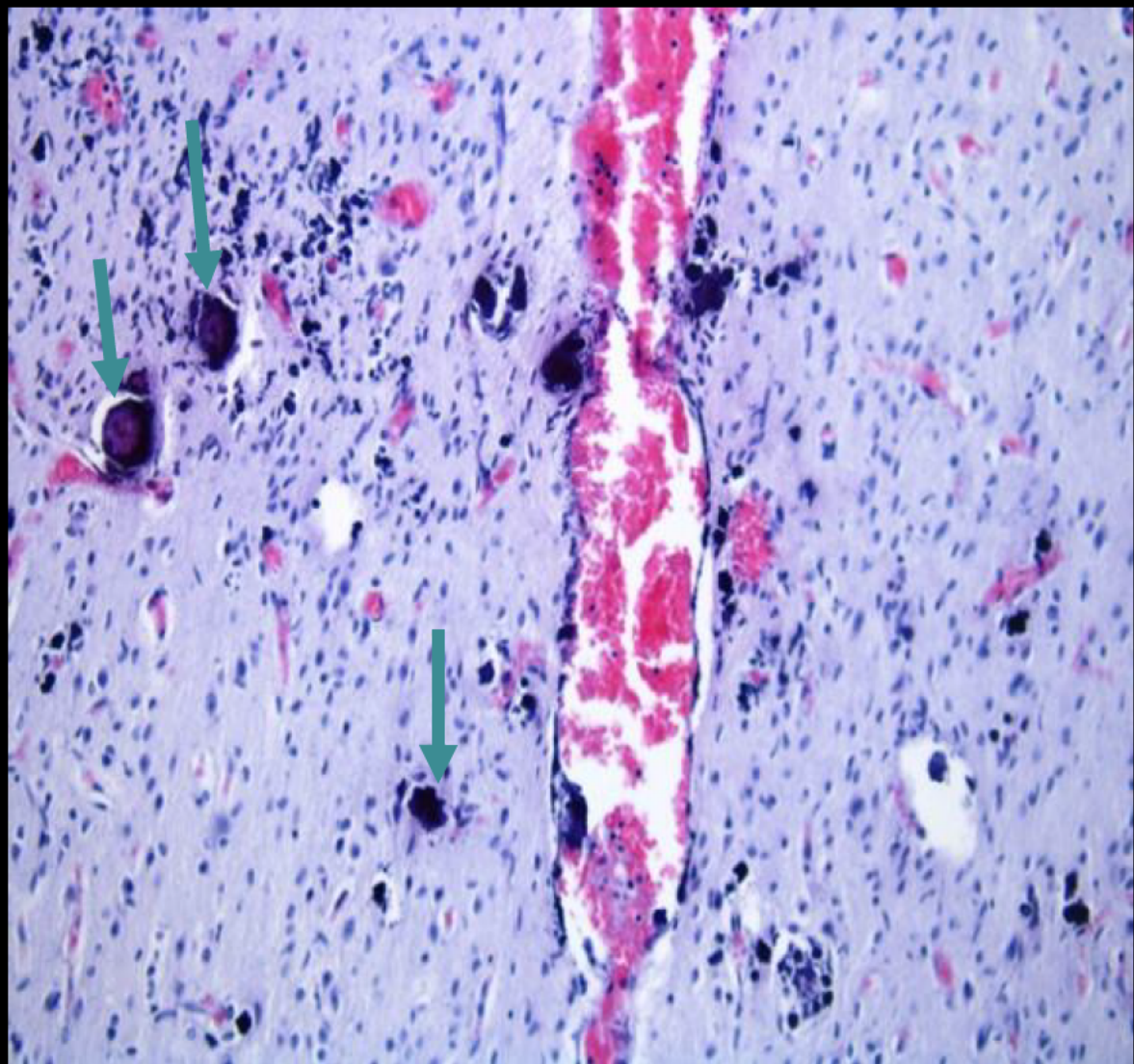
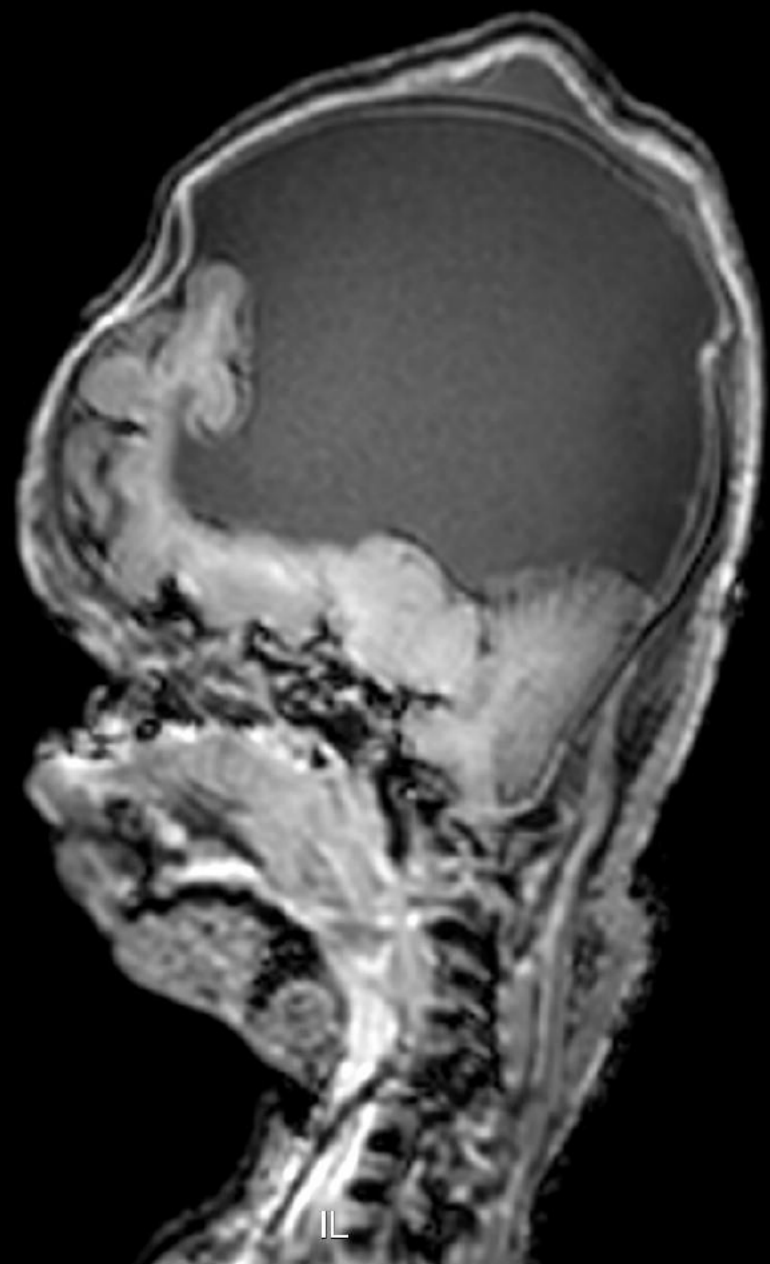












