

Low-grade Adenosquamous Carcinoma of the Breast in a Pregnant Patient: Case Report and Literature Review

David Bassa DO, MaKenzie Morrissey MD, Adewuni Ojo MD, Adeel Raza MD

Background

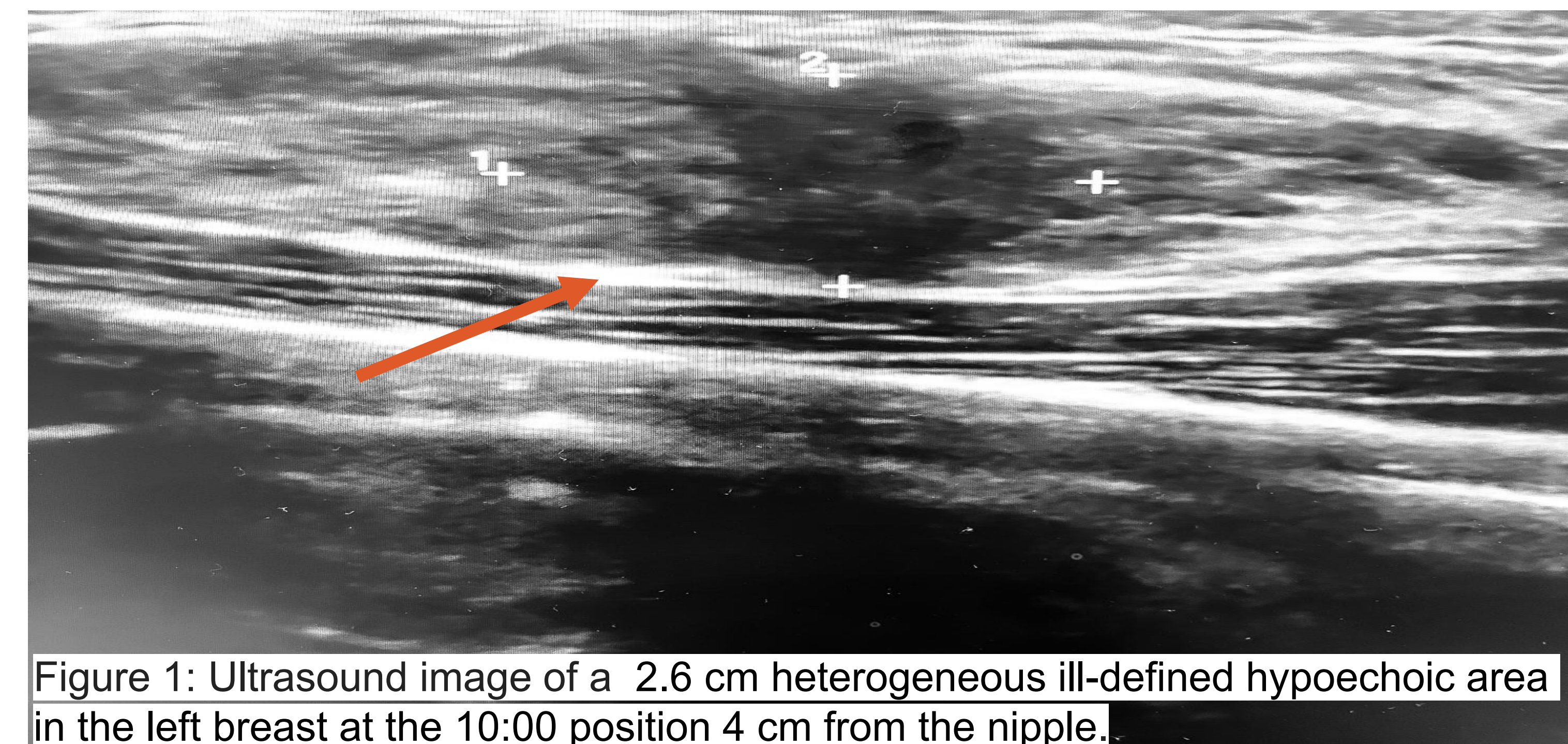
- Low-grade adenosquamous carcinoma (LGASC) is a rare variant of metaplastic carcinomas of the breast, occurring in less than 1% of all breast cancers and most commonly found in women over the age of 50.^{1,3}
- LGASC has low malignant potential and distant metastasis is extremely rare, with only a few documented cases in large lesions >3cm or after recurrence.³ Only one case of lymph node metastasis has been described.⁴
- Due to the rarity of this locally invasive malignancy, management consensus is not well defined.
- This is the first reported case of LGASC in a pregnant patient.

