

Introduction

Ectopic breast tissue occurs in 0.4-6% of women.¹ It is most often found along the milk line, axilla being the most common location and vulvar being the second most common.² As it is embryologically breast tissue it carries the same hormone responsiveness and as ectopic tissue is at higher risk of metastatic changes with earlier metastasis. Many of these lesions go unnoticed until puberty, or more commonly during pregnancy and lactation. This causes engorgement and rapid change prompting evaluation.

It can create a diagnostic uncertainty, especially in the emergency department and is often misdiagnosed as abscess.³ Proper recognition of this phenomena can help guide appropriate disposition, follow-up, and treatment while preventing unnecessary procedures or antibiotic use.

Case Report



Image 1: Used with patient consent

A 22-year-old G2P2 African American female 2.5 weeks post-partum presents to the emergency department for the third time in eleven days for evaluation of a growth in her right axilla. On initial visit incision and drainage (I&D) was performed, then a subsequent visit for packing removal. She states that since the I&D she has failed to heal and continuously has thin milky white discharge from the area.

Differential Diagnosis

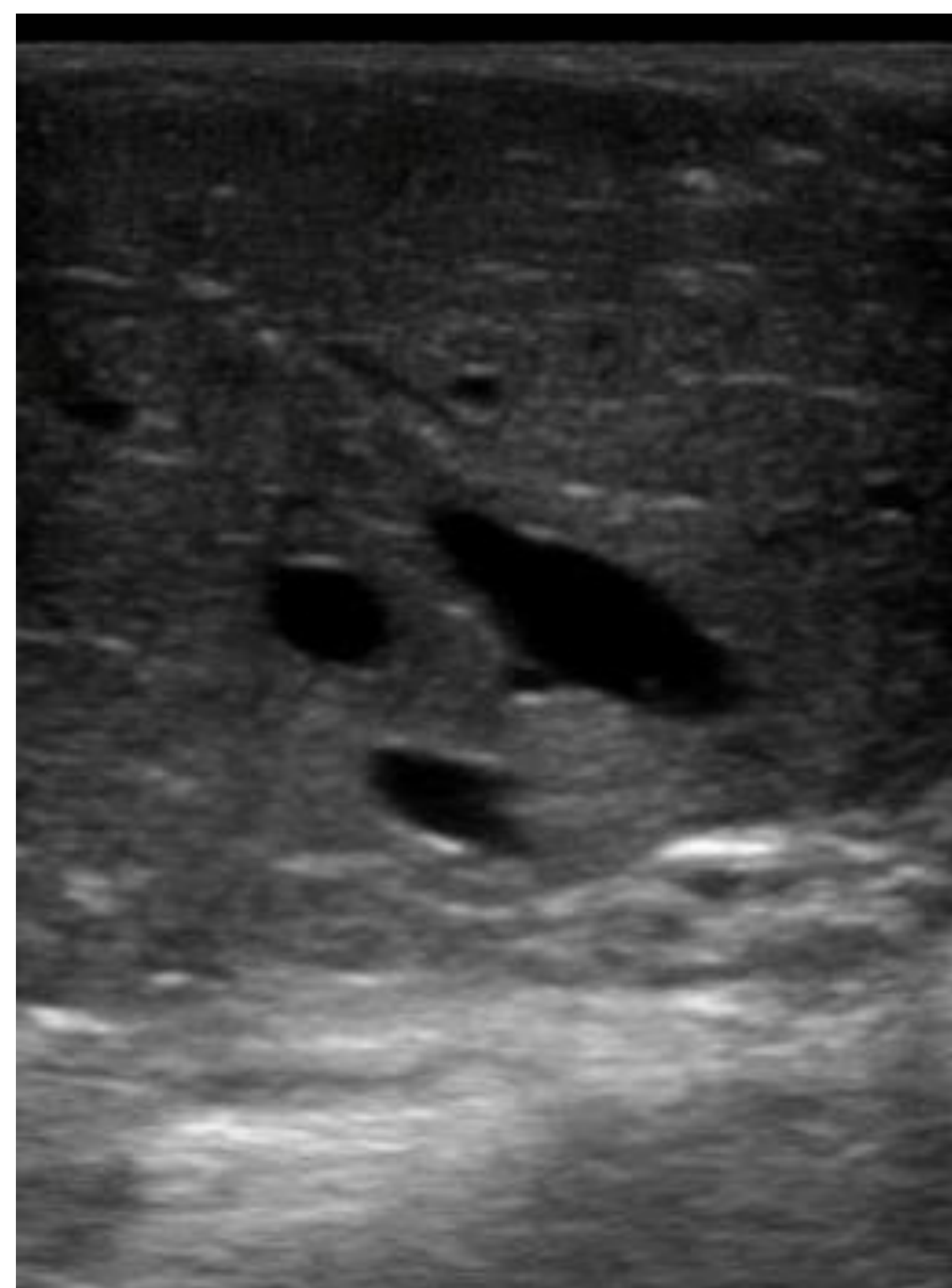


Image 2: Ultrasound image of mass with glandular structure

- Abscess
- Lymphoma
- Liposarcoma
- Angiomyolipoma
- Secretory Carcinoma
- Sebaceous Cyst
- Hidradenitis Suppurativa
- Fibroadenoma
- Lipoma
- Hibernoma
- Hamartoma
- Pseudolipoma
- Ectopic Breast Tissue

Discussion

On the initial visit the patient had an ultrasound identified complex fluid filled unilateral axillary lesion misdiagnosed as abscess. The I&D produced copious output initially and the area was packed. Presentation, pain, and fluid collection were all consistent with the much more common diagnosis of abscess.