# Holoprosencephaly/Congenital Zika Infection

Jidi Gao

Tufts Medical Center

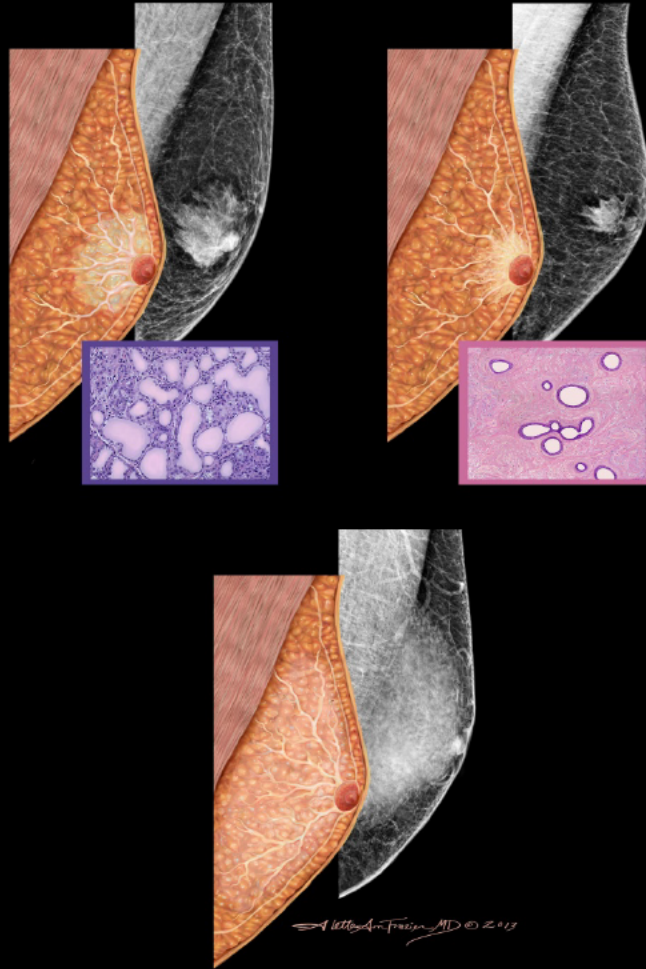
Boston, MA



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# Breast Best Case



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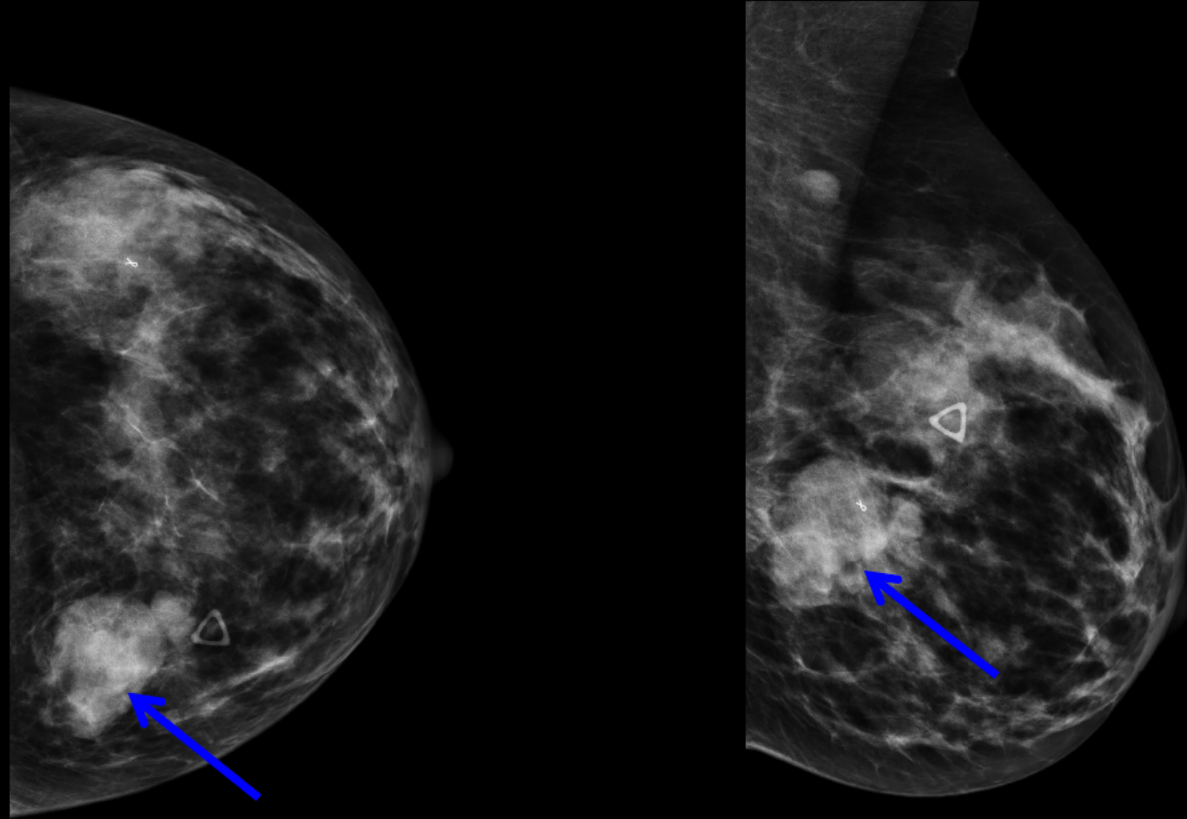
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# Clinical Information

**48-yo female with a palpable left upper inner quadrant breast mass. Family history remarkable for two sisters with breast cancer.**