Case Report

- 23-year-old female presents with painless left breast lump with sonographic findings see in Figure 1. BIRADS 3
- A surveillance ultrasound three months later identified no change in the mass, but a biopsy was recommended, BIRADS 4. Core needle biopsy revealed stromal fibrosis (Fig. 2).
- Surgical excision was recommended, but patient declined and was lost to follow up for about five months.
- She presented at ten weeks pregnant for ultrasound guided excisional biopsy which revealed sclerosing adenosis and fibrocystic changes (Fig. 3).
- Due to the discordant biopsy and imaging, a specialized pathology consult was requested.
- Histopathology of the excisional biopsy revealed a 2.6 cm LGASC arising within the background of a complex radial sclerosing lesion with positive posterior, medial, and anterior surgical margins. Tumor cells were ER: Low positive (1-5% weak), PR: positive (10% moderate), and HER2: negative (0 on a 0-3+ scale). Ki-67 proliferation index was low (5-10%).
- Multidisciplinary discussion led to patient referral to an academic center for further evaluation. Due to her gravid status and positive margins, mastectomy was recommended by both facilities.
- At 29 weeks pregnant, patient underwent a left skin sparing mastectomy with left axillary sentinel node biopsy with the intent of delayed reconstruction to minimize time under anesthesia. Final pathology is pending, and the patient will be seen for follow up in our clinic.

