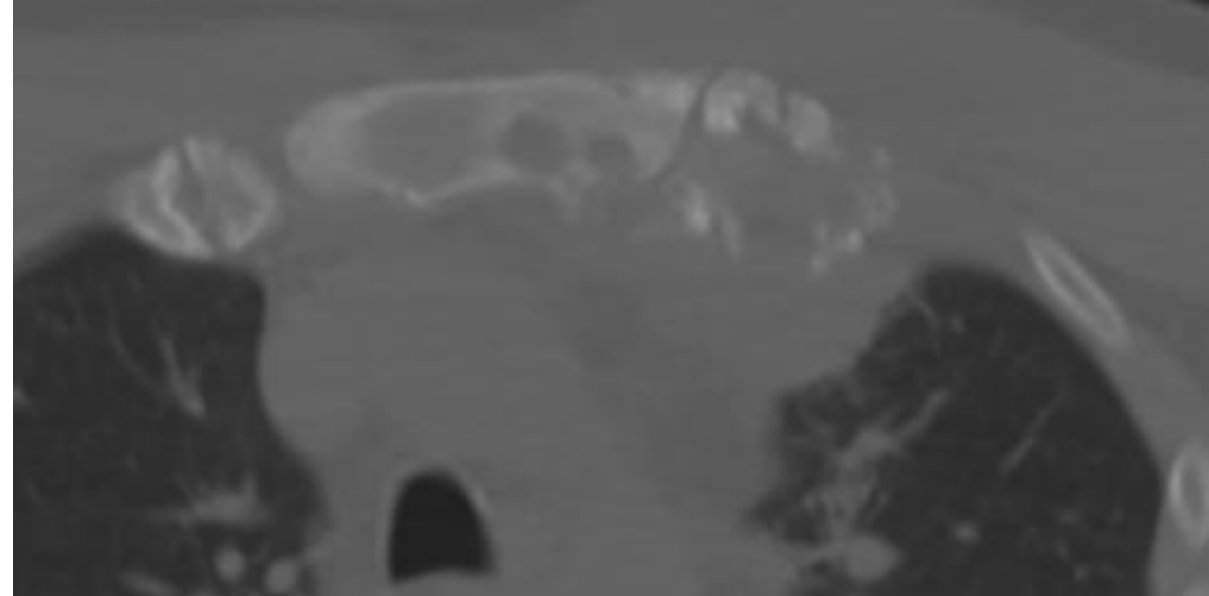
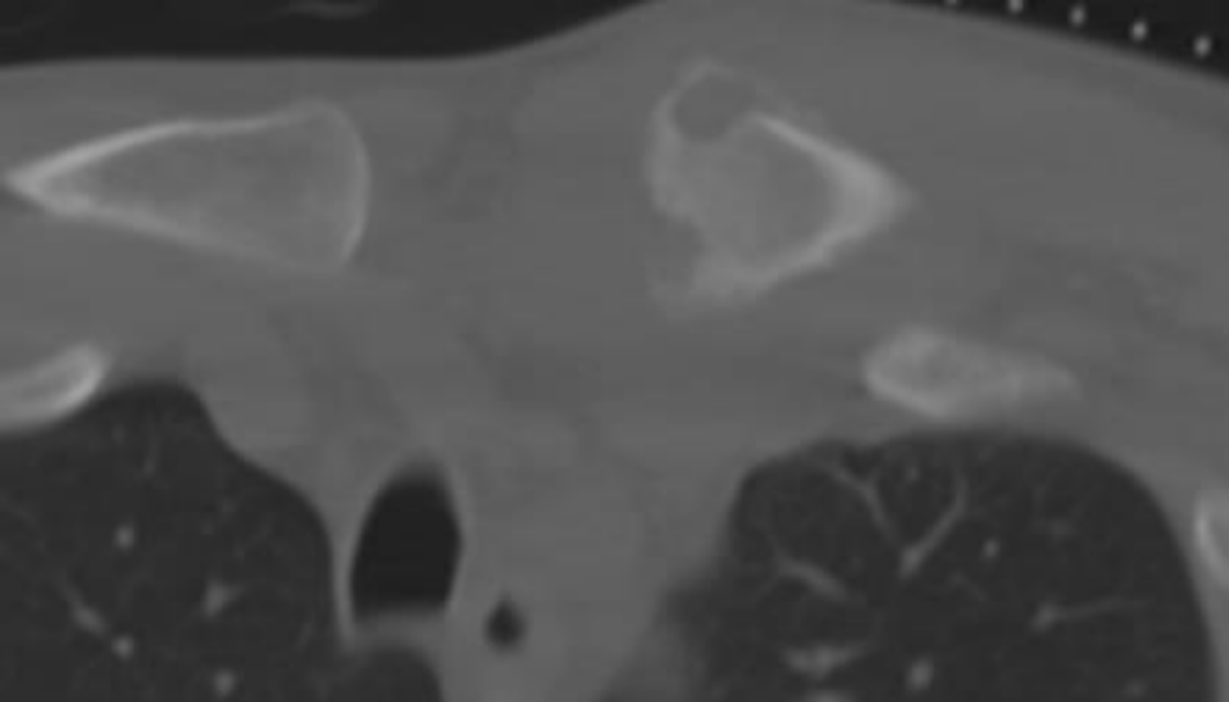
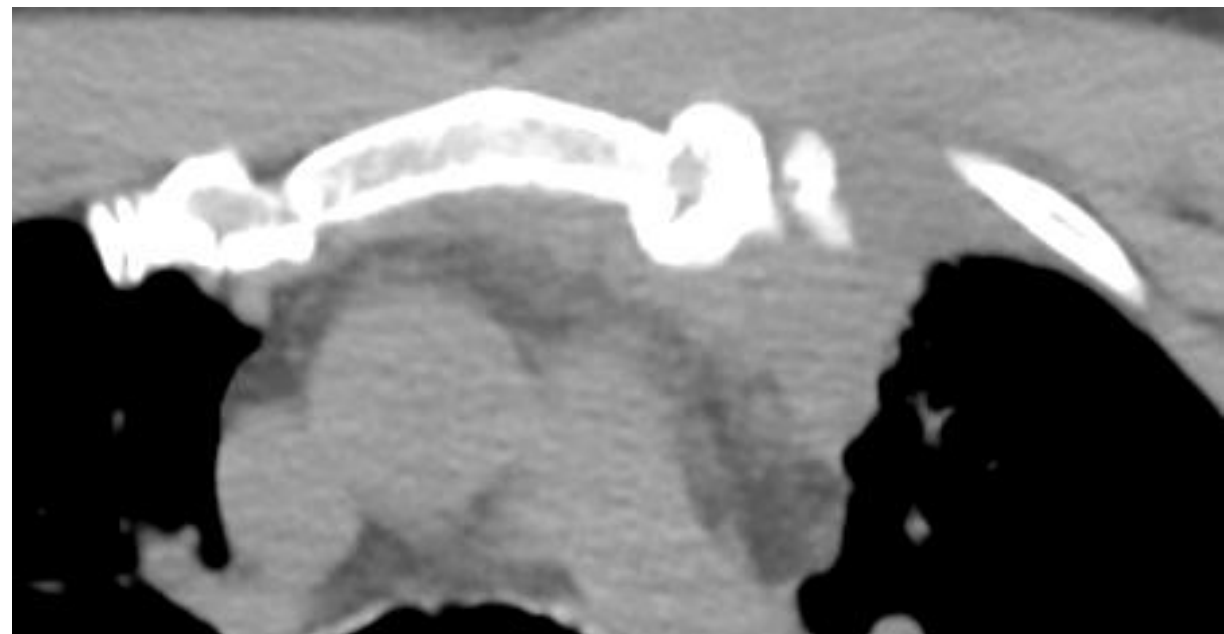
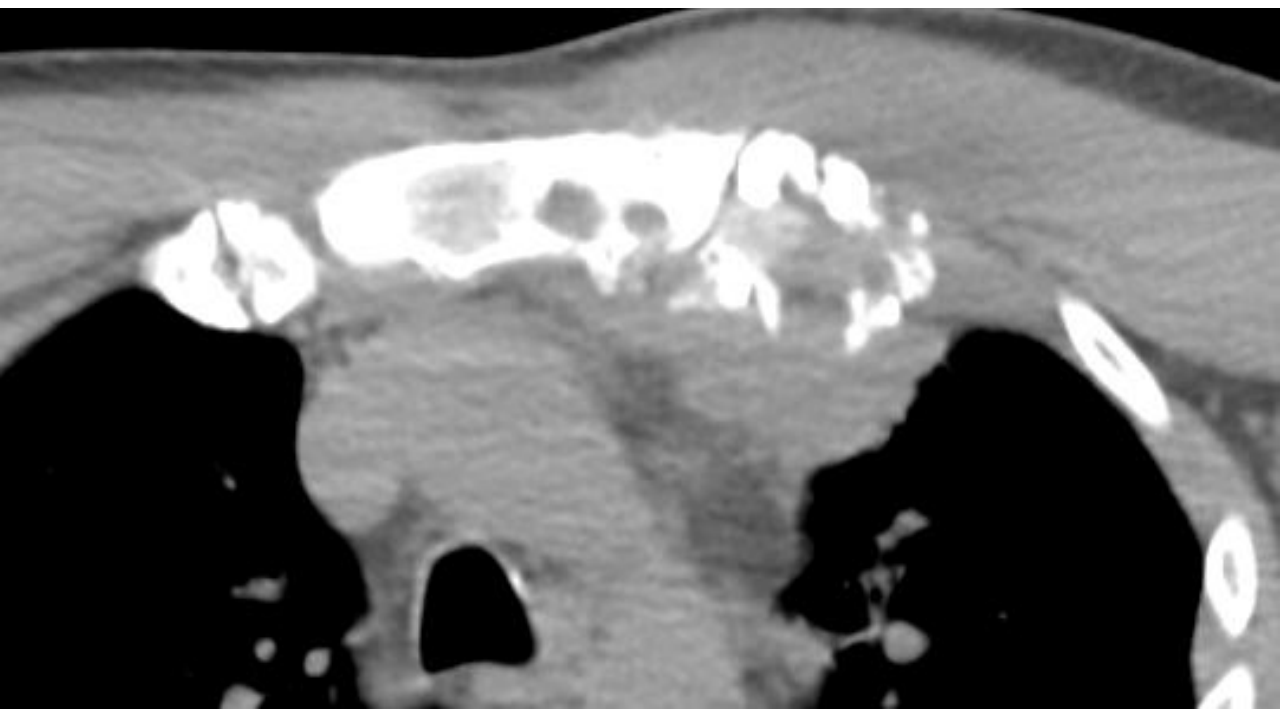


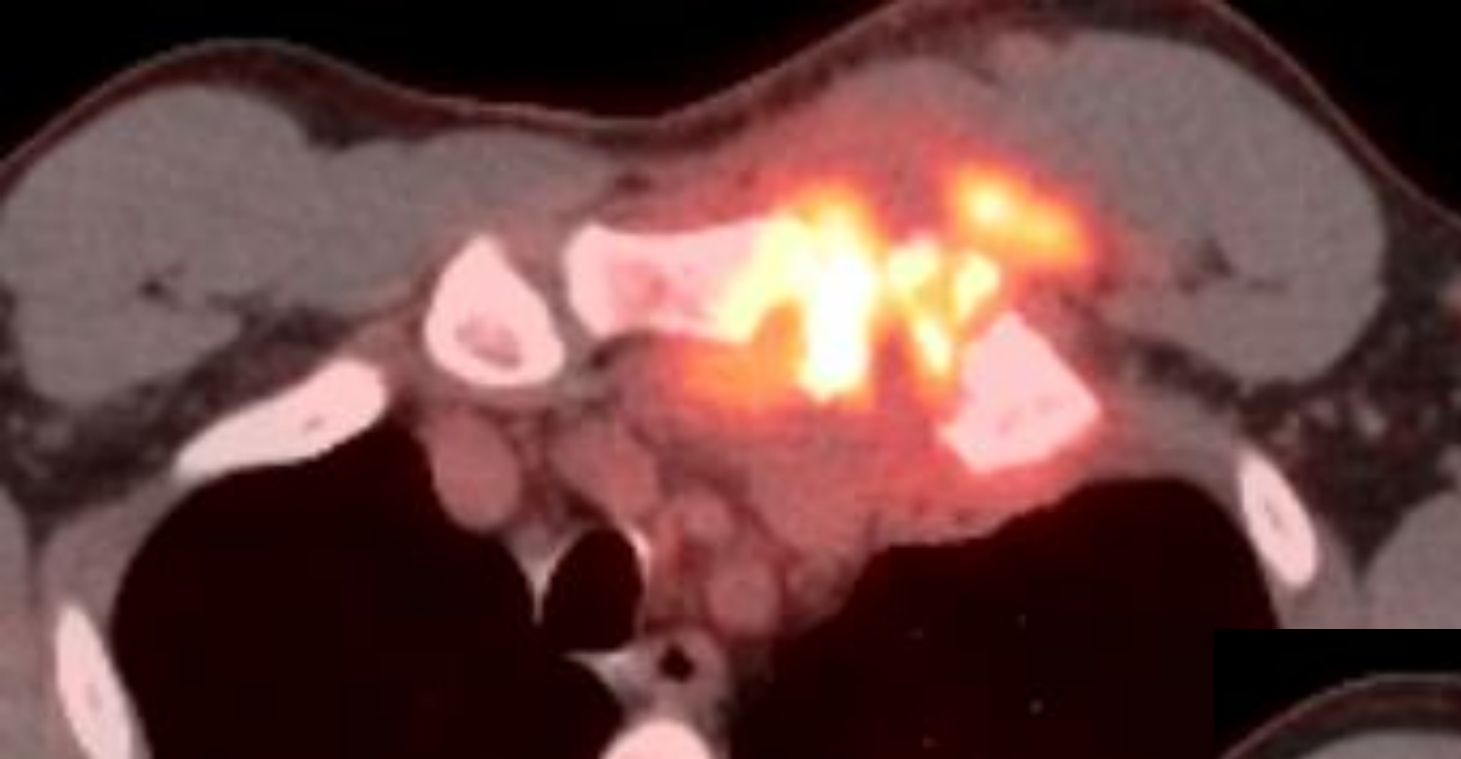
Hello everyone! Here is a case that has been puzzling to me, but hopefully you will have some better ideas. Question is about his left sternoclavicular joint. Full history as follows:

- 43 yo man with history of neuroendocrine tumor found in the stomach during EGD in 2023.
- Follow up PET dotatate and chest CT in 09/23 were negative. Specifically, Left sternoclavicular joint was totally normal at this time (images not included).
- In 01/24 he went to an outside hospital for bilateral PE's and pneumonia, blood cx positive for staph aureus at that time.
- At some point between then and 04/24, he noticed enlarging left sternoclavicular "mass." Painful.
- Outside FDG PET-CT 04/24 showed FDG-avid sternoclavicular and left upper lobe "mass." Outside report suggested malignancy and recommended biopsy.
- Outside biopsy performed 04/24: SOFT TISSUE MASS, LEFT CLAVICULAR/MANUBRIUM JUNCTION, NEEDLE CORE BIOPSY: FRAGMENTS OF BENIGN VASCULAR PROLIFERATION The differential diagnosis would include a hemangioma as well as granulation tissue.
- MRI performed 05/21/24, showing Left sternoclavicular marrow signal abnormality and erosions, with surrounding soft tissue abnormality, and anterior left upper lobe consolidation vs atelectasis. Possibility of atypical infection was raised (by me).
- Left clavicle bone biopsy performed 05/31/24: BENIGN BONE WITH MILD NONSPECIFIC REACTIVE CHANGES. Sections demonstrate fragments of bone and bone marrow elements with focal non-specific fibrosis.
- All cultures, including fungal and AFB are negative at 3 weeks.

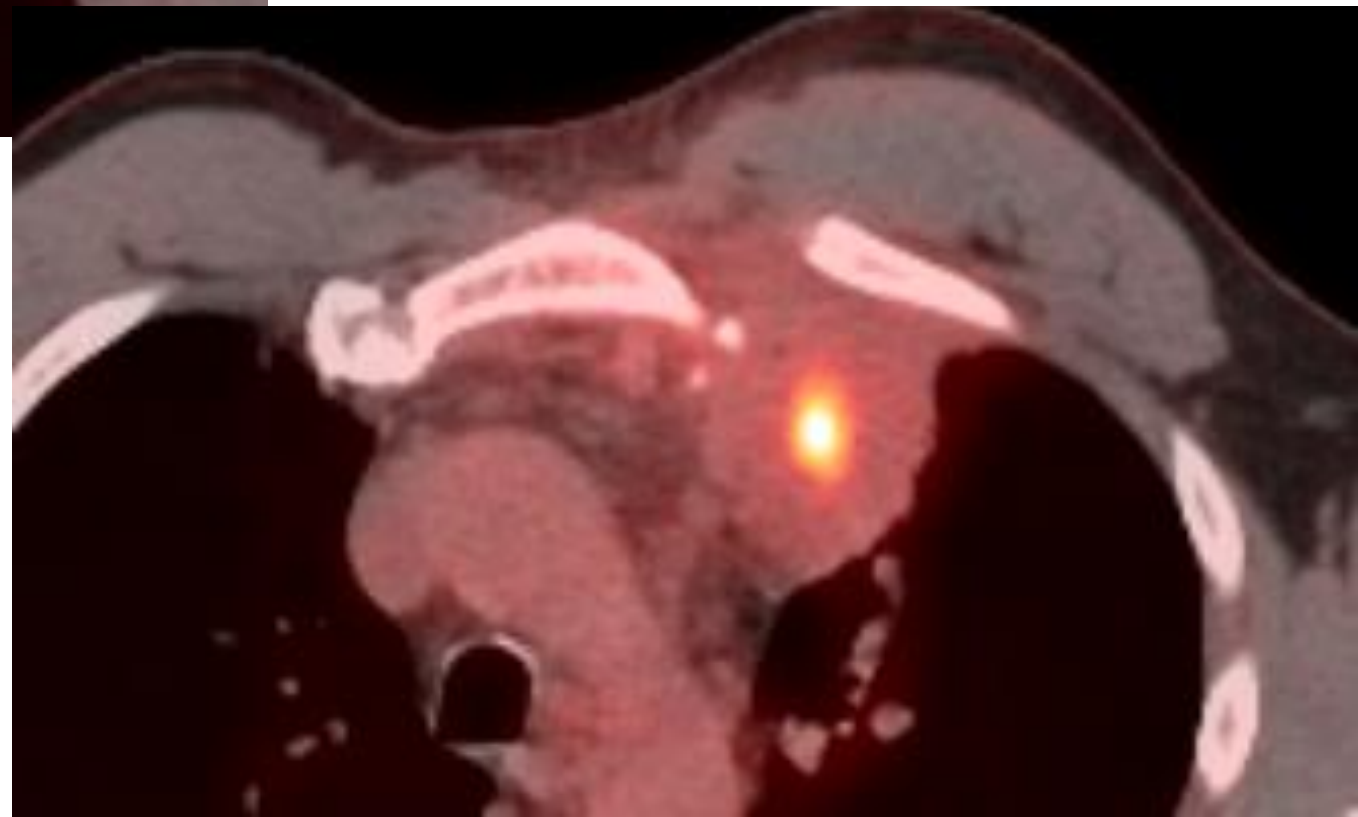


From outside 04/24

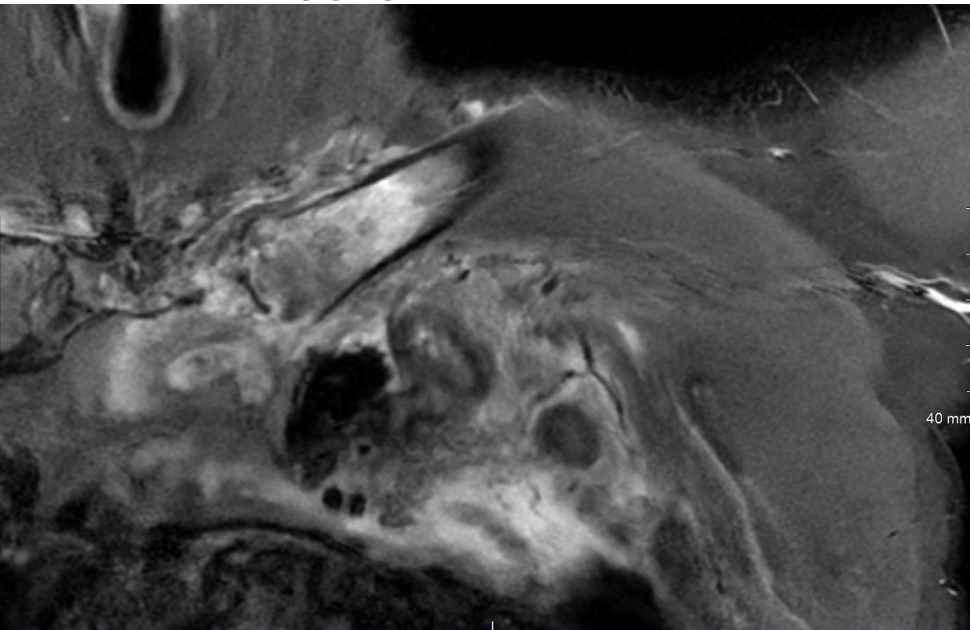




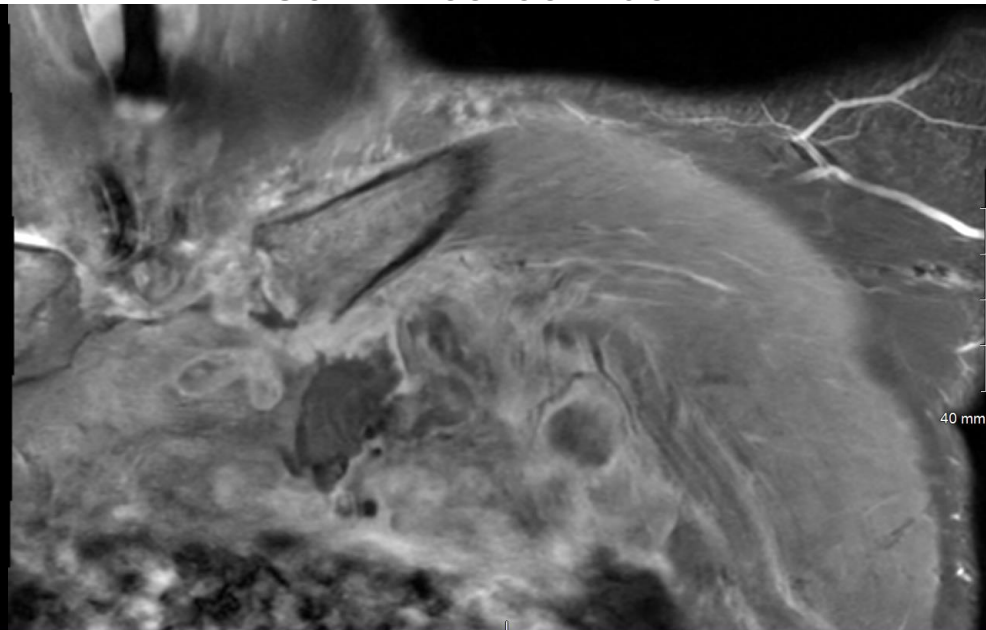
From outside PET CT (FDG-18) 04/24



Cor STIR



Cor T1 Post contrast



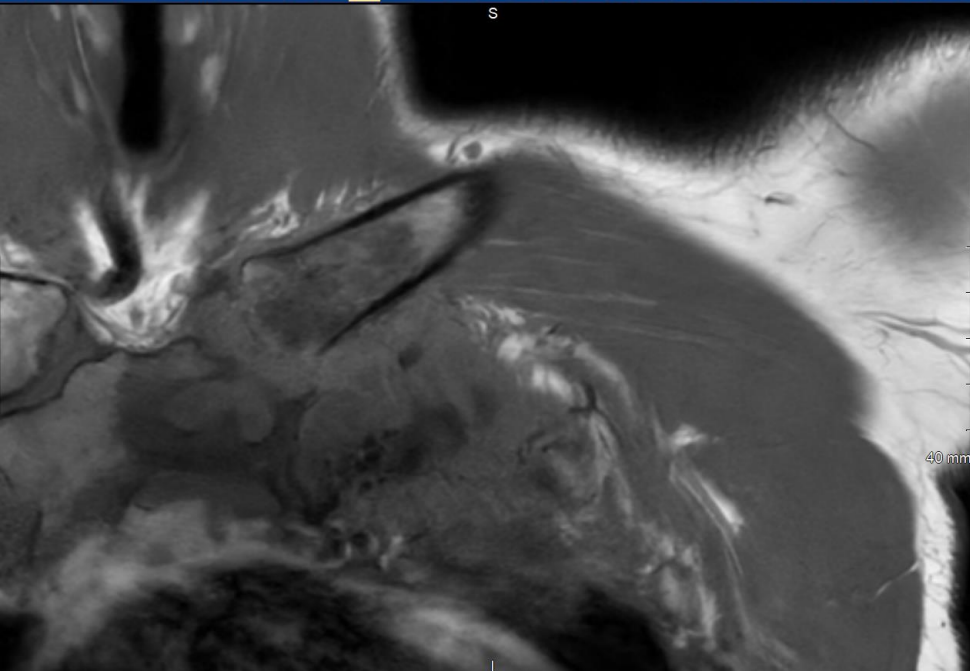
L R



S

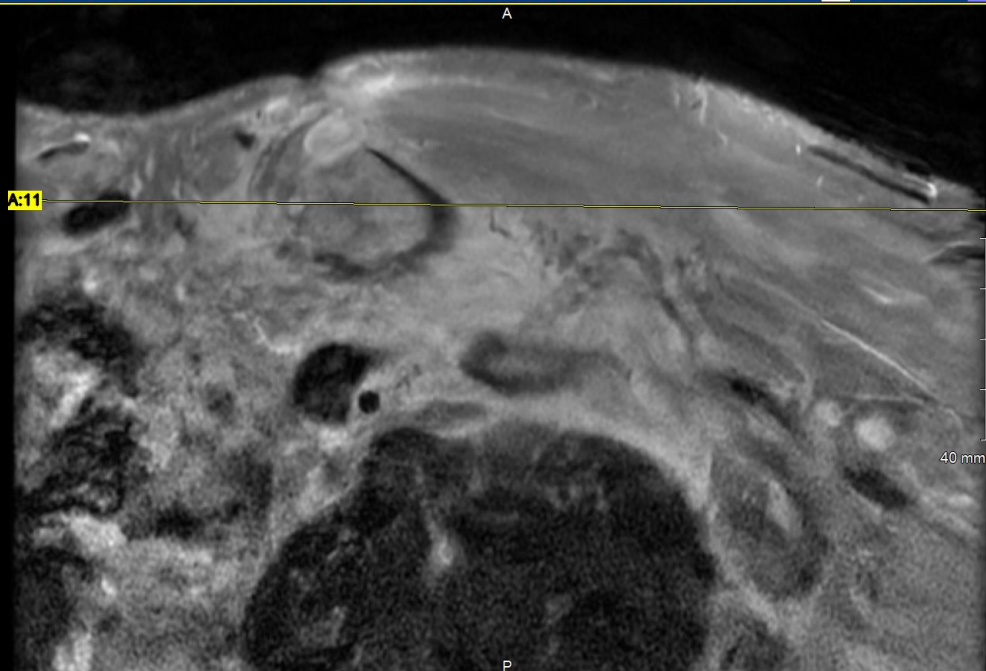


A



L R

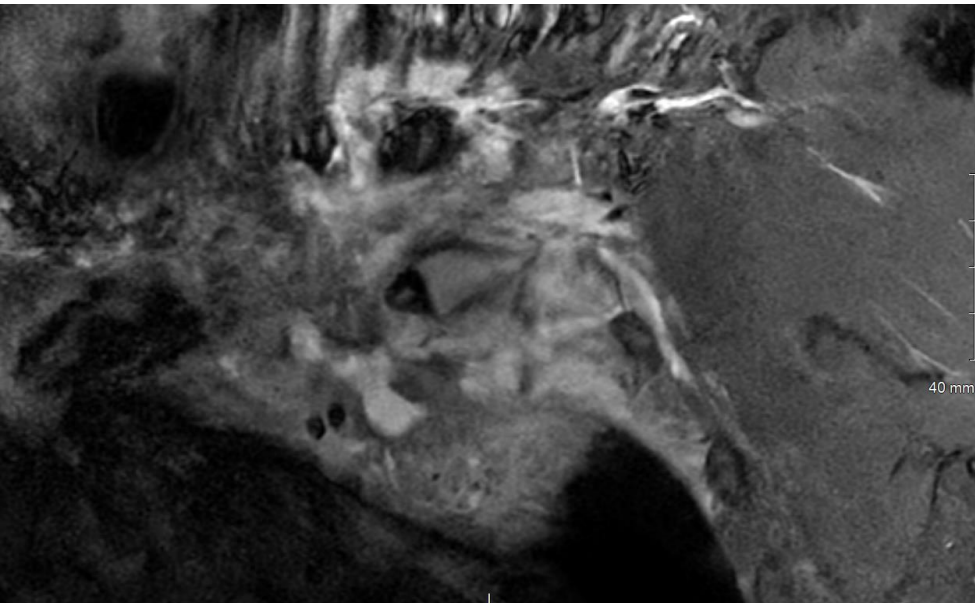
Cor T1



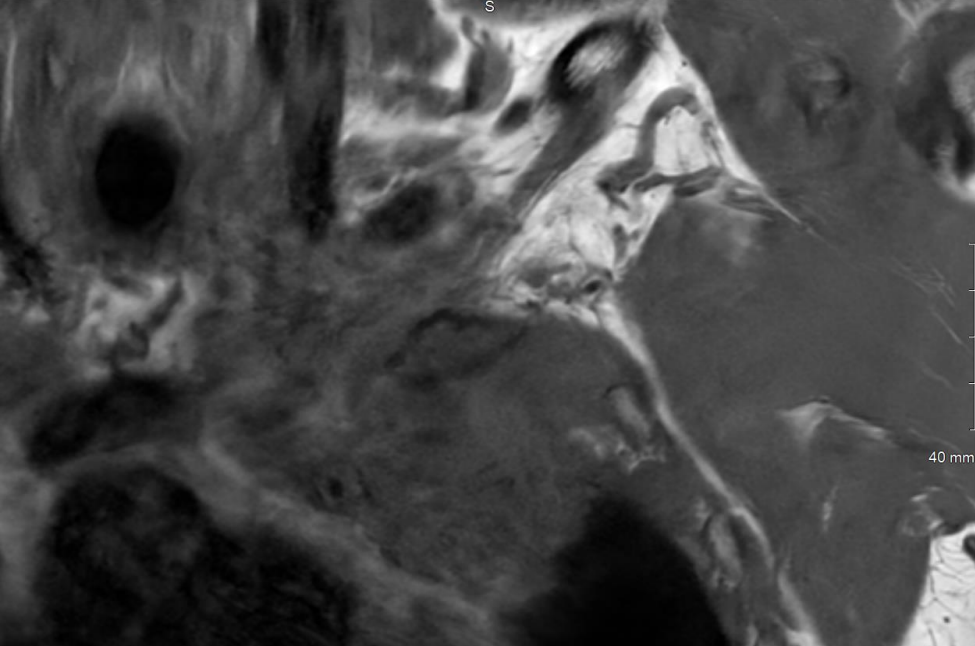
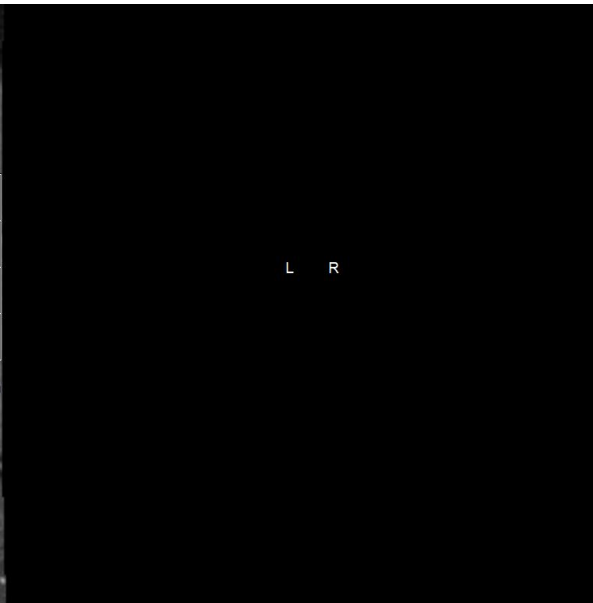
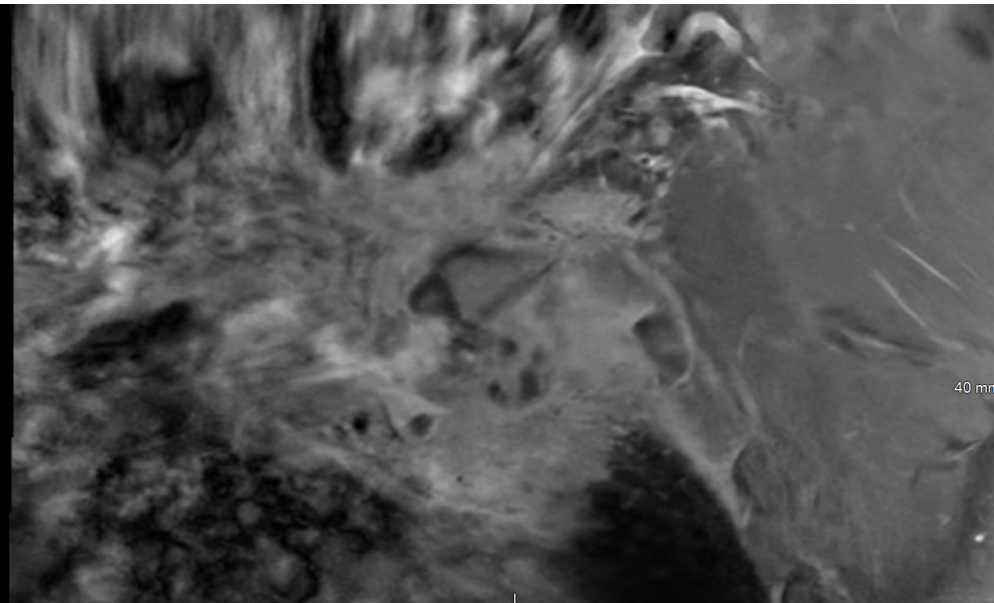
P