# Mammogram



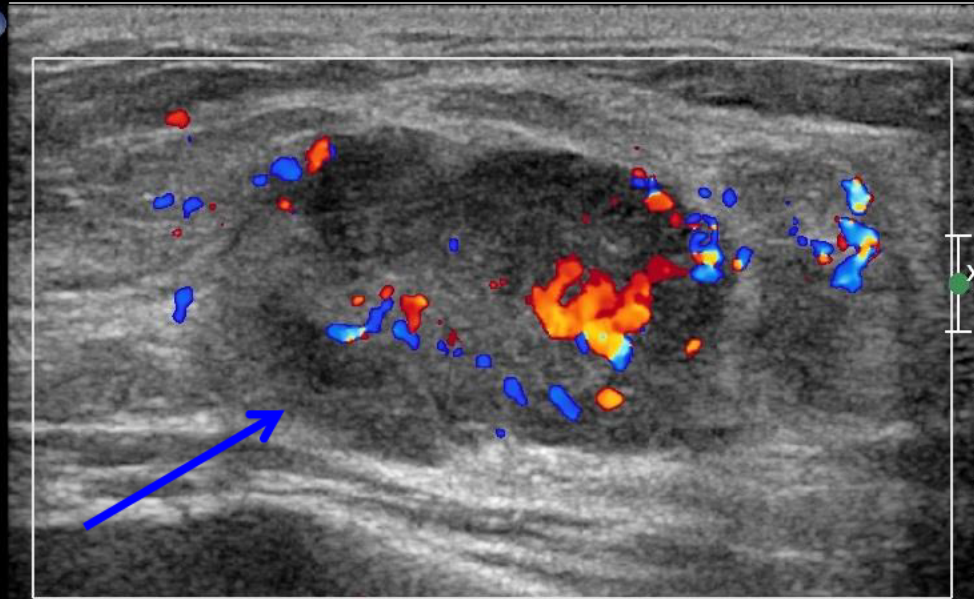
# Breast US

FR 4Hz  
R1

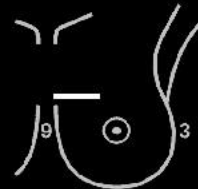
2D  
75%  
C 60  
P Med  
Res

CF  
77%  
487Hz  
WF 26Hz  
Low

P



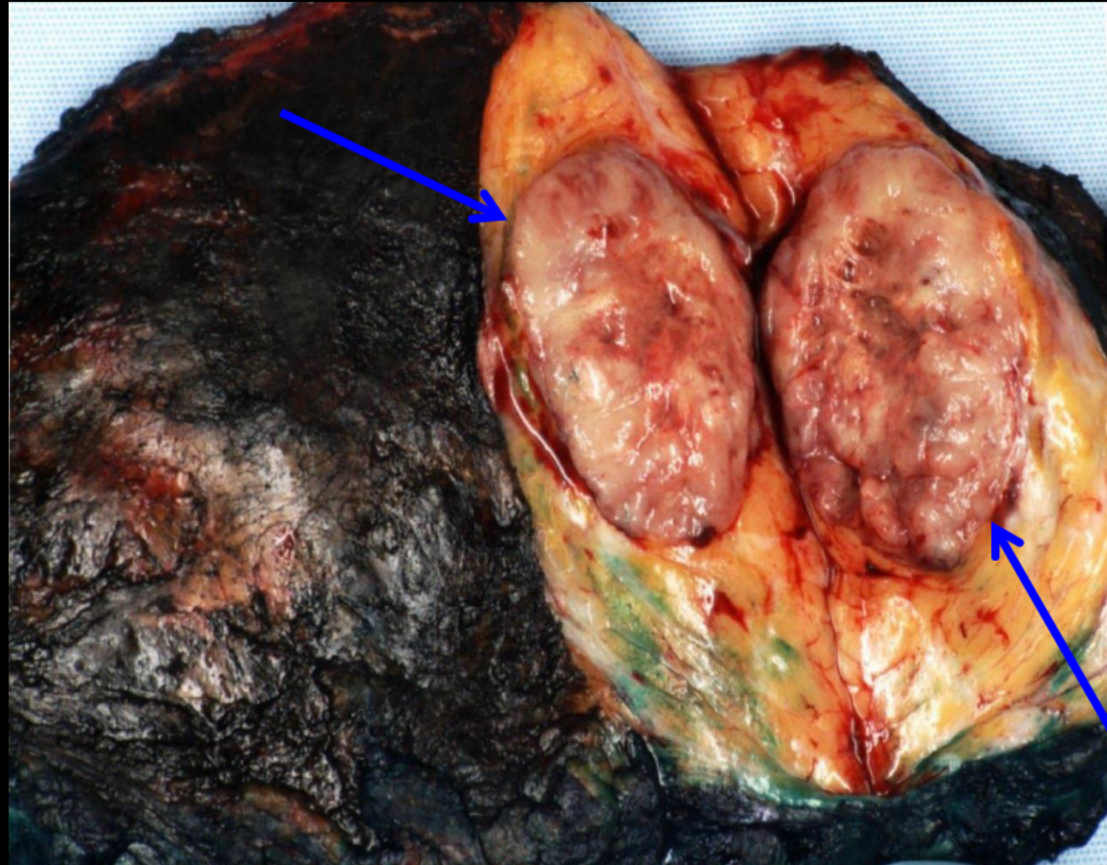
M3 M5  
+2.5  
-2.5  
cm/s



Lt Breast 10:00 8 CM FN PALP 4.0-

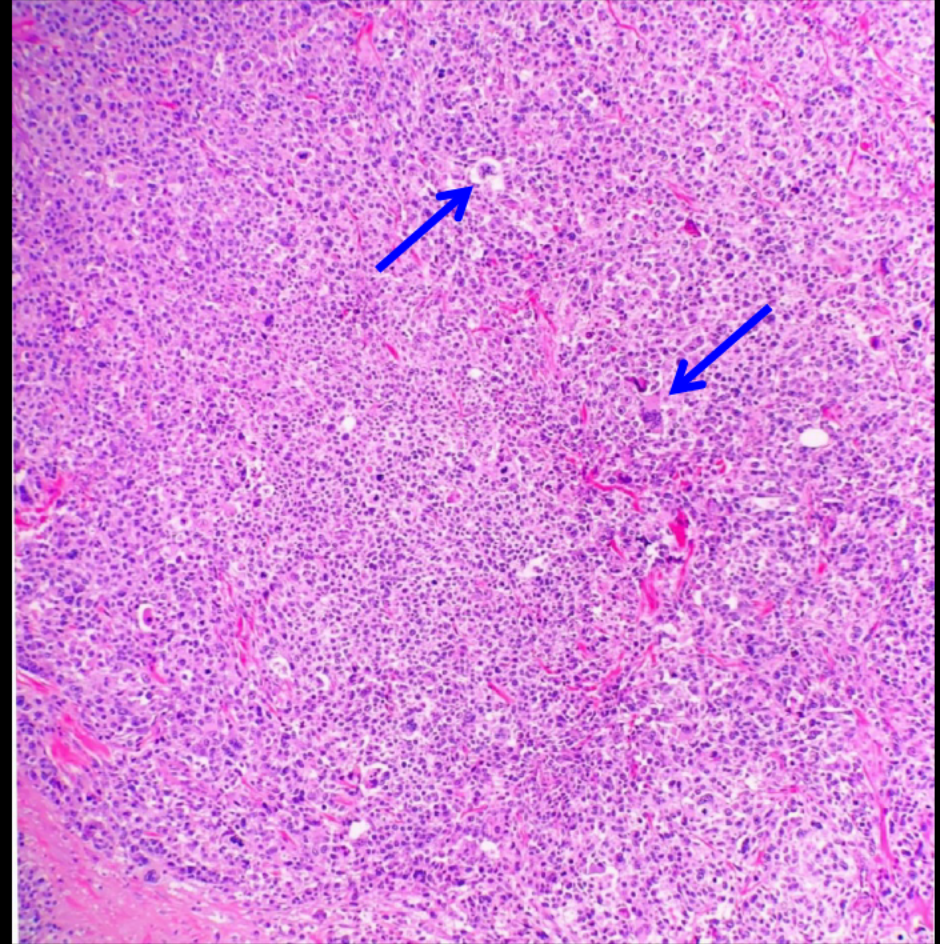
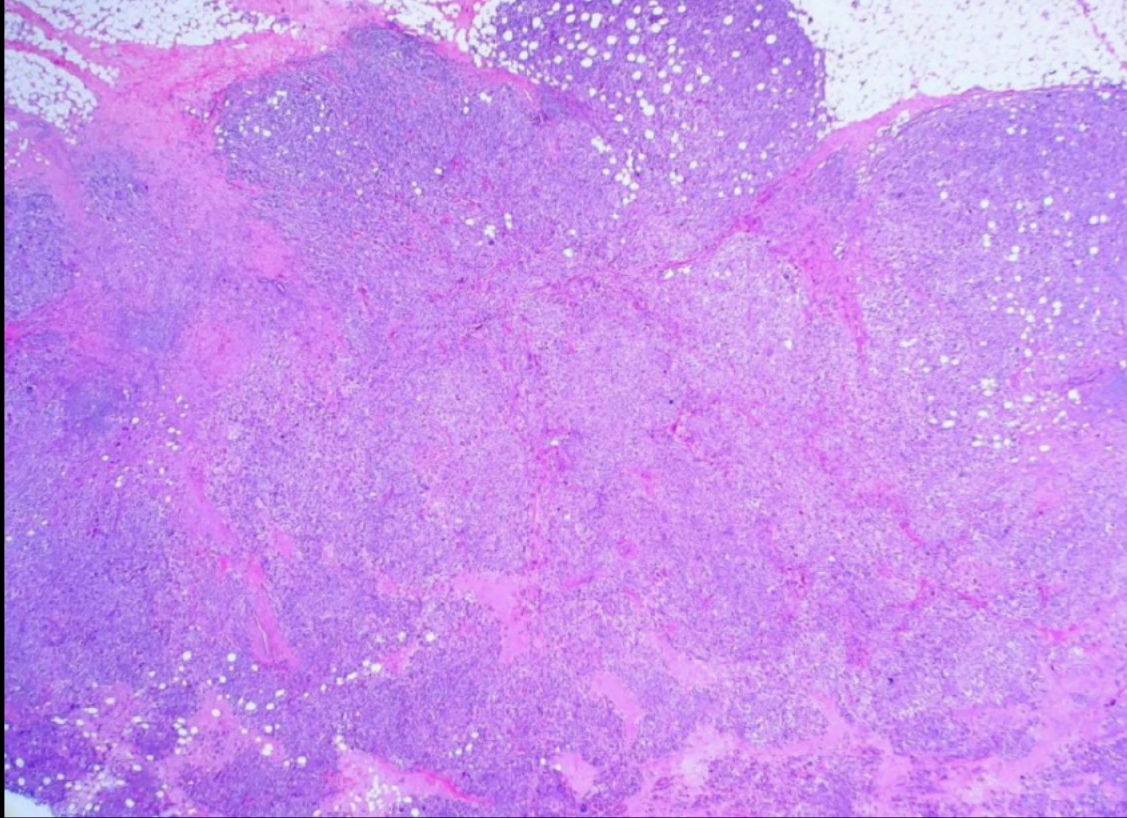


# Gross



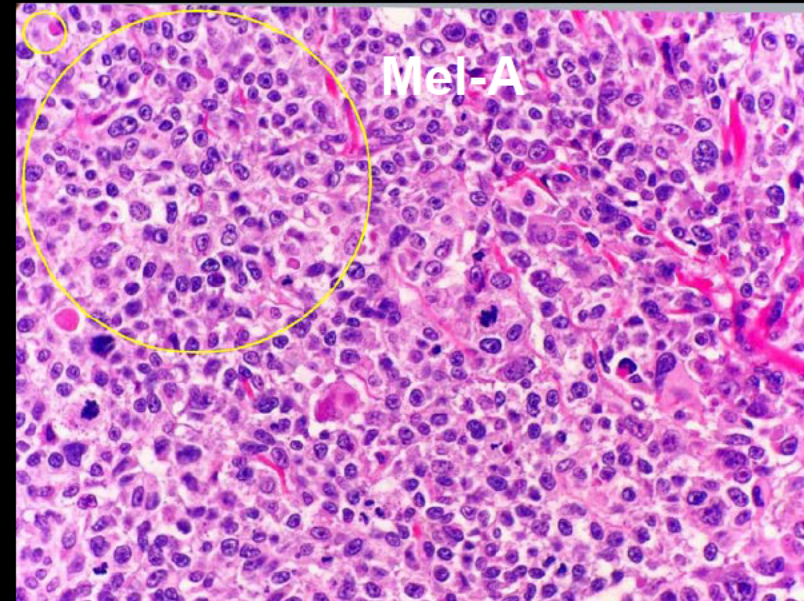
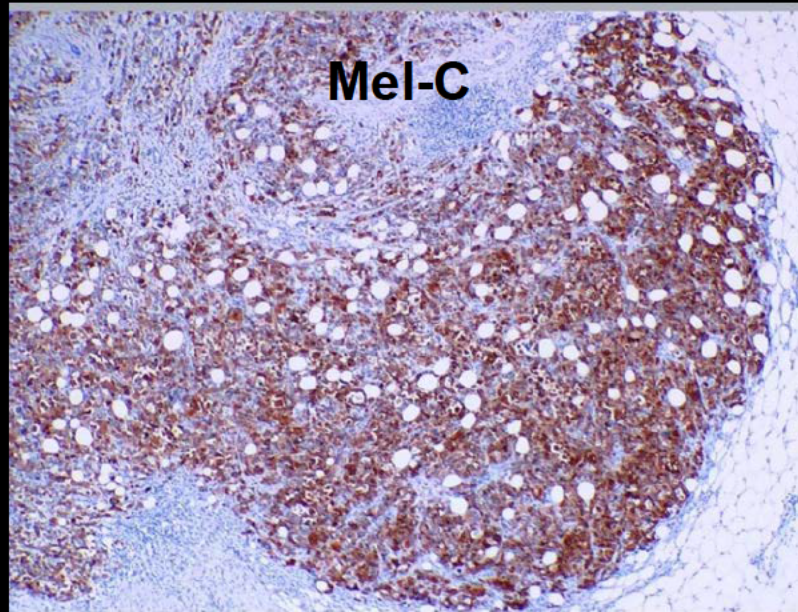