On repeat examination, point of care ultrasound was performed. A collecting duct system was identified within the current mass. Her presentation was consistent with breast tissue that responded to breast engorgement during her lactation. She then noted that with her prior pregnancy there was mild swelling but never to this degree; however, she did not breast feed with her first child and there was spontaneous resolution. This patient incurred multiple additional emergency department visits due to missed diagnosis and had been placed on antibiotics when none were indicated. The patient was referred to surgery clinic for follow up and possible surgical excision for definitive therapy. Subsequently, she has been lost to follow up.

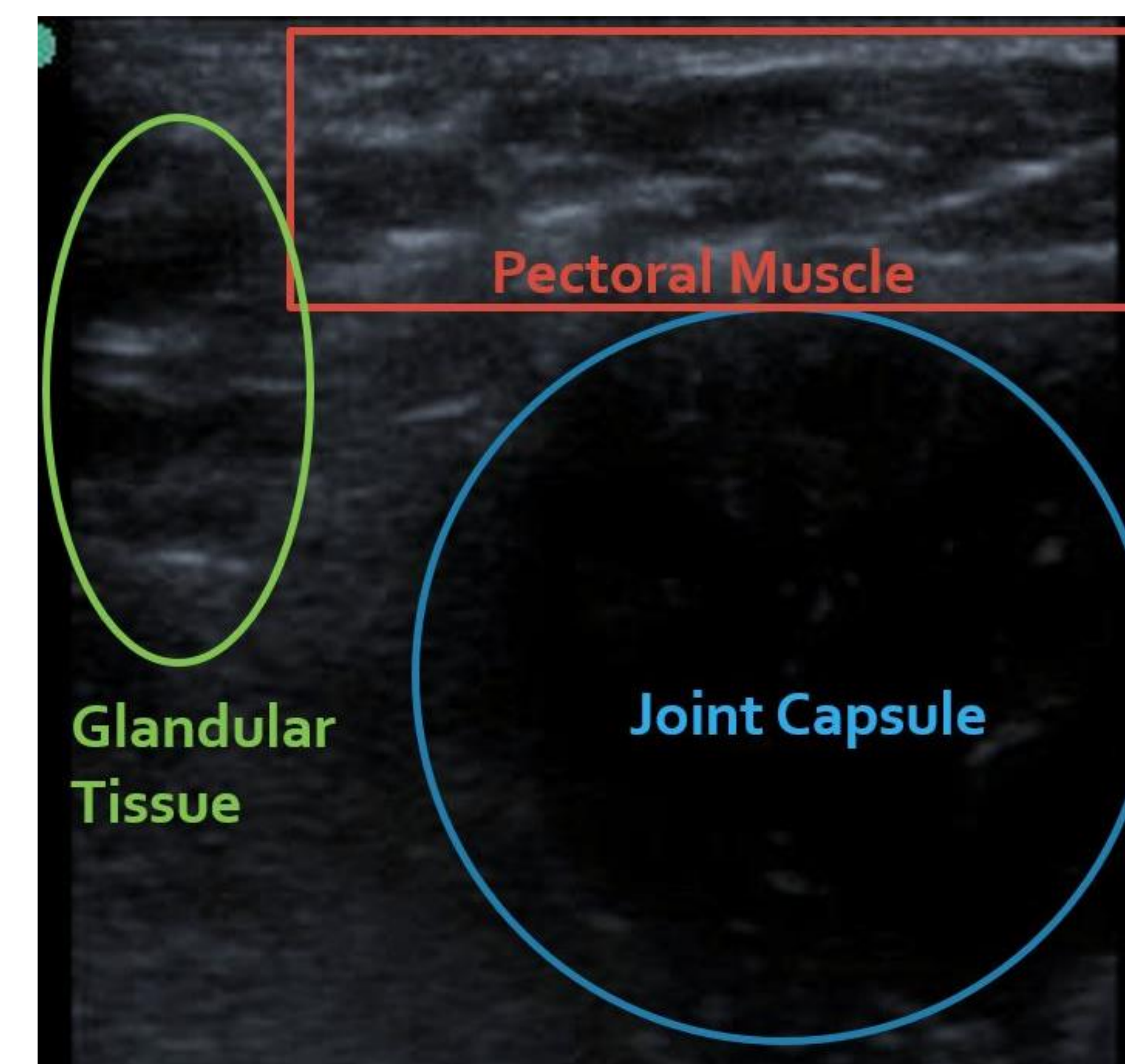


Image 3: Ultrasound image with identification

Conclusions

The literature demonstrates very few case reports with similar presentation with a single publication in emergency medicine literature from 2011.¹ Additionally, there is no reported case of collecting duct system identification in ectopic tissue in the absence of an areola/nipple complex. Lactating ectopic tissue not only appears as an abscess on physical exam and easily misdiagnosed, ectopic tissue is at increased risk of malignancy.⁴ This poses a diagnostic and educational challenge for emergency providers, most notably in this rare unilateral presentation without an associated nipple complex.

References

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