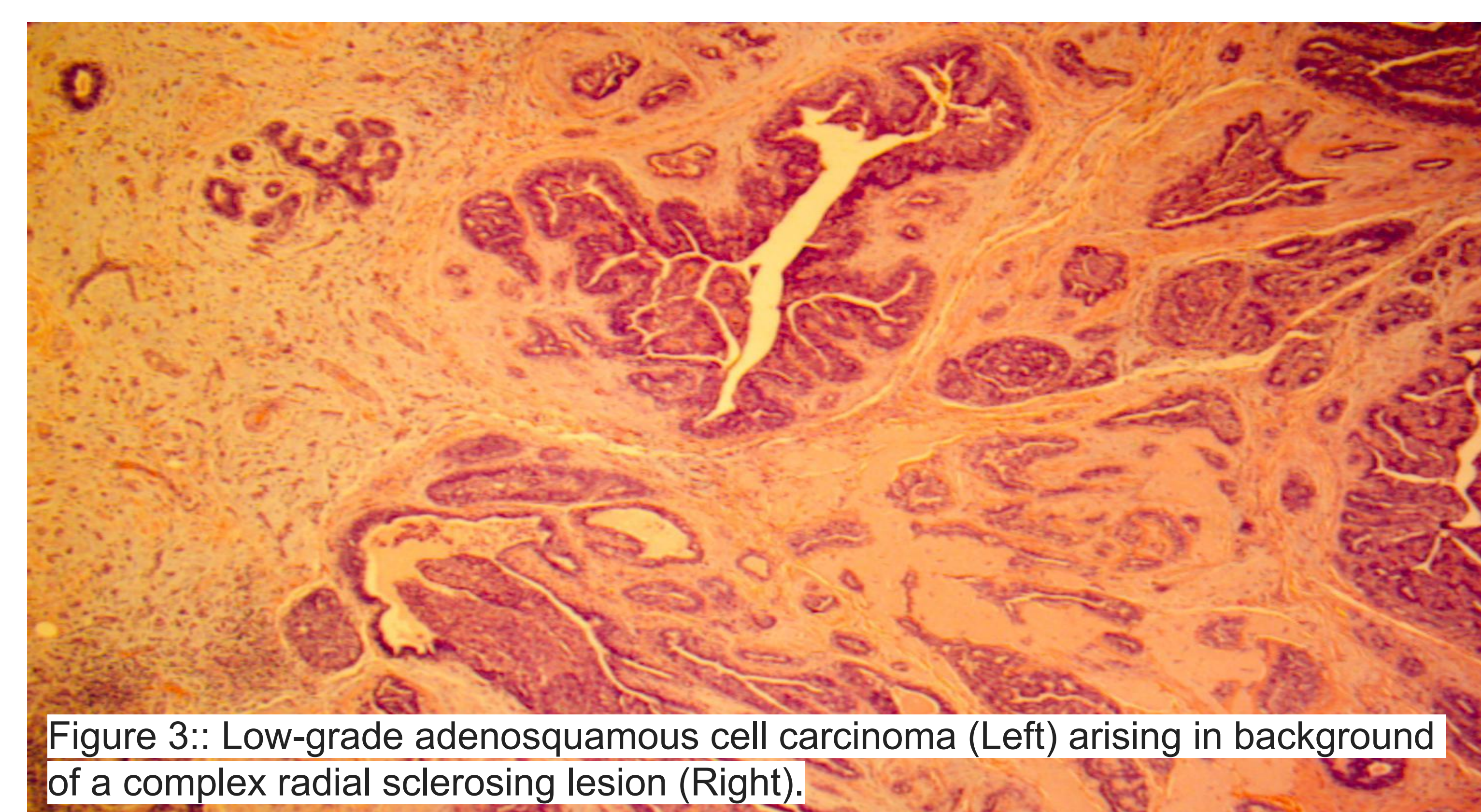
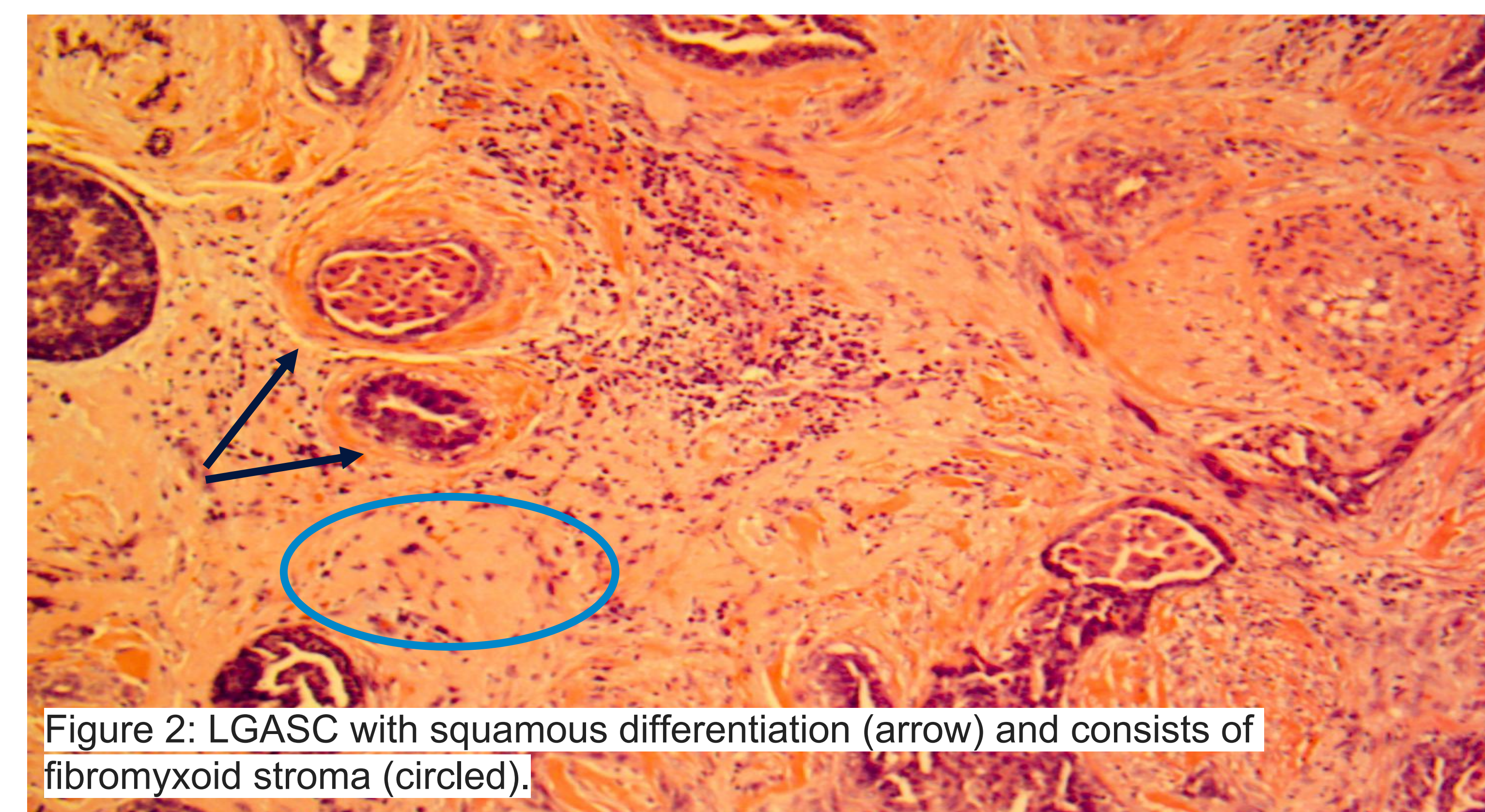
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Imaging