# Histology





# Histology





# Primary Melanoma of the Breast

Iliannie Rodriguez Chaluissant  
Hartford Hospital  
Hartford, Connecticut



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# Genitourinary Best Case



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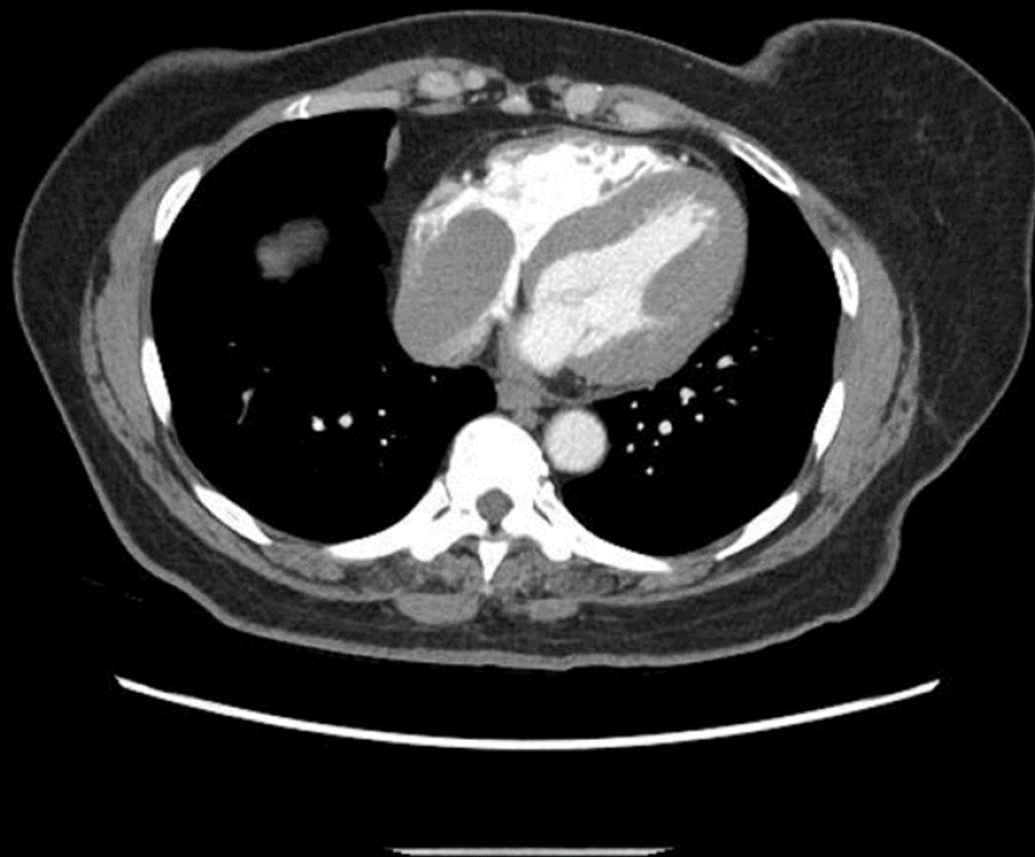
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# Clinical Information

**60 year old African American female presents for a wellness exam where she was found to have an abnormal EKG. A transthoracic echocardiogram was performed which revealed a right atrial mass.**

