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Giant bilateral lacting adenoma: A case report

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Abstract
A lactating adenoma is a benign tumor that presents as a solitary, mobile breast mass. It is most often found during the third trimester of pregnancy or during lactation. It is a rare benign tumor of the breasts. Its diagnosis is suspected on radiology and confirmed by histology. We report the case of a 24-year-old patient who came to our department for a breast ultrasound whose clinical information was a large firm mass on the bilateral breast at 3 months postpartum. This mass was discovered by the patient during the 3rd trimester of pregnancy. We attached to the diagnosis of bilateral lactant adenoma taking into account the clinical history, the ultrasound aspect and the histological confirmation. She has received medical treatment and regular gynecological follow-up to this day.

Keywords: lacting adenoma; lactation; ultrasound; pregnancy

Introduction
Lacting adenoma is a rare benign tumor that occurs during the last trimester of pregnancy. It is also discovered during lactation [1]. It is a tumor specific to pregnancy and lactation. It affects young women with a peak age of 25 years [2]. Lactant adenoma represents less than 10% of benign breast tumours. Ultrasound allows the diagnosis to be suggested, but confirmation must be provided by anatomo-pathological and histological examination [3]. We report the case of a 24-year-old woman who was discovered to have a bilateral breast mass during pregnancy with a rapid increase in volume after delivery and during breastfeeding.

Observation
Mrs. X, 24 years old, primiparous, came to our department 3 months postpartum for a breast ultrasound. In her story, she had noticed during the 9th month of her pregnancy, a right and then left breast mass but having considered these masses as normal. She had noticed a rapid increase in the volume of the mass after childbirth and during lactation, which prompted her consultation with a midwife who prescribed the ultrasound examination. Physical examination revealed a firm mass, mobile and sensitive to palpation, with no noticeable change in the skin covering. We had performed the breast ultrasound which had highlighted on the upper quadrants of the bilateral breast, a heterogeneous hypoechoic oval mass well limited with some areas of necrosis. On the right, it measured 7cm long axis and on the left, it measured 4.5 cm long axis [figure 1]. There was no axillary lymphadenopathy or internal mammary chain. Histological examination was in favor of a lactating adenoma. She had benefited from medical treatment alone with gynecological follow-up until now because she still wants to continue breastfeeding.

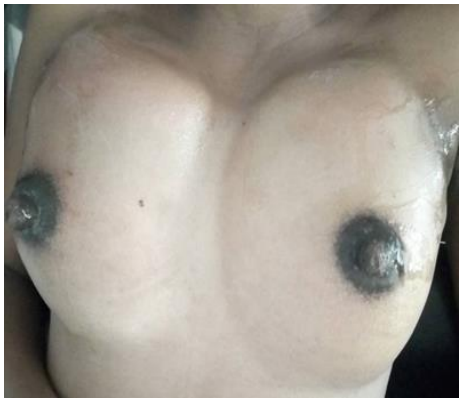
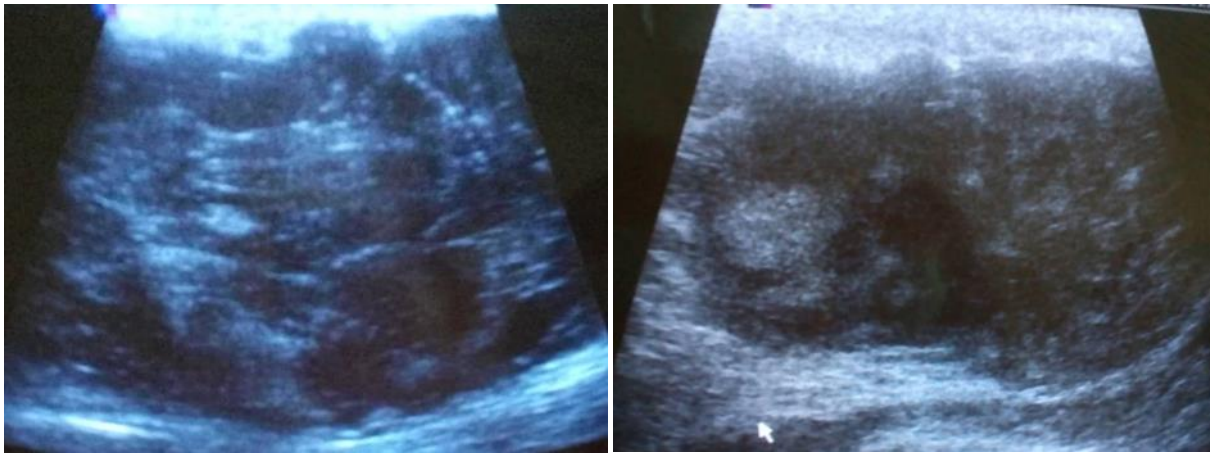


Fig 1: Swelling on the upper quadrants of the bilateral breast



A B

Fig 2: Ultrasound sections showing a heterogeneous hypodense mass with an area of internal necrosis (A=right breast, B=left breast)

Discussion

Lacting adenoma affects young women between 25 and 30 years old [4]. It is a rare benign tumor that is specific to pregnancy and lactation [5]. It most often occurs during the third trimester of pregnancy [4], as was the case in our patient. The majority of patients with a lactating adenoma are primiparous with no personal history [6]. The discovery of lactating adenoma in the postpartum is often early, it is due to the presence of a neglected nodule during pregnancy, which evolved with breastfeeding [1]. This was also the case with our patient. In our study, lactational adenoma occurred in a 24-year-old patient, primigest, who was 3 months postpartum. The lacting adenoma is not a neoplastic lesion but rather an abnormal localized response of the breast tissue to hormonal stimulation. The increase in progesterone and estrogen levels and prolactin during pregnancy promotes the growth of the ducts and the formation of the tubuloalveolar structures. Progesterone and prolactin have a proliferative action on breast tissue. It has been demonstrated that the cells of the lacting adenoma strongly express these prolactin receptors [7]. According to the literature, it does not increase the risk of developing breast cancer [8]. The lactating adenoma presents as a well-circumscribed tumor, generally mobile with a long axis parallel to the skin [6, 7] as was the case in our patient. Its size can be greater than 30 mm and reach 50 mm and more [7]. In our patient, the tumor was giant, measuring up to 7 cm. Ultrasound helps to evoke its diagnosis [5]. According to the literature, this mass had sonographic characteristics similar to that of adenofibroma, but microbiopsy is the definitive examination for diagnosis [4]. The treatment of lacting adenoma is medical and surgical [9]. The medical treatment is to a cessation of lactation by Bromocriptine. Surgical treatment is based on lumpectomy. This was not the case for our patient who still wanted to breastfeed. She has benefit from symptomatic medical treatment and regular gynecological follow-up.

Conclusion

Lacting adenoma is a benign tumor occurring during pregnancy and lactation. It generally affects young primiparous women. Its diagnosis is evoked clinically and radiologically mainly by ultrasound. The histological and anatomo-pathological allows diagnosis of certainty. Our case was special because the tumor was giant and bilateral. The ideal treatment is medical and surgical**.**

Conflict of interest: The authors declare that they have no conflict of interest

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