

# **Giant Lactant Adenoma: About a Case**

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#### Abstract

Affecting young women, lactating adenoma is a rare benign tumor of the breast. It is seen mainly in the third trimester of pregnancy and in the postpartum period. Clinically, it is a solid mass, mobile typically benign but its character of rapid evolution is reminiscent of phyllodes tumors, sarcomas and galactoceles. The definitive diagnosis is histological. We report a case of lactating adenoma in a 26-year-old lactating woman, third procedure, second pare, with a history of tumor resection of the outer quadrants of the left breast, 9 months ago, whose histology evoked a fibrotic disease, cystic breast associating non-specific subacute mastitis with suppuration. Received for recurrence of a tumor in the left breast which was the site of a polylobed mass of about 10/5 cm occupying 3/4 of the breast with mobile ipsilateral axillary adenopathies. A micro tru-cut biopsy was performed and the histology was in favor of a lactating breast adenoma with no signs of malignancy. She underwent surgical excision, the consequences of which were simple.

### **Keywords**

Lactating Adenoma, Breast, Histological, Malignancy, Surgical Excision

## **1. Introduction**

A lactant adenoma is a benign tumor of the breast that is seen in pregnant or breastfeeding women [1]. It constitutes less than 10% of benign lesions [2] [3]. It falls within the scope of adenomatous lesions of the breast for which Hertel has proposed a classification; among these, he distinguishes "true adenomas", nipple adenomas and fibroadenomas [1]. It often presents as a single, mobile, small mass, <3 cm, sometimes as a large mass that may suggest a malignant tumor. It's discovered most often during the 3rd trimester of pregnancy [1] [4]. Contracep-

tive use was rarely found [4] [5]. The lesion is often single; rare cases of multiple lactational adenomas have been reported, and during the same pregnancy [4]. The lesion is often single; rare cases of multiple lactational adenomas have been reported, and during the same pregnancy [4]. The lesion is often single; rare cases of multiple lactational adenomas have been reported, and during the same pregnancy [4]. The lesion is often single; rare cases of multiple lactational adenomas have been reported, and during the same pregnancy [4]. Clinically and radiologically, they are indistinguishable from other benign breast tumors. The definitive diagnosis is histological. Its increase in size leads to surgical excision and contraindicates breastfeeding. It does not recur and does not increase the risk of breast cancer. We report a case of giant lactant adenoma treated in the surgery department of CHU Gabriel TOURE in Bamako, Mali.

#### 2. Observation

Mrs. R.C, 26 years old, third act, second parent, with no notable family history, having undergone tumor resection of the outer quadrants of the left breast, 9 months ago. The histology of the surgical specimen was in favor of a fibrocystic breast disease with non-specific subacute mastitis with suppuration. She was referred to us for a recurrence of a tumor in the left breast. On physical examination, there was breast asymmetry. The left breast presented a periareolar scar of approximately 10 cm and was the site of a polylobed mass of approximately 10/5cm occupying 3/4 of the breast (Figure 1). It was an ill-limited mass, mobile with respect to the superficial and deep plane. A milky-looking nipple discharge was noted. There was mobile ipsilateral axillary lymphadenopathy. The right breast was normal apart from a milky nipple discharge. The breast ultrasound had shown a breast full of reworked cystic masses of heterogeneous content. The largest measured  $55 \times 51 \times 50$  mm and  $56 \times 46 \times 36$  mm suggesting fibrocystic mastopathy (Figure 2). A tru-cut microbiopsy was performed and the histology was in favor of a lactating breast adenoma with no signs of malignancy. She had undergone wide excision of the tumor through an inverted "T" incision (Figure 3). Histology concluded that there was a lactating adenoma associated with acute suppurative mastitis. The postoperative course was simple. There was no recurrence after a new contracted pregnancy and a 2-year follow-up (Figure 4).



Figure 1. Left breast tumor.



**Figure 2.** Breast ultrasound showing hypoechoic, heterogeneous tissue mass with irregular contours.



Figure 3. Piece of resected breast tissue.



**Figure 4.** Postoperative image showing healing without signs of recurrence.

## 3. Discussion

Lactant adenoma is a rare benign tumor specific to pregnancy and lactation. It occurs more frequently during the third trimester of pregnancy and more rarely postpartum [6]. It affects young women with a peak age of 25 years, preferentially in the third trimester of pregnancy [2]. The discovery of lactating adenoma postpartum is often early, it is due to the presence of a neglected nodule during pregnancy, which evolved with breastfeeding [1] [2] [3]. It constitutes less than 10% of benign breast tumors [1]. It has been demonstrated that the cells of the

