

The Importance of Carefully Evaluating Breast Masses During Pregnancy

A Importância de uma Avaliação Detalhada de Nódulos da Mama na Gravidez

Keywords: Adenoma/diagnosis; Breast Neoplasms/diagnosis; