Stump the Experts

SBI 2024

John P. Salvas, MS2, IUSM

Colleen M. Madden, MD, FACR, Division Chief of Breast Imaging, IUSM

Case Compliments of Stephanie Holz, MD

SBI
IN AFFILIATION WITH CSBI

Disclosures

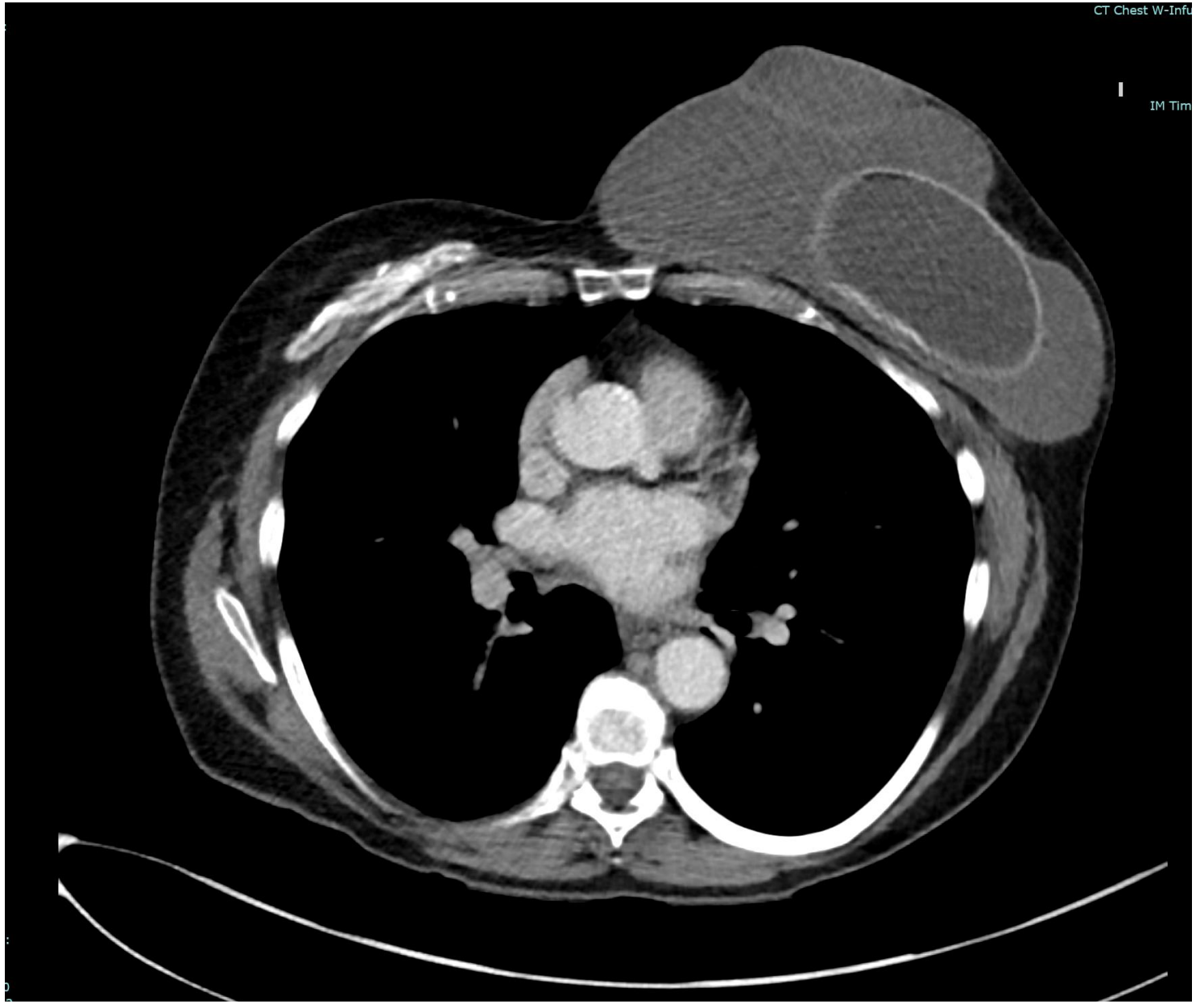
- None

Patient History

60-year-old female with history of bilateral breast implants presents with left breast swelling for 2-3 weeks. Per patient right breast implant "popped" years ago

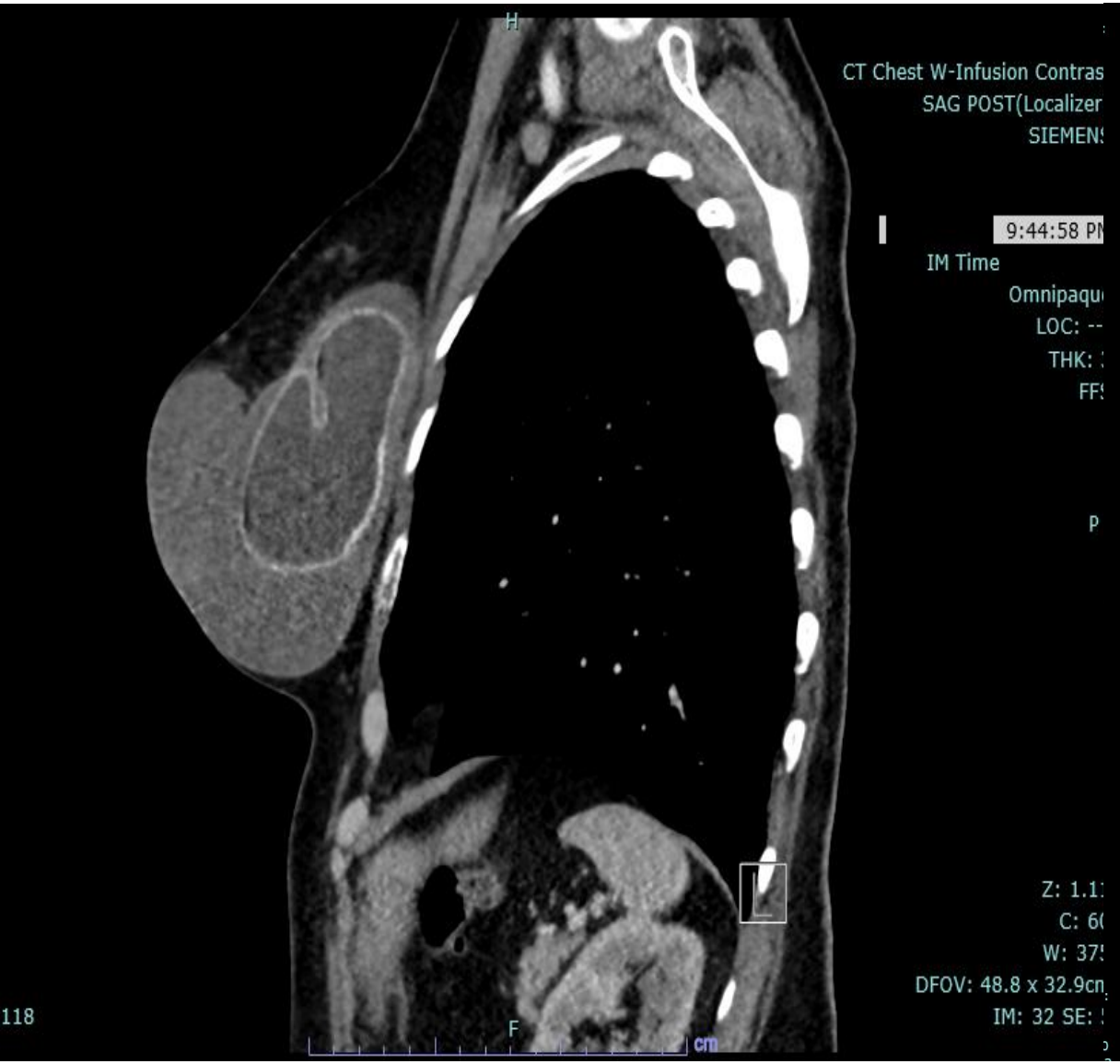
SBI
IN AFFILIATION WITH CSBI

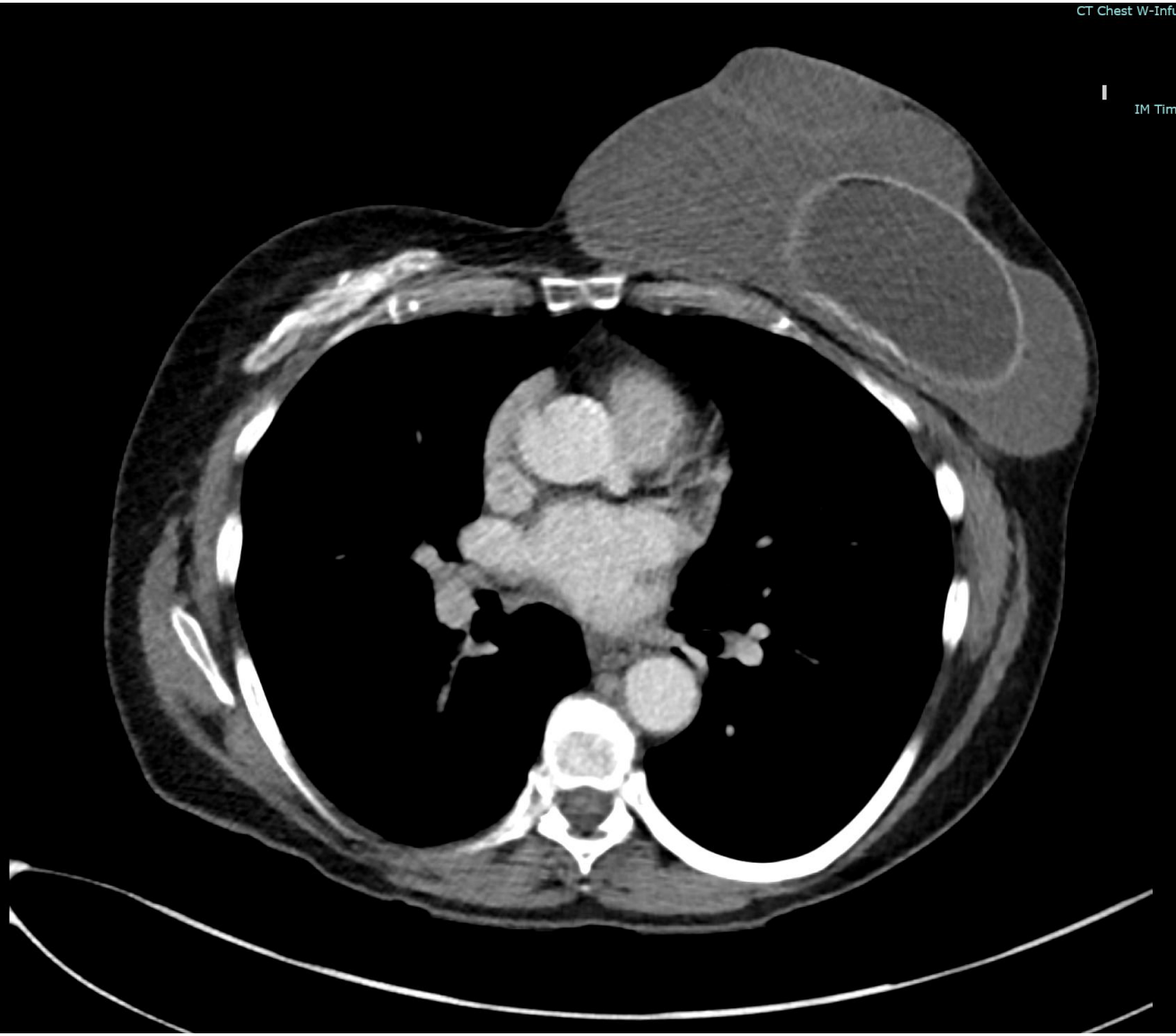
Contrasted Axial Chest CT



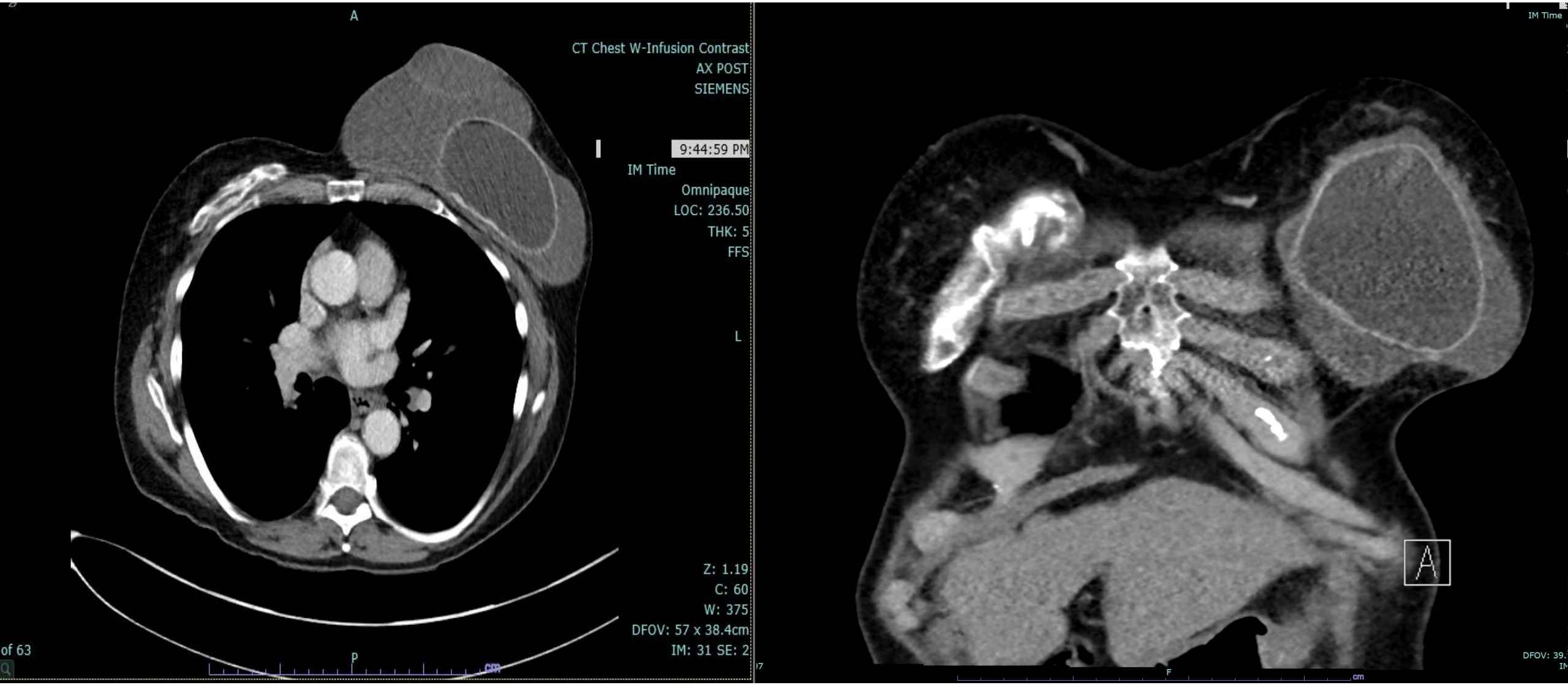
SBI
IN AFFILIATION WITH CSBI

Contrasted and Axial CT Images

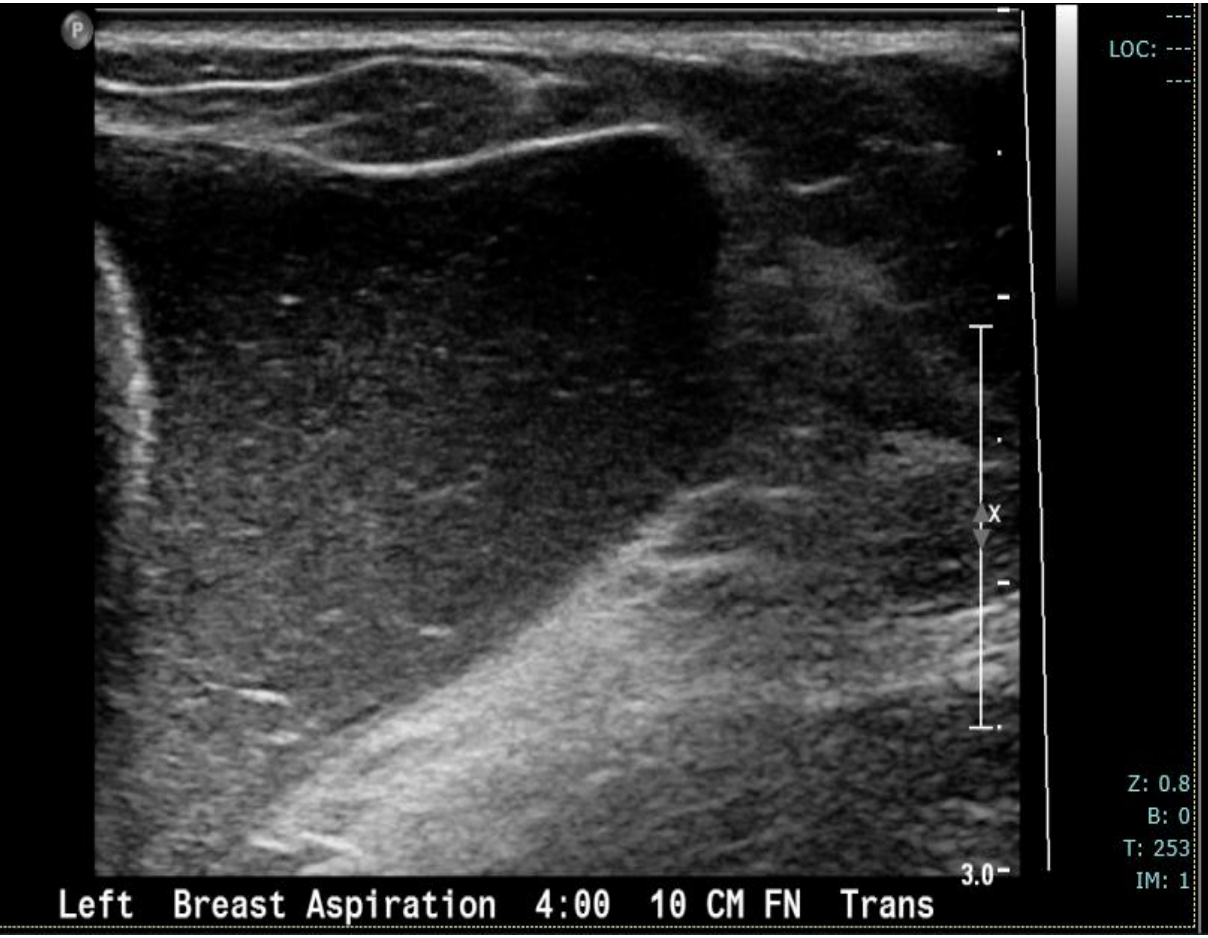


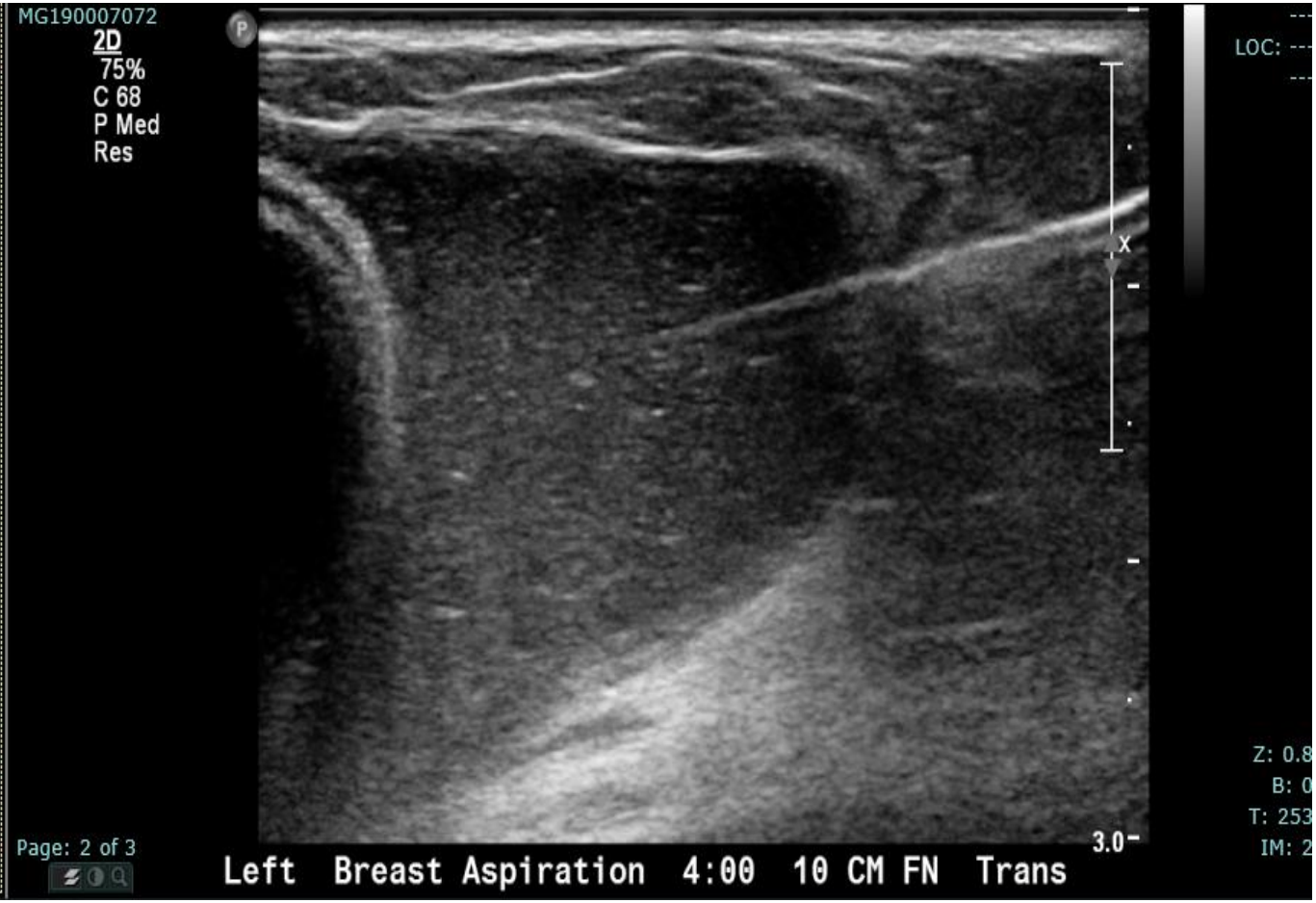


Contrasted and Axial CT Images



Left Breast Ultrasound & Aspiration Images





IN AFFILIATION WITH CSBI

Aspiration Results

Clinical Information:
The patient is a 60-year-old female with history of bilateral breast implants, who presented with symptoms concerning for left breast infection/implant rupture. The fluid was described as purulent upon drainage.

Specimen Received:
Left Breast
Final Cytologic Diagnosis:
Left Breast: No atypical cells identified.
Please also correlate with the associated microbiologic studies.
Note: The sample contains abundant squamous cells and anucleated squamous cells. No significant lymphoid cell population is present.

SBI
IN AFFILIATION WITH CSBI

Surgical Pathology Report

Clinical Information:

Patient with a history of breast augmentation and a several month history of left breast swelling and pain. Most recently developed drainage from breast wound. Cytology was negative for atypical cells. Clinical concern for infection versus malignancy (particularly ALCL).

Operative Procedure:
Removal of infected breast implant
Pre-Operative Diagnosis: Infected breast implants.
Specimen Received:
A: Right breast implant
B: Left breast implant with capsule
C: Left breast capsule margin

Final Pathologic Diagnosis:
A. Right breast implant, removal. Fibrous tissue consistent with implant capsule. Synthetic material consistent with implant.

B. Left breast implant with capsule: Squamous cell carcinoma arising from squamous metaplasia of the implant capsule. Tumor infiltrates the soft tissue to a depth of 2mm. Inked margins free of tumor. Fibrous tissue consistent with implant capsule. Synthetic material consistent with implant.

C. Left breast capsule margin, excision:
Soft tissue with foreign body granulomas. No evidence of malignancy.

SBI
IN AFFILIATION WITH CSBI

Breast Implant-Associated Squamous Cell Carcinoma (BIA-SCC)

- BIA-SCC is rare highly aggressive and invasive tumor associated with implants arising from the implant capsule.
- BIA-SCC is not a cancer of breast tissue
- 80% have spread to lymph nodes or distant metastasis at presentation (extracapsular spread)
- 19 known cases reported in literature
- Average time to presentation 22.4 years post implantation
- Does not respond well to chemotherapy
- 43.8% mortality at six months vs BIA-ALCL 2.8% at one year

SBI
IN AFFILIATION WITH CSBI

2023. American Society of Plastic Surgeons. "FDA provides update on Breast Implant Associated-Squamous Cell Carcinoma (BIA-SCC)" www.plasticsurgery.org