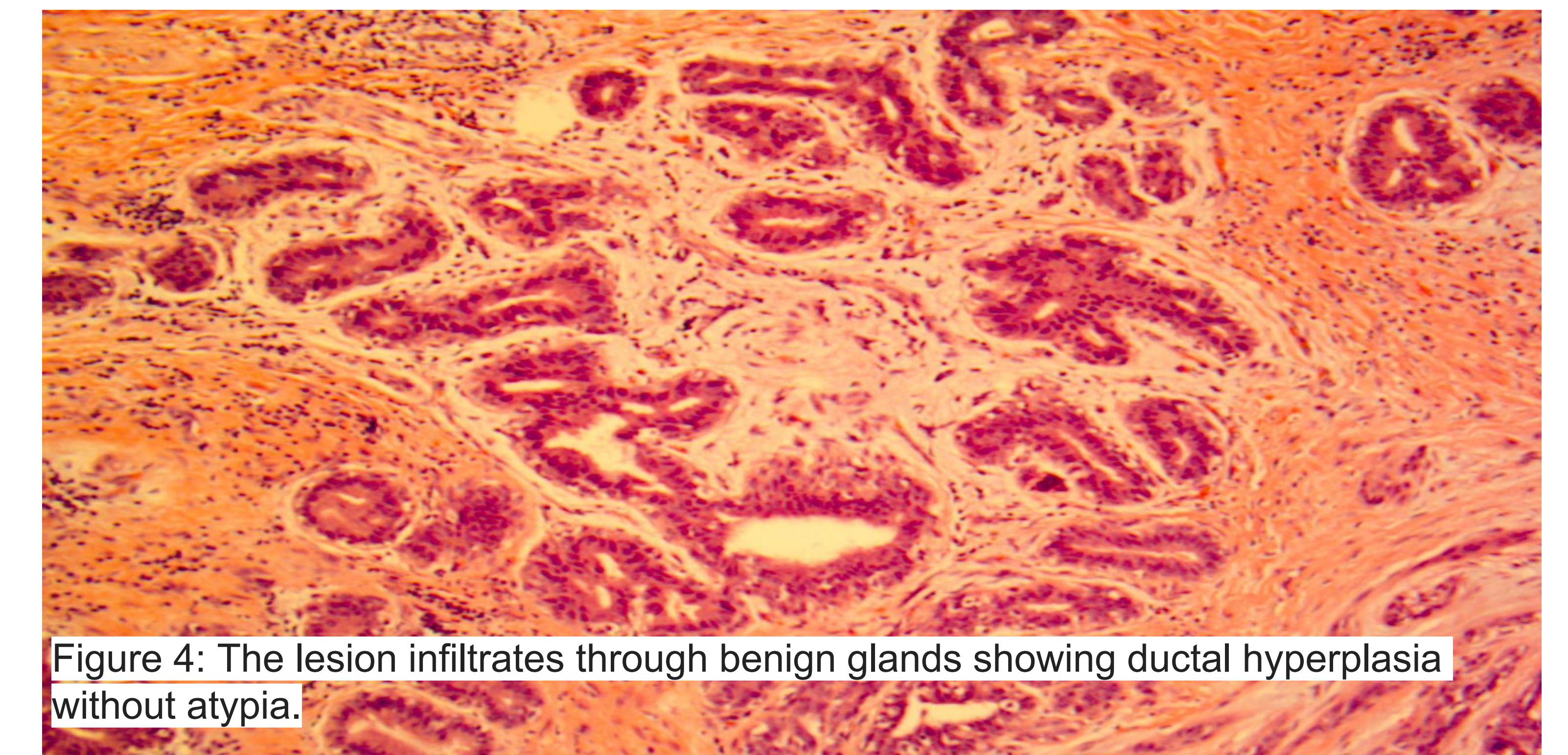


Pathology

Histopathology of LGASC shows infiltrative, small, compressed glands, well formed glands with variable squamous differentiation and found in setting surrounded by stroma with bland spindle cells. There is rare to no mitotic activity. As identified in our patient, modest lymphocytic infiltrate can also be seen.²



Pathology



Discussion

- As seen in this patient, LGASC is often found in the setting of other lesions including sclerosing lesions and adenomyoepitheliomas.¹
- Diagnosis is difficult to achieve with imaging, fine needle aspiration, and core needle biopsy. Excisional biopsy is routinely needed for diagnosis.
- Consensus in management of LGASC is not well defined. Most authors recommend management with wide local excision or simple mastectomy.
- Chemotherapy and radiation have occasionally been administered, but more commonly in the setting of an associated malignancy or large lesions.³ It has been suggested that due to the indolent nature and rare occurrence of metastasis that routine sentinel lymph node biopsy may not be necessary.⁴
- LGASC of the breasts is exceedingly uncommon and remains a diagnostic and therapeutic challenge and has not been previously described in a pregnant patient. This case contributes to further discussion of management in LGASC with an individualized approach.

References

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