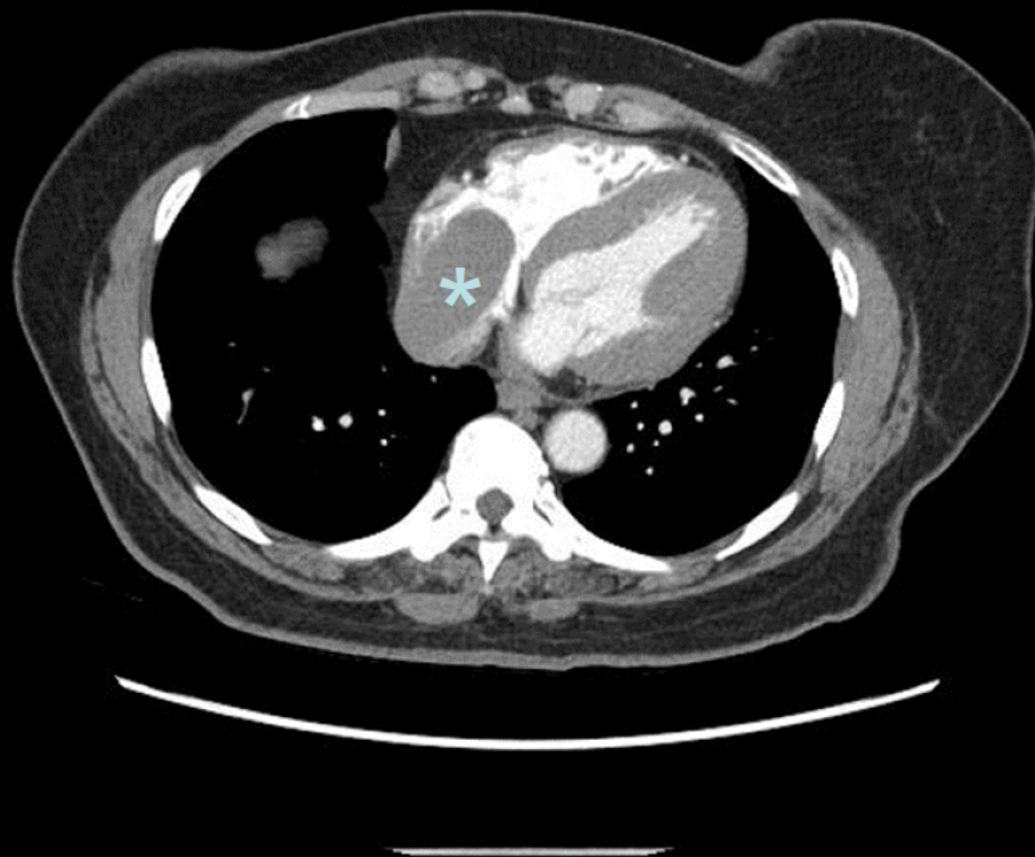




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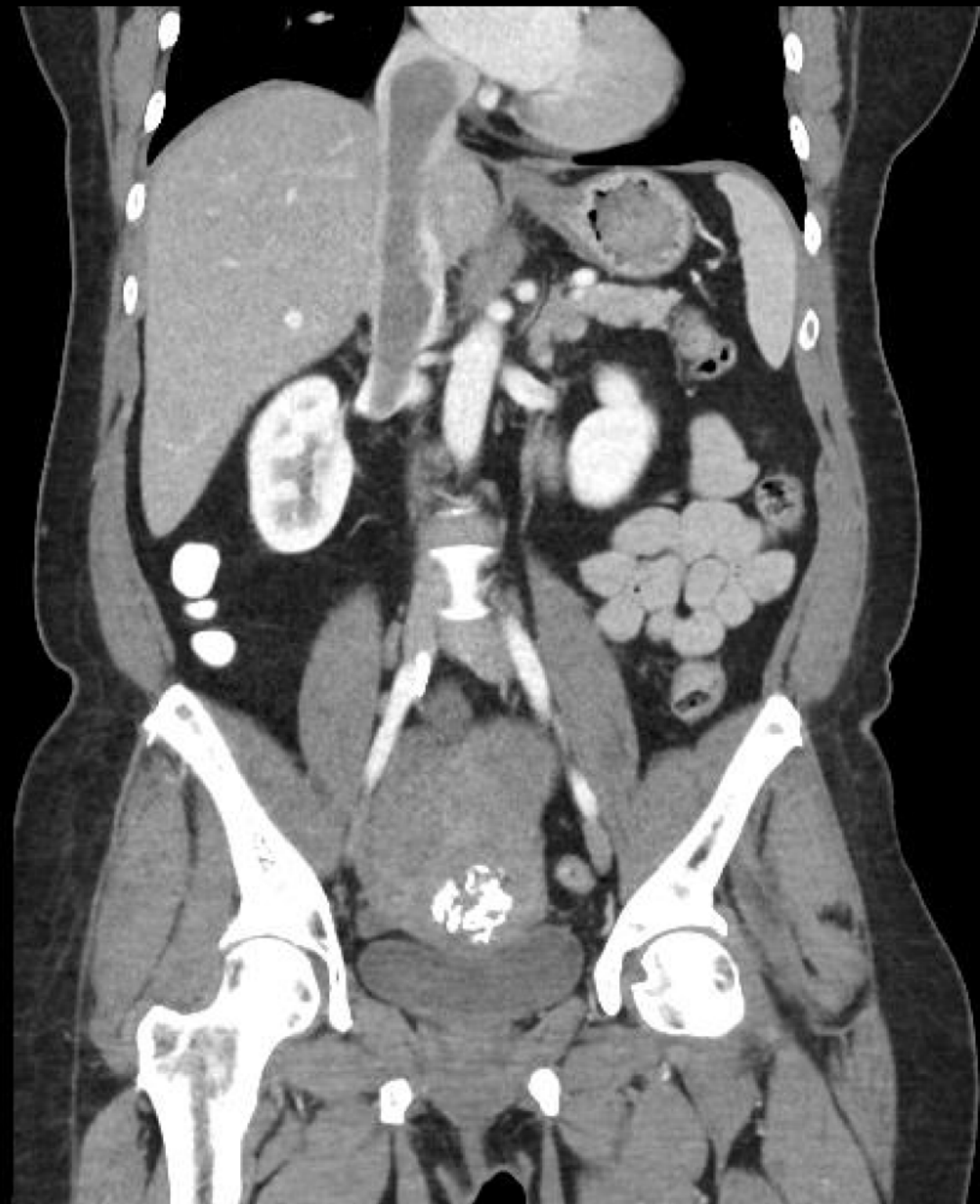
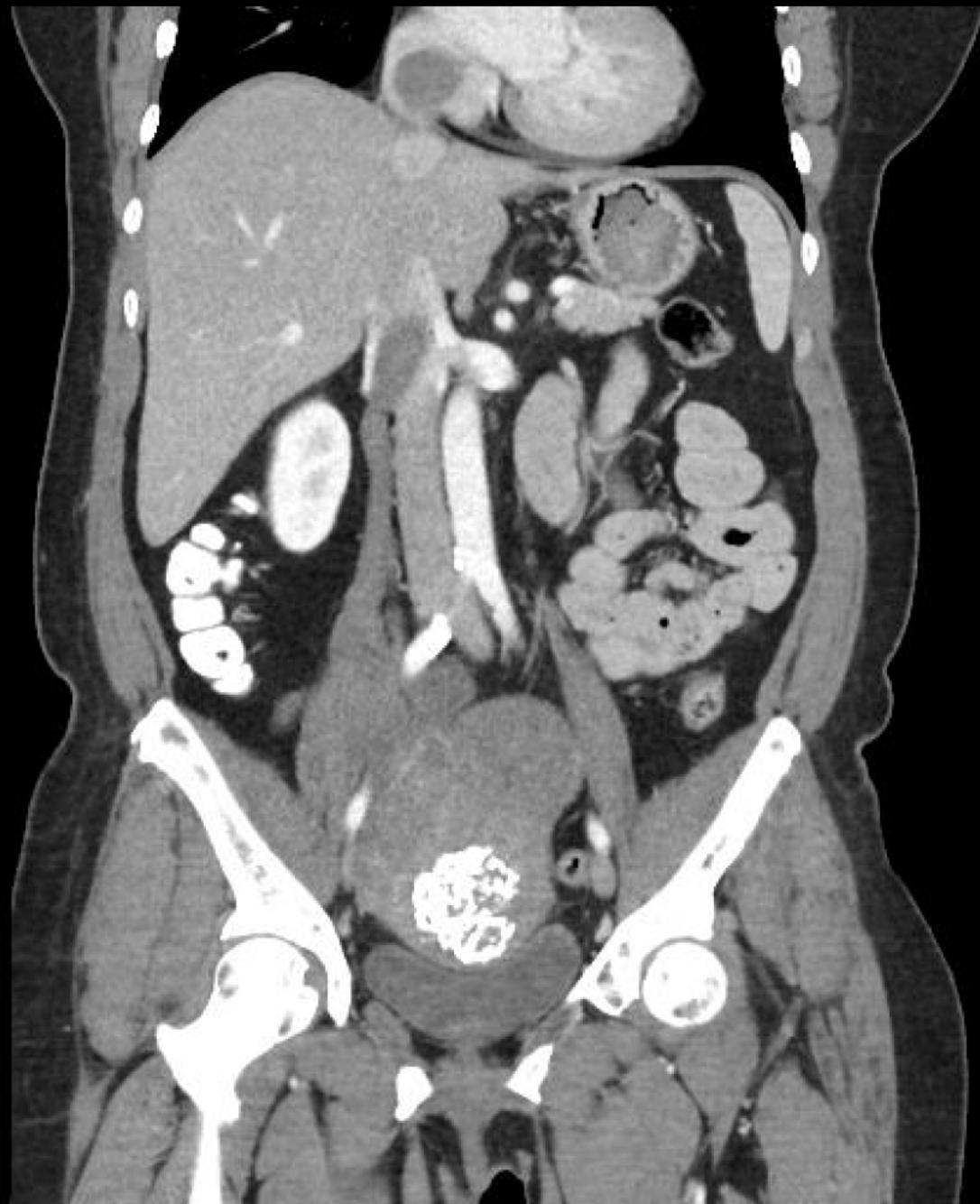
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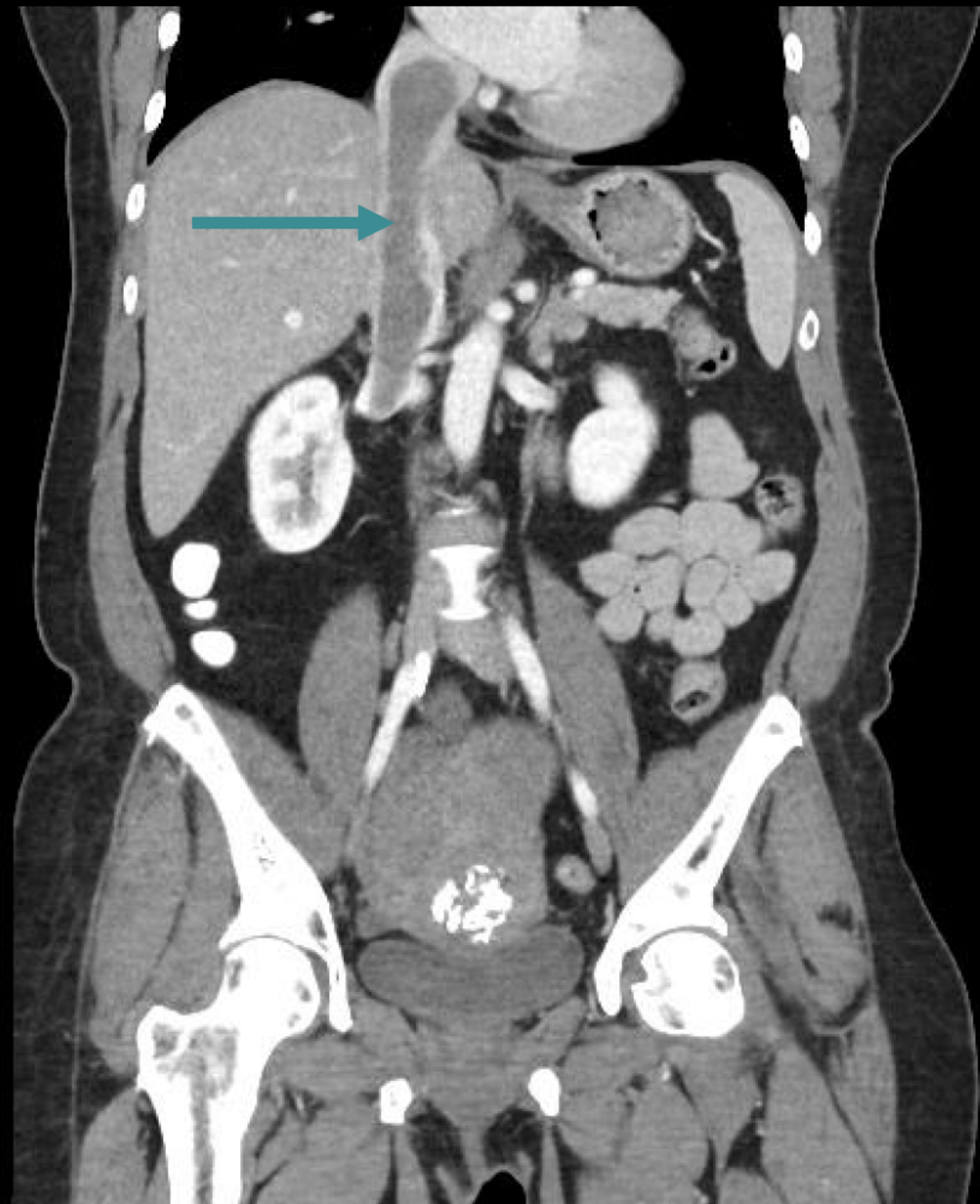