Axial T1 post contrast

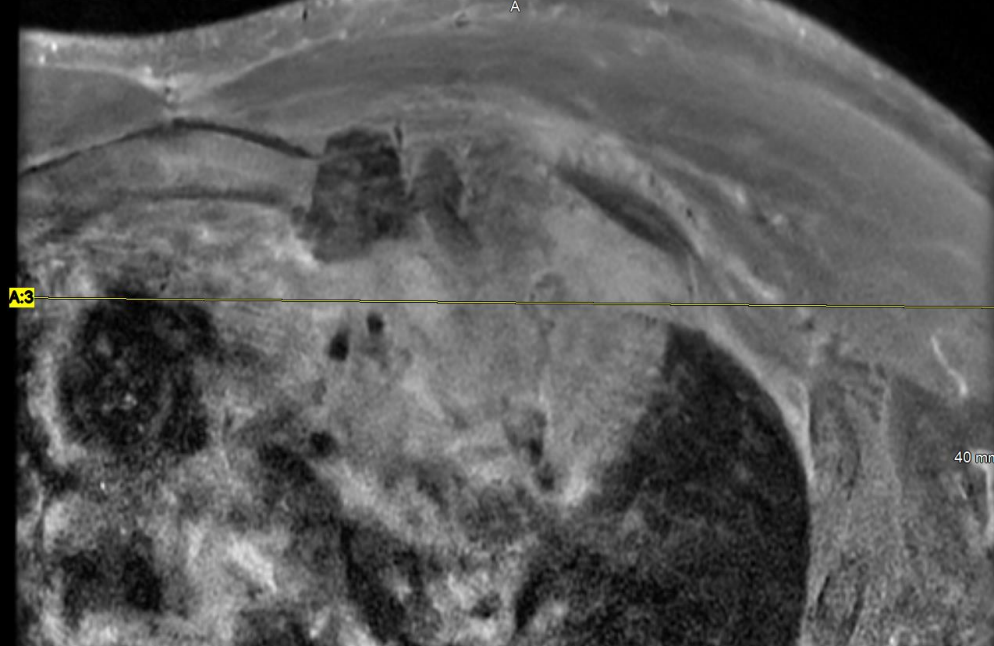
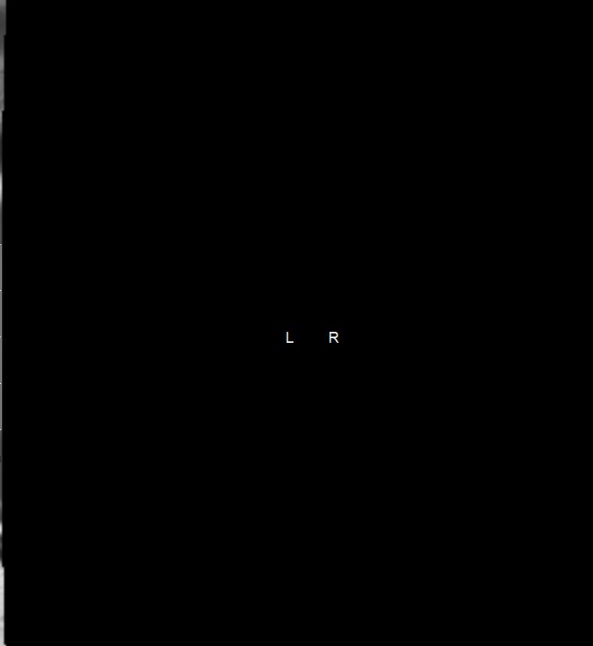
Cor STIR