lactant adenoma strongly express these prolactin receptors [4]. Combined oral contraception does not constitute a risk factor for the occurrence of this tumor [3] [5]. The lactating adenoma does not increase the risk of occurrence of breast cancer [3] [5] nor of occurrence of benign breast tumor (adenofibroma) and any association between the two remains fortuitous [7]. Currently, a consensus emerges to consider that the lactant adenoma does not correspond to an authentic neoplastic lesion but rather to an abnormal localized response of the breast tissue to hormonal stimulation, regressing after pregnancy. These authors would prefer the term "lactating nodule" [8] [9]. The lesion is often single; rare cases of multiple lactational adenomas have been reported, and during the same pregnancy [4]. It often presents as a well-limited mass, mobile in relation to adjacent structures, without abnormal nipple discharge [2] [4] [5]. In our case, the left breast presented a periareolar scar of approximately 10 cm and was the seat of a single mass taking up 3/4 of the ipsilateral breast. Clinically, it presents as a small mass of 1 to 3 cm, mobile, with no adjacent skin abnormality or nipple discharge [7]. Rarely the adenoma is giant reaching more than 5 cm in diameter [1] [3]. In the literature, some cases of giant lactant adenoma have been reported [2] [6]; this was the case of our observation where the tumor measures approximately 11 cm. It was a badly limited mass mobile with respect to the superficial and deep plane. There is a milky-looking nipple discharge. Ultrasound With high-frequency probes, ultrasound is the first-line examination in a pregnant woman [4] [5] [6]. During pregnancy, the echostructure may become heterogeneous with anechoic areas of liquid nature. These multiple central and peripheral liquid areas seem to correspond to the dilated and milk-filled alveoli giving this multicystic appearance. Microbiopsy is an essential tool for diagnosis, it is a micro-invasive procedure but which can lead to certain complications (in particular infection and cutaneous fistula specific to the lactating breast) [10].

A tru-cut microbiopsy was performed and the histology was in favor of a lactating breast adenoma with no signs of malignancy. Surgical indications are reserved for aesthetic problems secondary to the size of these adenomas and complicated forms [2].

An increase in tumor size after childbirth, due to tumor necrosis, requiring surgical excision is described. Some authors suggest stopping breastfeeding with bromocriptine and monitoring the patient by ultrasound every 6 months [1] [5]. Our patient had undergone wide excision of the tumor through an inverted "T" incision. Lactant adenoma usually does not recur and does not increase the risk of cancer [1] [4]. We recorded sequels that were simple and there was no recurrence after a new pregnancy contracted.

#### 4. Conclusion

Lactant adenoma is a benign pathology of pregnancy and lactation. The diagnosis can be suspected on ultrasound but must be confirmed by micro biopsy. The diagnostic confirmation is histological. Surgery, whether or not preceded by medical treatment, is reserved for aesthetic problems related to the size of the adenomas. The prognosis is good.

#### **Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

#### **References**

- Kouach, J., El Hassani, M., Babahabib, A., Guelzim, K., Zazi, A., Moussaoui Rahali, D., et al. (2008) Adénome lactant éctopique: Aspects radiologiques. *Imagerie de la Femme*, 18, 35-37. <u>https://doi.org/10.1016/S1776-9817(08)71698-5</u>
- [2] Reeves, M.E. and Tabuenca, A. (2000) Lactating Adenoma Presenting as a Giant Breast Mass. Surgery, 127, 586-588. <u>https://doi.org/10.1067/msy.2000.102603</u>
- [3] Mayank, J. and Mukesh, S. (2006) Giant Lactating Adenoma of Breast. *Bombay Hospital Journal*, **48**.
- [4] Magno, S., Terribile, D., Franceschini, G., Fabbri, C., Chiesa, F., Di Leone, A., *et al.* (2009) Early Onset Lactating Adenoma and the Role of Breast MRI: A Case Report. *Journal of Medical Case Reports*, **3**, Article No. 43. <u>http://www.jmedicalcasereports.com/content/3/1/43</u> <u>https://doi.org/10.1186/1752-1947-3-43</u>
- Kouach, J., Babahabib, A., El Hassani, M., Hafidi, R., Moussaoui, R.D. and Dehayni, M. (2010) Adénome lacatant géant. *Practical Obstetrics Gynecology*, 230, 7-8.
- [6] Hertel, B.F., Zaloudek, C. and Kempson, R.L. (1976) Breast Adenomas. *Cancer*, 37, 2891-2905.
  <u>https://doi.org/10.1002/1097-0142(197606)37:6<2891::AID-CNCR2820370647>3.0.</u> <u>CO;2-P</u>
- [7] Eid, S., Dos Santos, E., Boisserie-Lacroix, M., Grelet, P.H. and Rivel, J. (2001) Adénome lactant: Aspect radiologiques. À propos d'un cas. *Journal of Radiology*, 82, 264-267.
- [8] Slavin, J.L., Billson, V.R. and Ostor, A.G. (1993) Nodular Breast Lesions during Pregnancy and Lactation. *Histopathology*, 22, 481-485. https://doi.org/10.1111/j.1365-2559.1993.tb00162.x
- [9] Zafrani, B. and Vincent-Salomon, A. (2000) Lésions et tumeurs bénignes du sein. Annals of Pathology, 20, 570-587.
- [10] Sumkin, J.H., Perrone, A.M., Harris, K.M., Nath, M.E., Amortegui, A.J. and Weinstein, B.J. (1998) Lactating Adenoma: US Features and Literature Review. *Radiology*, 206, 271-274. https://doi.org/10.1148/radiology.206.1.9423682