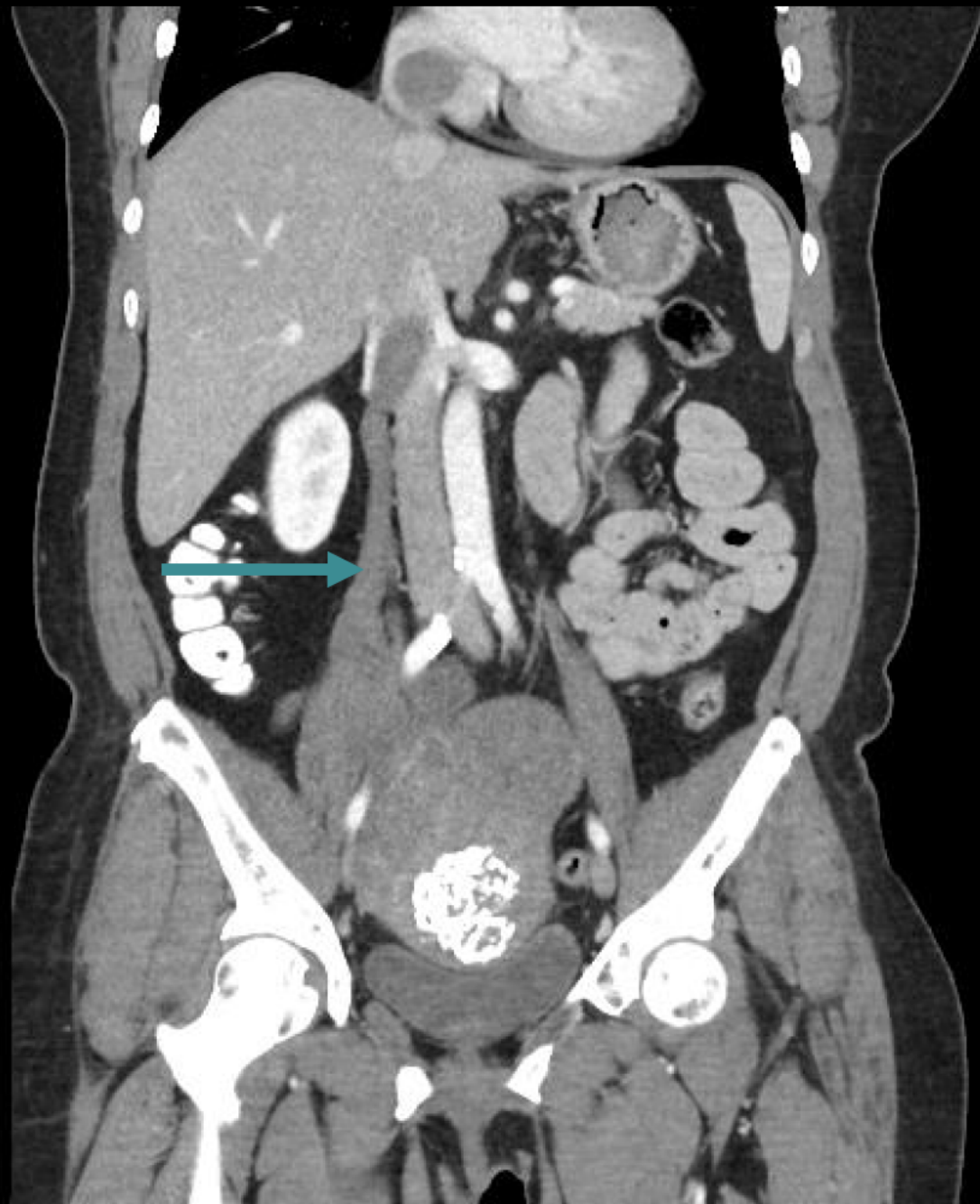
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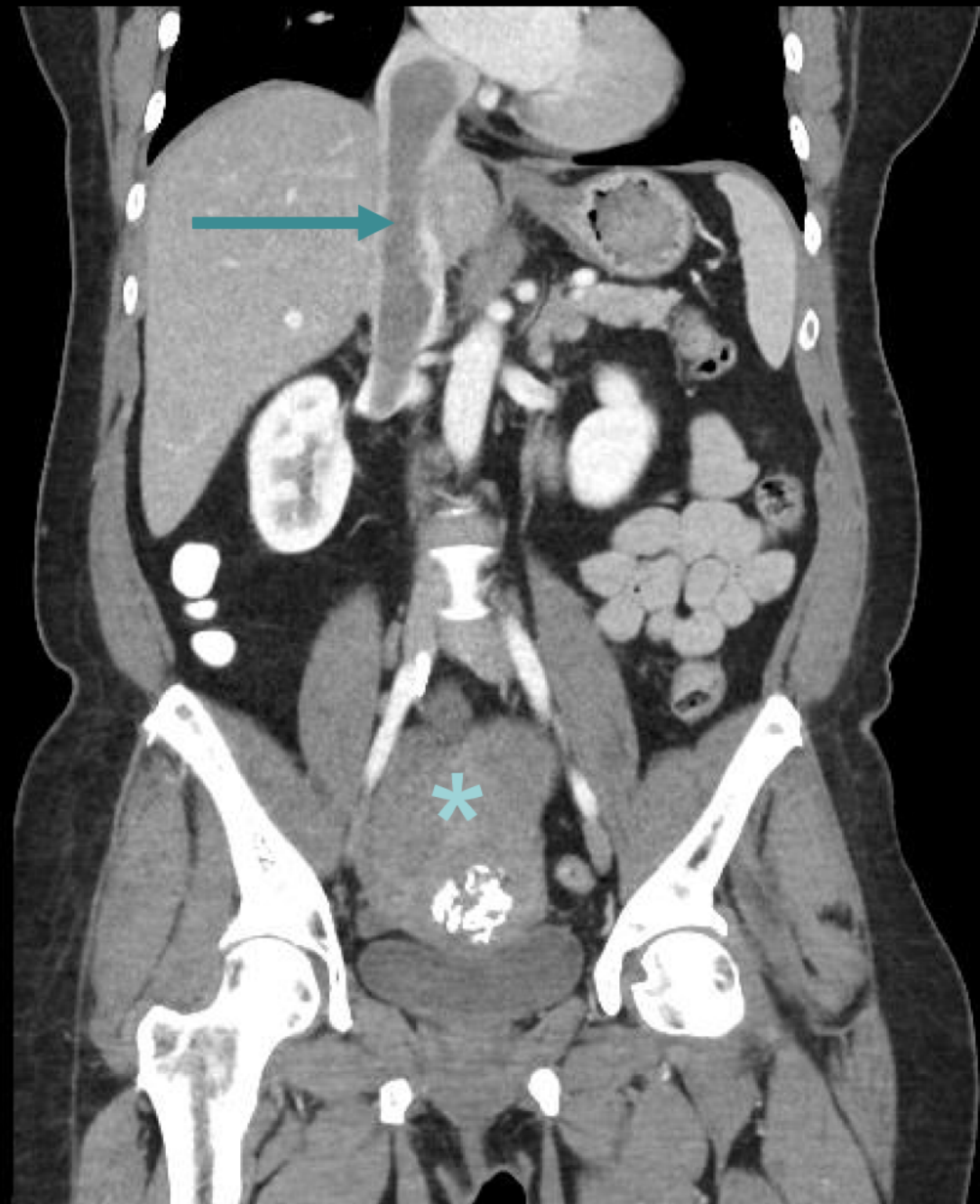
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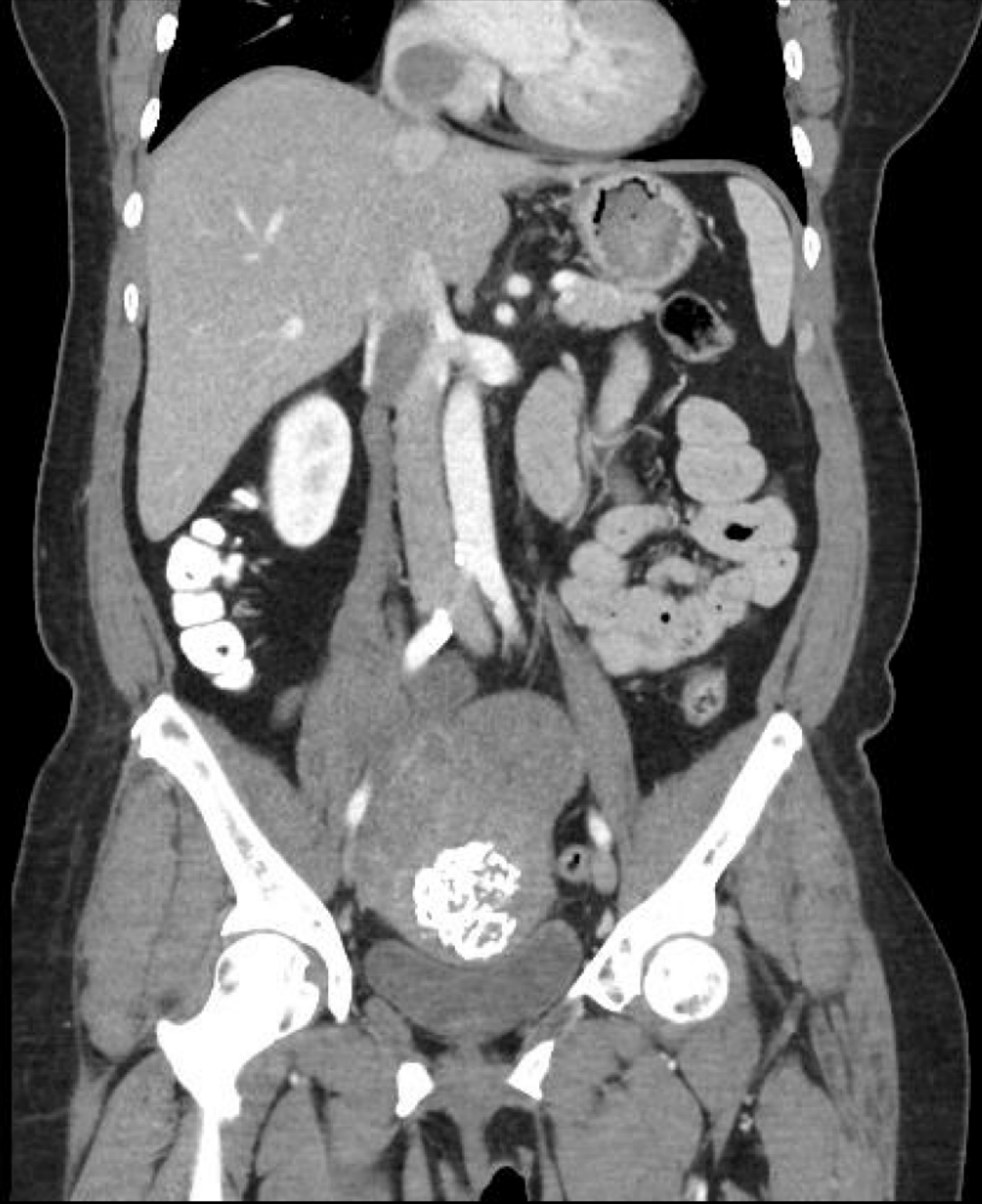