Cor T1 Post contrast

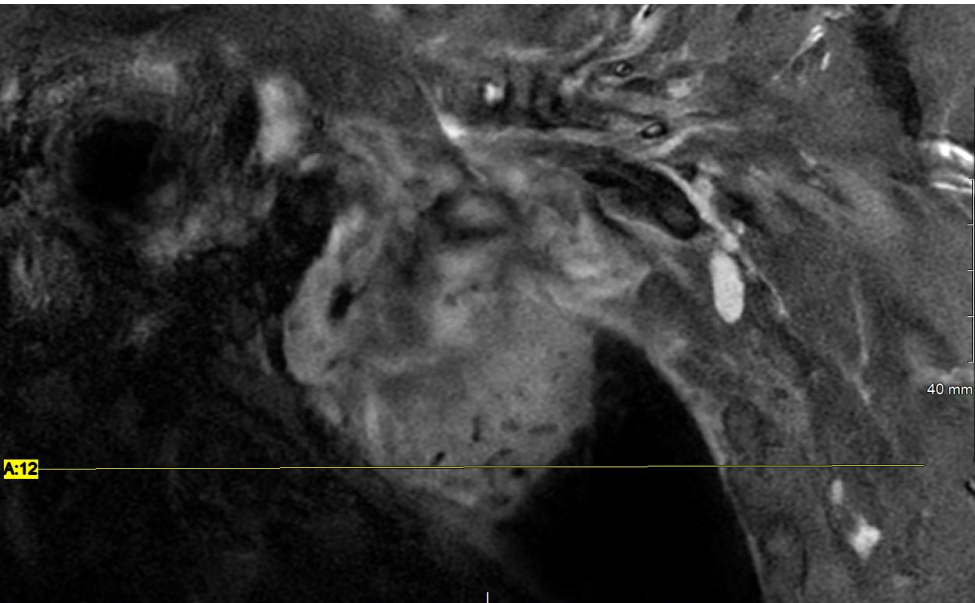


Cor T1

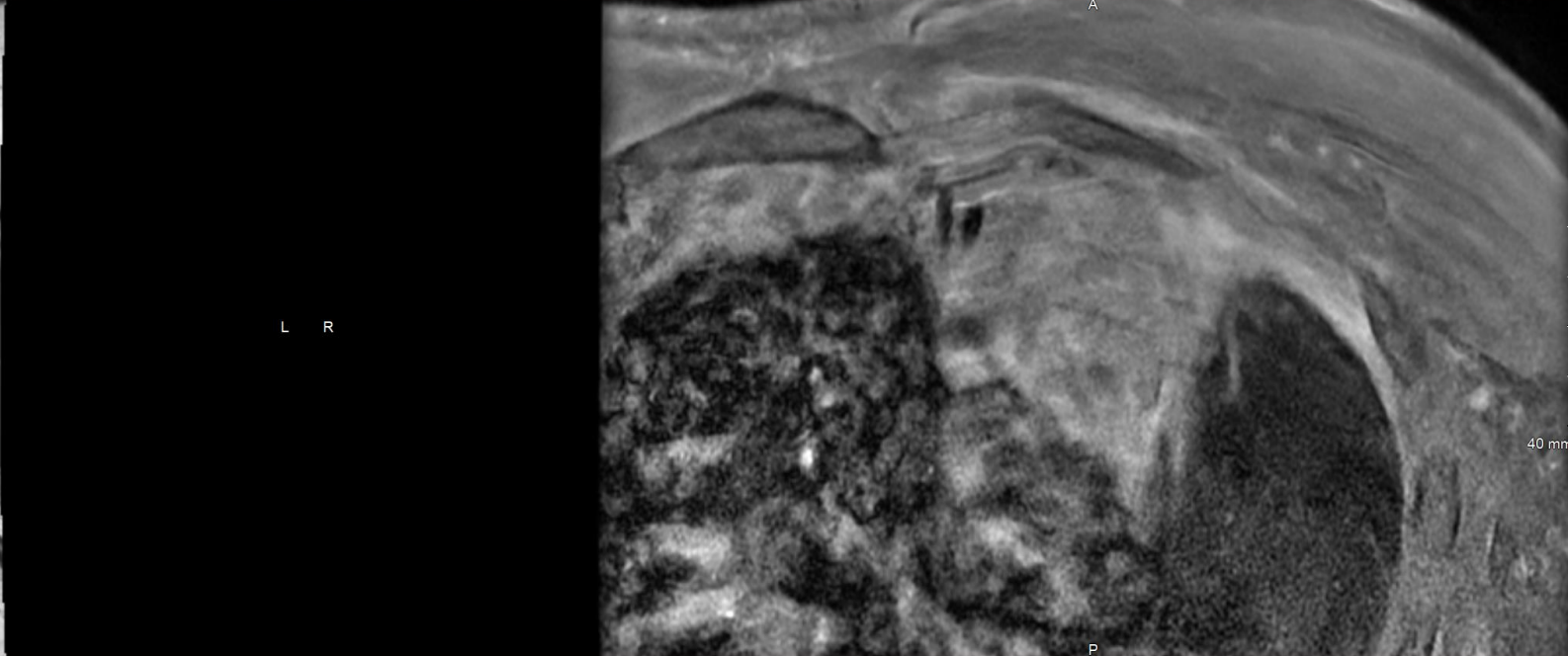
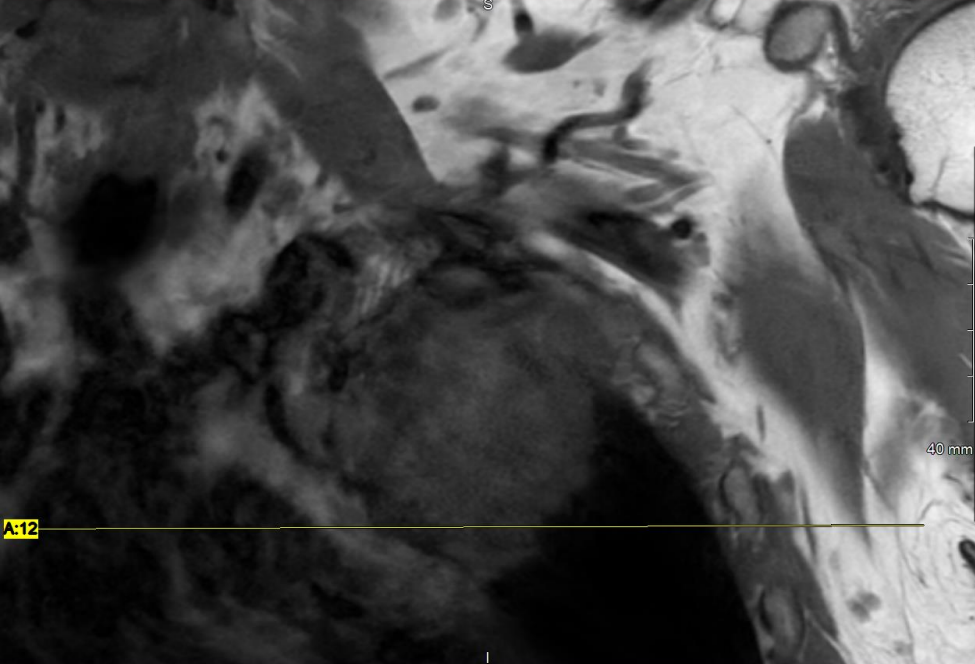
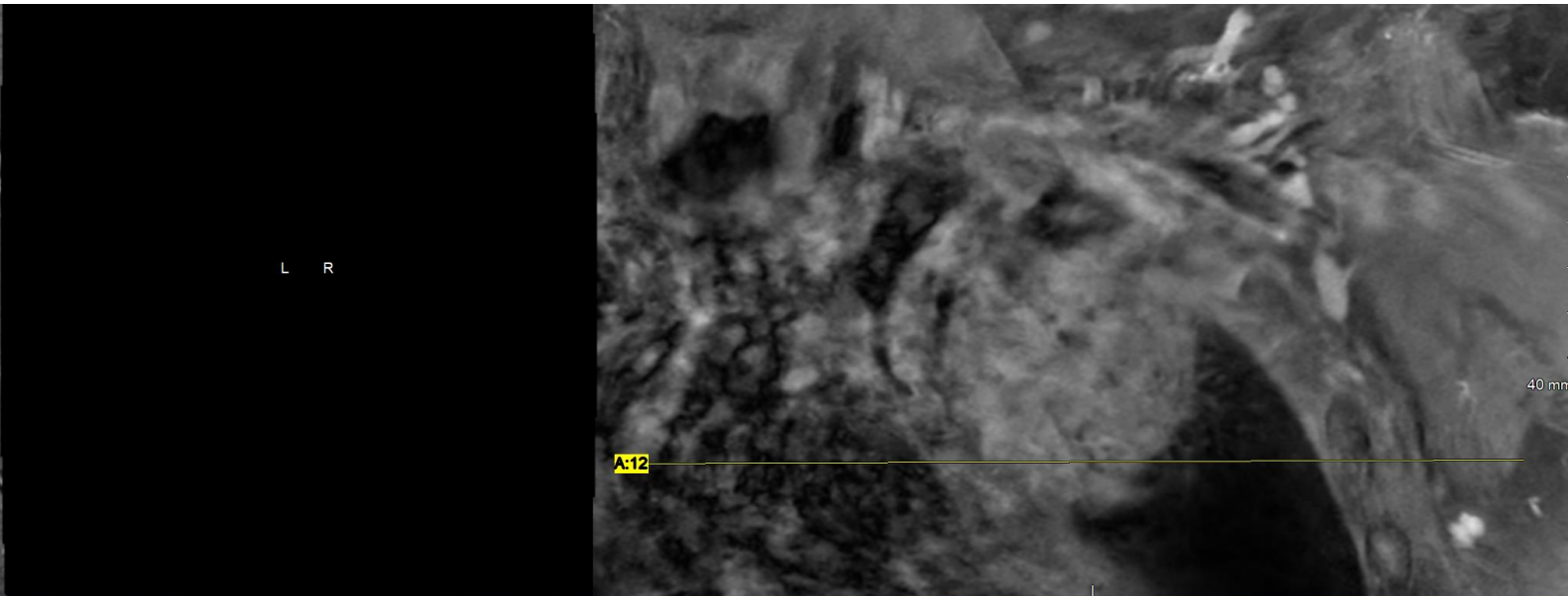


