

## Lactating Adenoma: A case report

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**ABSTRACT:** Lactating adenoma is a benign tumor of pregnancy and lactation, found most often in the third trimester of pregnancy and less frequently during lactation. Clinically, it presents itself as a unique and discrete mobile mass. It is a rare benign tumor which the diagnosis requires pathological confirmation. Usually it disappears spontaneously. Chirurgical treatment is offered for aesthetic problems related to the size of the adenoma. The authors report a case of lactating adenoma discovered at eight months of the post-partum. Through this case, they discuss the clinical, radiological, histopathological aspects and various therapeutic modalities of this tumor.

**KEYWORDS:** breast, benign tumor, ultrasound, mammography, biopsy.

### INTRODUCTION

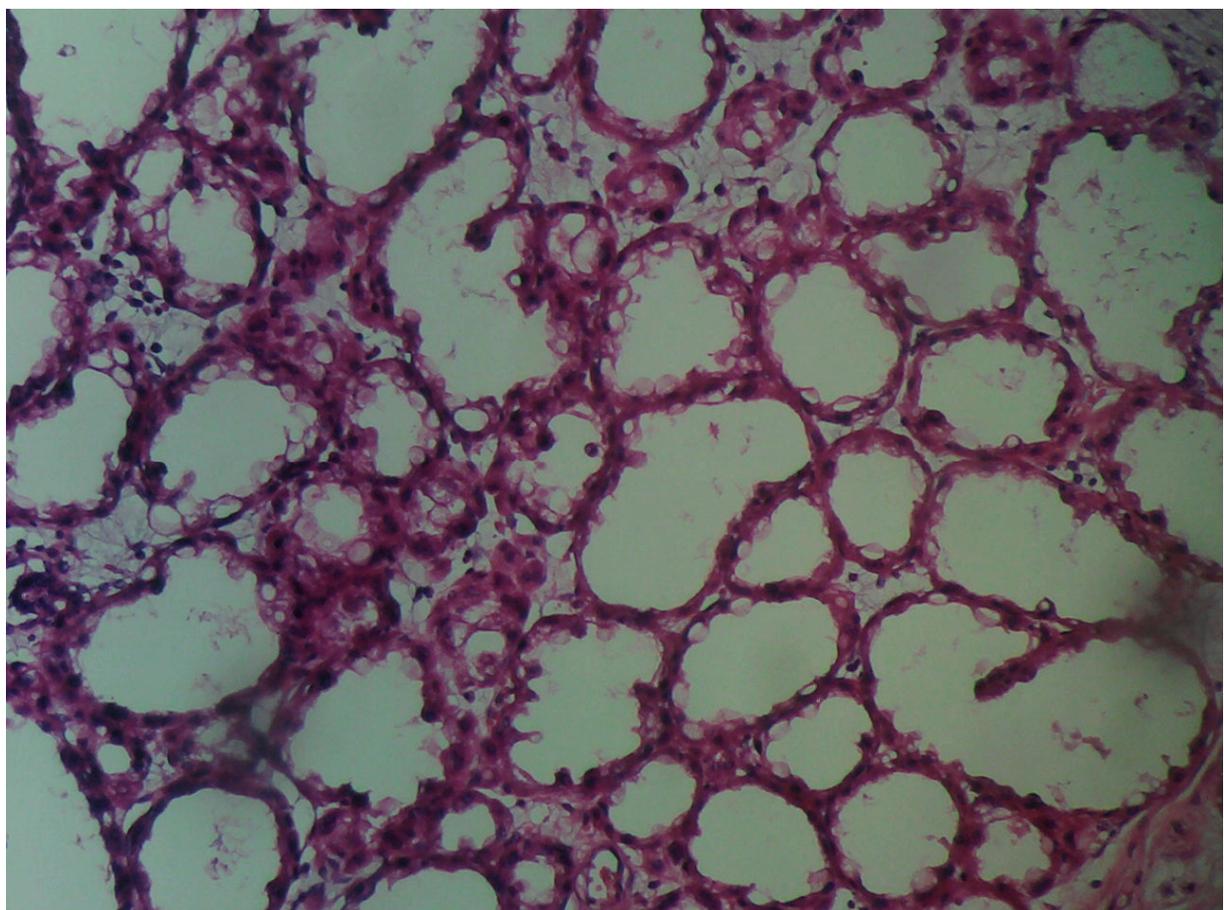
Lactating adenoma is a rare benign tumor most often found in prepartum or postpartum. The authors report a case of lactating adenoma in a 27 year-old primigravida woman, discovered at eight months in the post-partum.