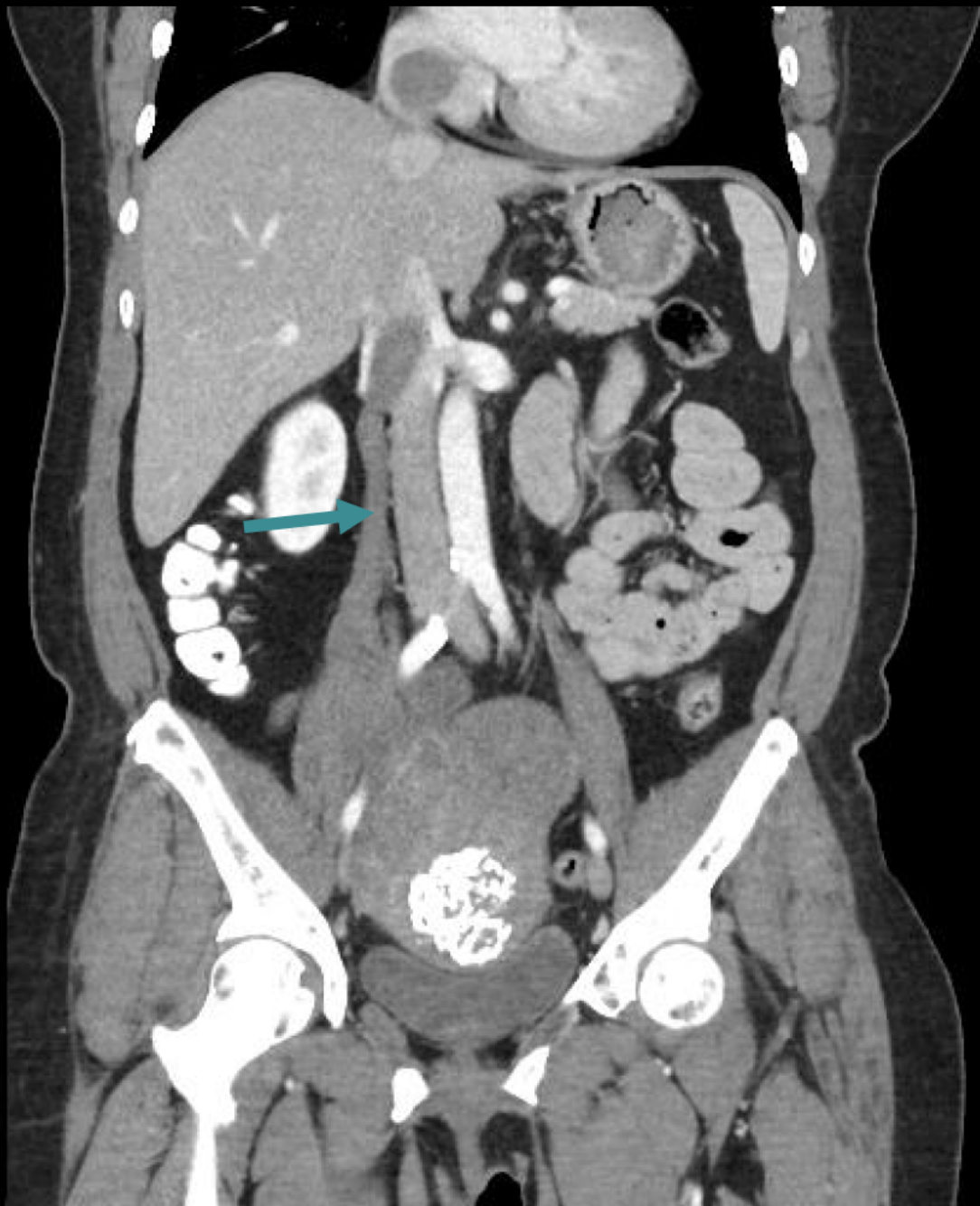


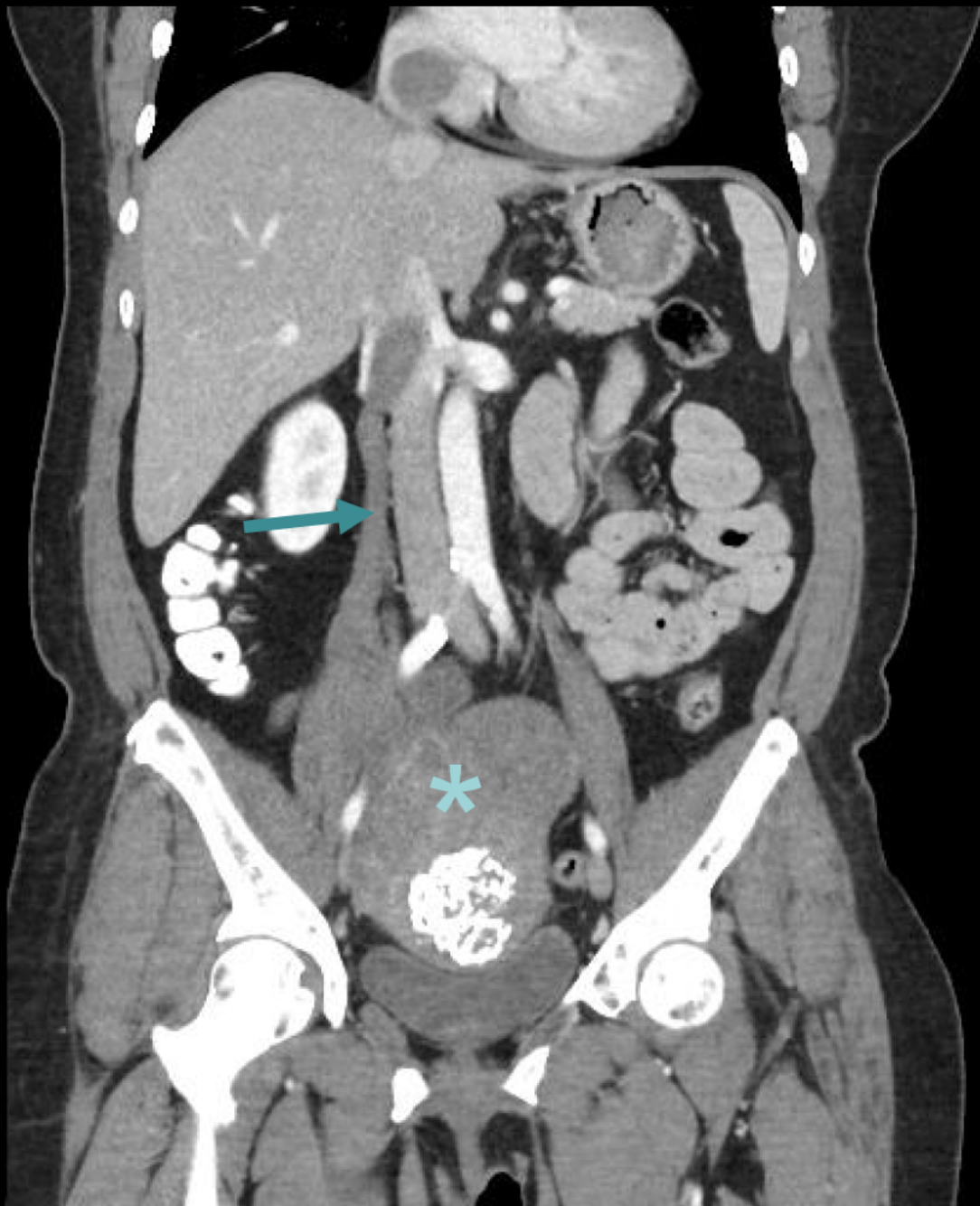




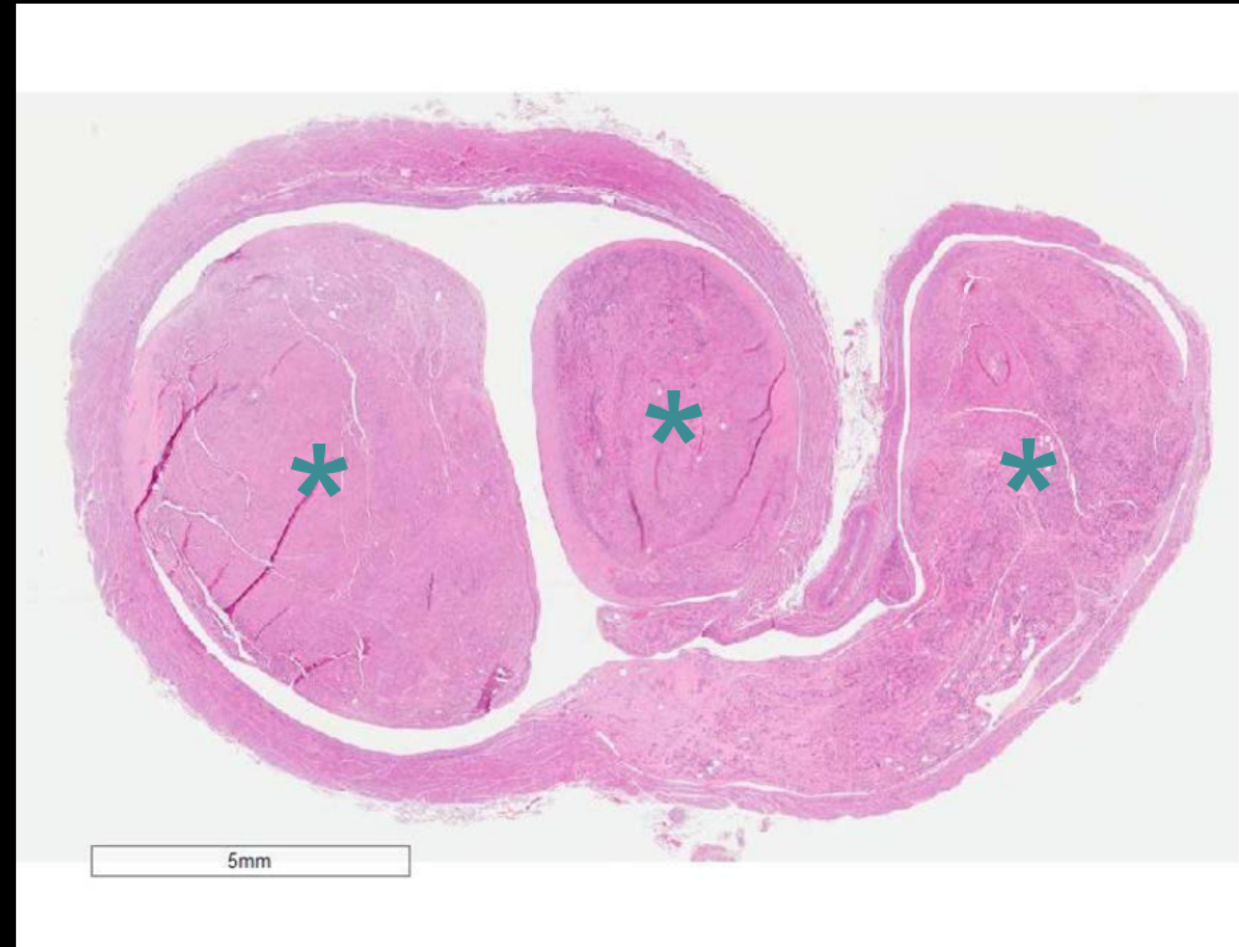




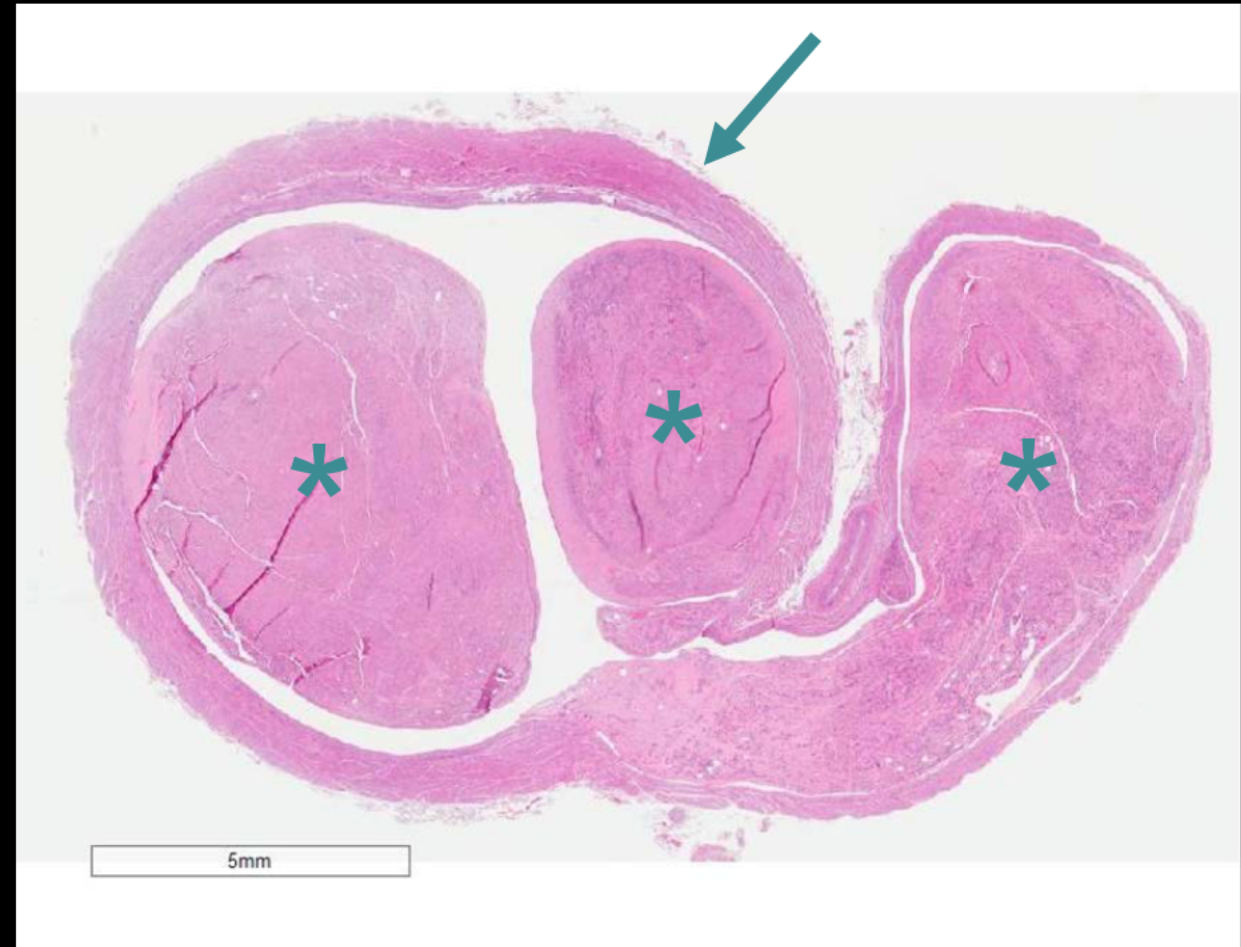
