

ATYPICAL PRESENTATION OF LACTATING ADENOMA

Radiology

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ABSTRACT

A lactating adenoma is a rare, palpable breast lump that typically occurs during late pregnancy or breastfeeding, commonly affecting young women in their 20s or 30s who are having their first child. Although it's a benign condition, a pathological correlation may be necessary to rule out cancer. Breast cancer is rare during and immediately after pregnancy, but any breast lump in this group of women requires investigation. The main possibilities for a solid breast lump include normal tissue growth, fibroadenoma, mastitis, lactating adenoma, tubular adenoma, phyllodes tumor, and breast cancer. We report a case of a 30-year-old woman who presented with a non-tender palpable lump in right breast over a period of 3 months.

KEYWORDS

lactating adenoma, breast lump, Galactocele, fibroadenoma, Lobular hyperplasia, Abscess, Breast cancer

INTRODUCTION:

- Lactating adenoma is an uncommon benign stromal tumor seen during late pregnancy and lactation.
- Etiology and pathogenesis are not clear but it is affected by rising estrogen levels of pregnancy.
- Clinically, it presents as a firm, nontender and mobile mass that usually regresses spontaneously after the period of lactation.(1)

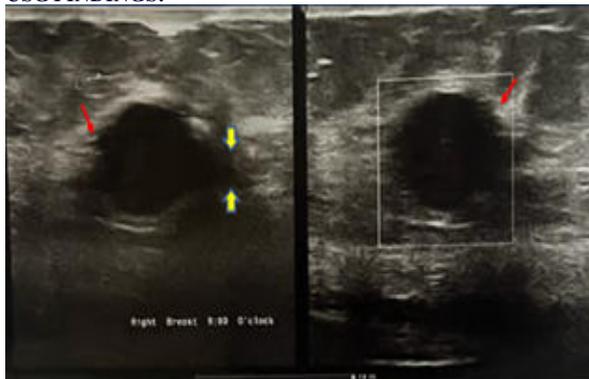
CASE STUDY:

- A 30-year-old female who is 6 months post-partum presented with a non-tender palpable lump in right breast over a period of 3 months.
- She has no history of pain or trauma.
- Family history: Grandmother was diagnosed with breast carcinoma at 60 years of age.

INVESTIGATIONS:

- USG of right breast was done followed by USG guided FNAC.
- Right breast show predominantly lactating pattern of parenchyma.
- A well defined hypoechoic lesion measuring 1.2 x 1.5 cm was noted at 9°clock position in the peripheral zone.
- The lesion showed focal spiculations and extension into the adjacent ducts.
- There is evidence of posterior acoustic enhancement.
- No internal vascularity and no mobile internal echoes were seen.
- The postechoic enhancement, absence of internal vascularity and well circumscribed margin of the mass pointed to its benign nature and absence of internal vascularity favoured galactocele rather than lactating adenoma.

USG FINDINGS:



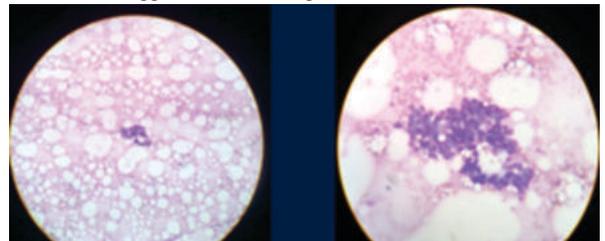
USG IMAGE OF RIGHT BREAST LESION – infiltration into duct (↓) and peripheral spiculations (‡) noted.

DIFFERENTIAL DIAGNOSIS:

- Galactocele
- Fibroadenoma
- Lobular hyperplasia
- Abscess
- Breast cancer

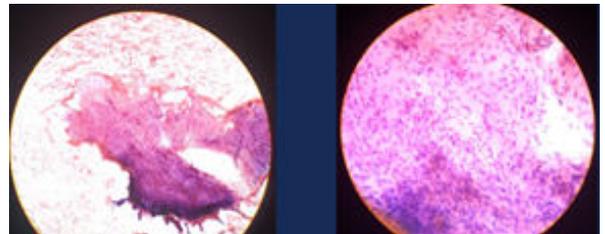
CYTOLOGY FINDINGS:

- Smears are moderately cellular and show benign ductal epithelial cells arranged in cohesive mono layered sheets, staghorn tridimensional clusters and papillae with intact myoepithelial cell layer sheets.
- Background shows plenty of bare benign nuclei, fibromyxoid stroma and hemorrhage.
- Features suggestive of Lactating adenoma.



Low power view of ductal epithelial cells.

High power view of ductal epithelial cells.



Low power view of fibromyxoid component.

High power view of fibromyxoid component.

- Ultrasound is the preferred modality for detection.
- Benign breast tissue with gestational/secretory hyperplasia with or without infarction is concordant with a lactating adenoma.

Classical features of lactating adenomas(2):

- Wider than tall orientation
- Homogeneously hypoechoic or isoechoic solid ovoid masses
- Posterior acoustic enhancement
- Increased vascularity
- Long axis parallel to the chest wall

Atypical features of lactating adenomas :

- Hyperechoic mass due to inspissated milk within the dilated acini
- Echogenic “pseudocapsule” due to a thin layer of compressed stroma
- Microlobulations

Aggressive features of lactating adenomas :

- Irregular margins
- Posterior acoustic shadowing
- Internal heterogeneity due to infarction making it indistinguishable from malignant entities.

MANAGEMENT:

- Regress spontaneously and require no additional treatment.
- To reduce the size, Bromocriptine can be used.(3)
- Simple enucleation if the lesion does not regress and produce pain.
- Successful management of these patients requires an understanding of expected clinical and imaging findings associated with physiologic breast changes and with common benign breast disease.

CONCLUSIONS:

Cause of lactating adenoma is postulated to be:

- either simply a variant of fibroadenoma, tubular adenoma or lobular hyperplasia
- or unique neoplasms that arise de novo in a hormonally stimulated breast.(4)

Lactating adenomas have an excellent prognosis with rare recurrence, hence diagnosing and differentiation from other benign lesions and malignancy is necessary.

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