### OBSERVATION

Mrs. FH , 27 year-old, primigravida woman, without medical history, consulted in our service for swelling of the right breast which appeared eight months after giving birth and two months after stopping breastfeeding . The swelling gradually increased in size. Breast examination found a tumefaction at the right axillary tail without inflammatory signs. Palpation found a nodule of 4/3 cm, well delineated, painless, with soft consistency and mobile. There was no palpable axillary lymphadenopathy. Mammography showed an axillary tail mass of the right breast measuring 4/3 cm , dense with regular limits and without clustered microcalcifications. Ultrasound showed a well delineated hypoechoic lesion containing several microvesicles (Figure 1). Microbiopsy (trucut) with histopathological examination revealed microcystic changes of breast parenchyma with many cystic dilated channels lined by flattened epithelial cells . The lobules were large, consisting of enlarged hyperplastic acini and lined by a double layer of myoepithelial and epithelial cells and containing many vacuoles containing mucoïd secretions (Figure 2). These features are consistent with the diagnosis of lactating adenoma. Thus, we decided to perform a tumorectomi. Postoperative recovery was uneventful.



**Fig. 1.** *Ultrasound showing a well delineated hypoechoic lesion containing several microvesicles*



**Fig. 2.** *Histopathological examination: Lactating adenoma: Microcystic changes of breast parenchyma with many cystic dilated channels lined by flattened epithelial cells*

## DISCUSSION

Lactating adenoma occurs most often young women ( 20-38 years ) in the third trimester of pregnancy and during lactation [1] . The majority of patients are primiparous without medical history [1]. Clinically, it presents itself as a palpable mass, quite large from 1cm to 4 cm diameter with an average of 2cm, painless, well-defined, unique and mobile with a firm consistency, most often in the periphery and in the upper outer quadrant [2] . There is usually no axillary lymphadenopathy, or nipple discharge, or appearance of inflammatory skin look. Our observation are consistent with the literature data. Concerning histology, lactating adenoma is not surrounded by a capsule; It is formed by a lobules proliferation separated by thin connective vascular septations. The alveolar lumen is filled with an abundant protein material with fat and colostrum and it's lined by cuboidal epithelial cells with large vacuolated cytoplasm [2,3] . The epithelial layer is lined with a layer of myoepithelial cells sensitive to ocytocin. In immunohistochemistry, these cells express the S100 protein and lactoferrin and alpha- lactalbumin which is unique to gestational breast tissue [4]. The basal membrane is intact and there is no cellular atypia [5,6]. Mammography should be avoid during pregnancy. In the postpartum period, its analysis is limited by the high density of breasts during this period. Ultrasound is the first examination to do. Usually lactating adenoma appears as a homogeneously hypoechoic mass, with a large axis parallel to the skin, and smooth and slightly lobulated edges [2]. During pregnancy, the echogenicity may become heterogeneously anechoic or hypoechoic with echoic areas corresponding to the enlarged and milk-filled cells [4]. The biopsy allows the histopathological diagnosis of breast masses discovered during and immediately after pregnancy. Even if the mass is palpable, biopsy under ultrasound guidance is preferable to target solid portions of the mass while avoiding liquid areas. When the benign nature is confirmed by biopsy, a simple clinical and ultrasonographic monitoring is recommended waiting for spontaneous regression. Because of the aesthetic discomfort occasioned by the tumor our patient opted for surgical resection.

## CONCLUSION

Lactating adenoma is a benign tumor who regress spontaneously. It usually requires a simple clinical and radiological follow-up. Surgical indications are reserved for aesthetic issues related to the size of the adenoma.

## CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest related to this article.

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