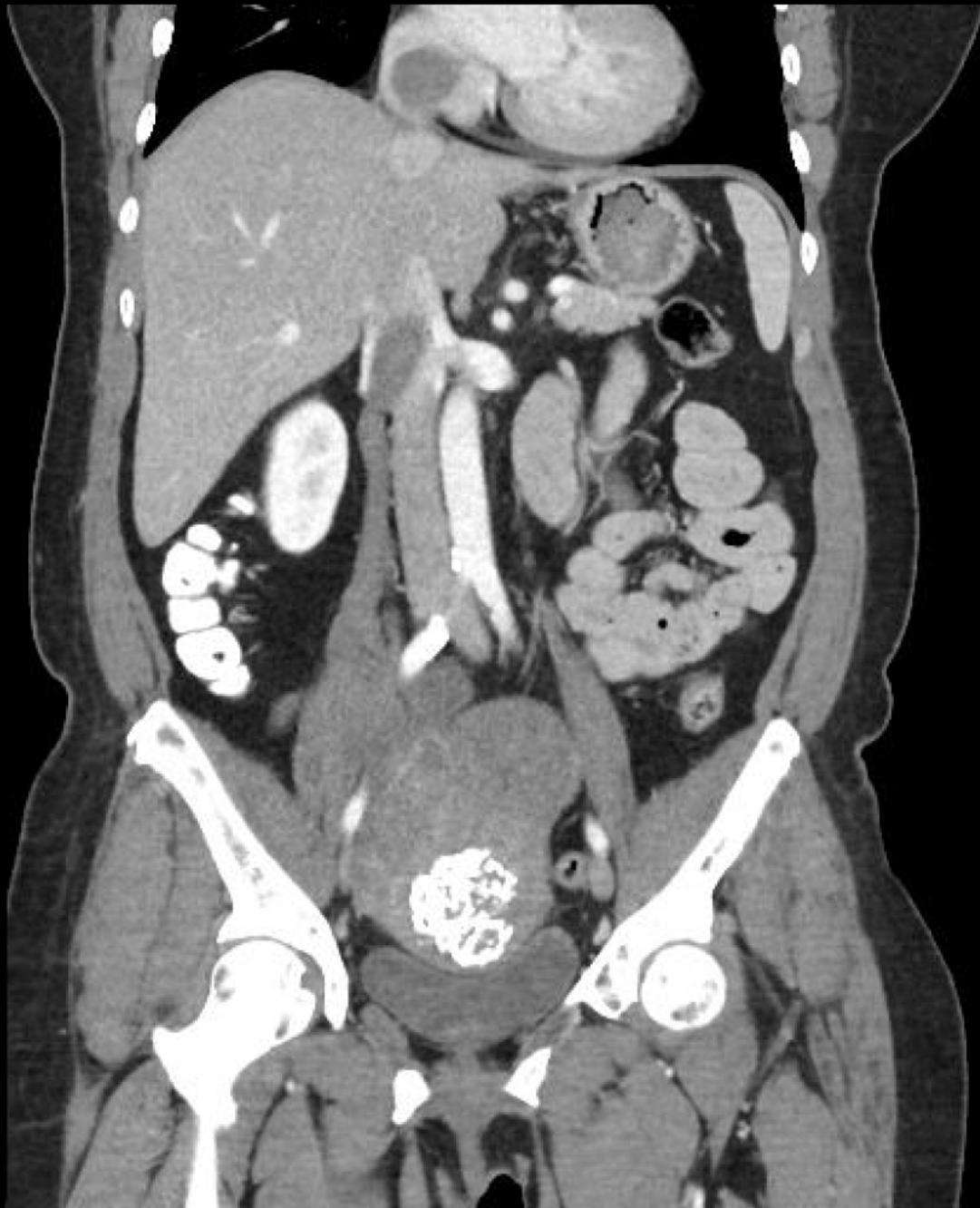












# Intravenous Leiomyoma

**Brian Trieu, MD**

**University of Texas**

**Galveston, TX**

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