Axial T1 post contrast

Cor STIR

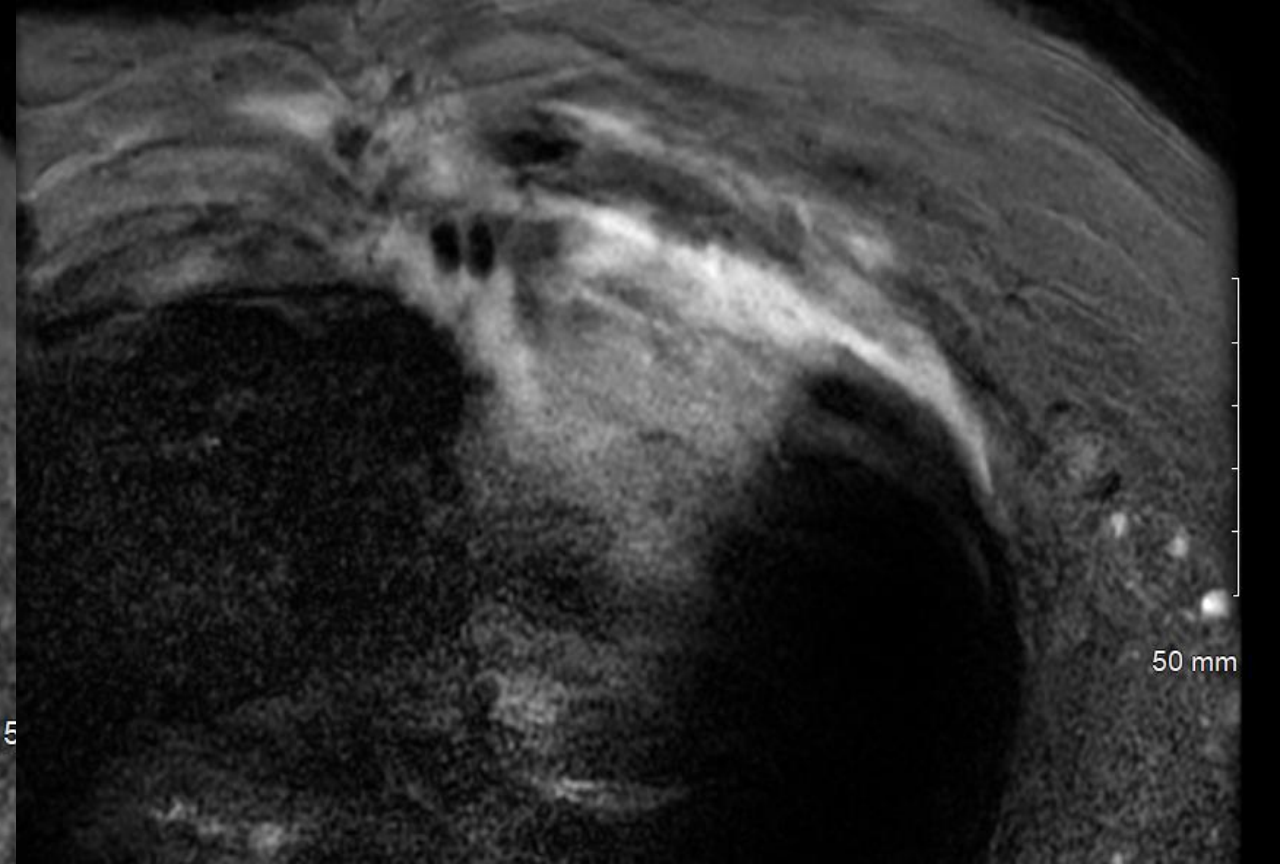
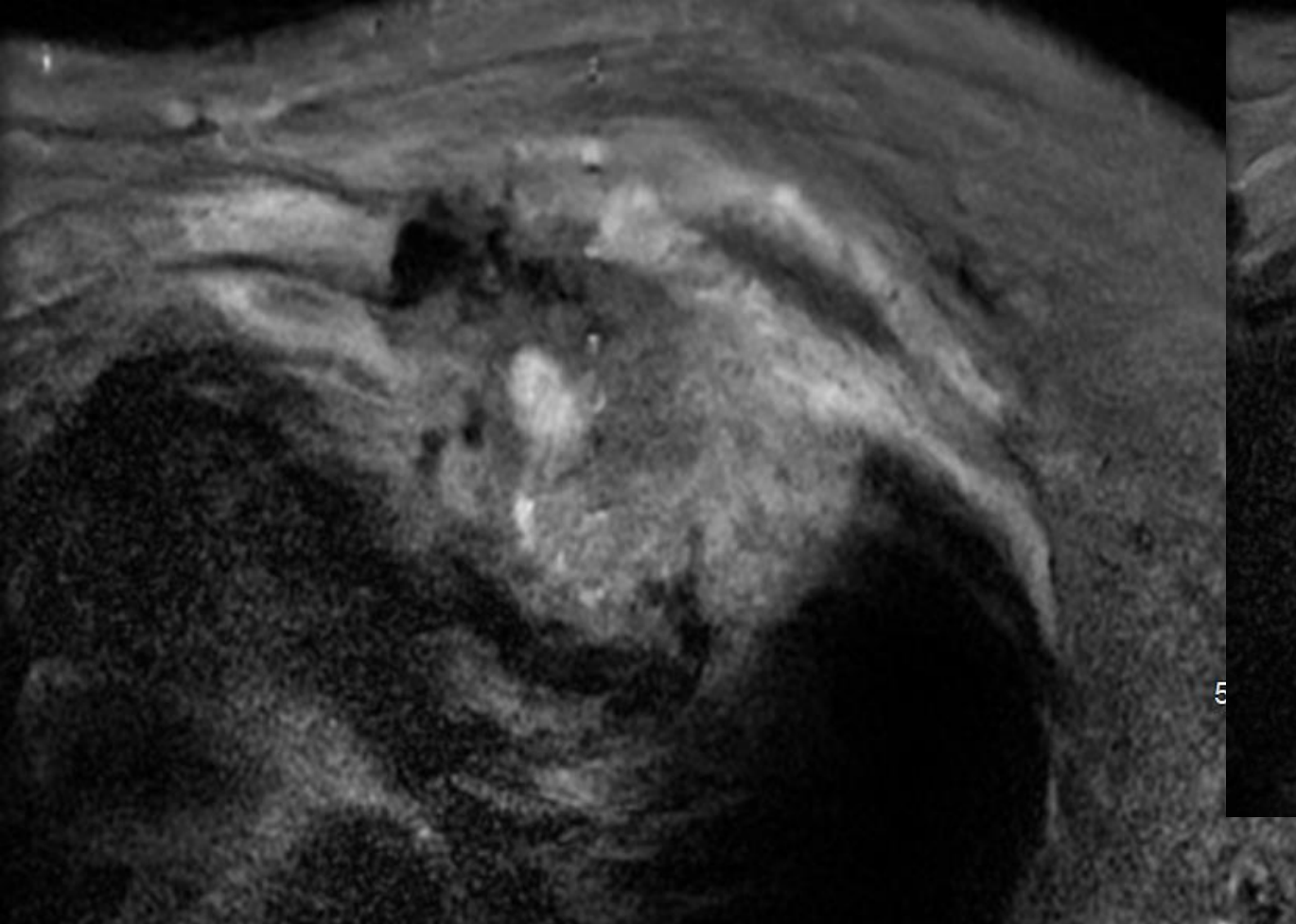


Cor T1 Post contrast



Cor T1

Axial T1 post contrast



Both are axial STIR

I read the chest MRI from 5/24. Here is my very long impression:

Confluent enhancing signal abnormality and erosions centered around the left sternoclavicular joint and left first costosternal joint, with surrounding enhancing masslike soft tissue abnormality involving the overlying chest wall, left anterior mediastinum, and left anterior upper lung. Constellation of findings favors infection, with acute osteomyelitis/septic arthritis of the left sternoclavicular joint and left first costosternal joint, with surrounding phlegmon versus granulomatous tissue, underlying atelectasis versus pneumonia of the left upper lung, and possible small anterior empyema. However, it is difficult to exclude the presence of an underlying mass in the left upper lung given confluent signal abnormality. Somewhat atypical appearance and reported timeline raise suspicion for an atypical etiology such as a fungal or mycobacterial infection, although bacterial infection is also possible.

Seems that I was wrong. I was really thinking that he could have some sort of awful lingering pneumonia that turned into a sort of empyema necessitans that invaded into the sternoclavicular joint. Yes I know there's not a lot of fluid to be found, but still.

I've been digging into paraneoplastic syndromes, and have discovered that carcinoid can have distant fibrosis ... From a random pubmed article: "Carcinoid tumors of the small bowel often present with pronounced fibrosis in the peri-tumoral tissues, distant in the heart or lungs, and locally in the peritoneal cavity."

**Do you think this could be some sort of aggressive fibrosis? Do you have any other ddx????**

Thanks in advance,

Jessica Pelz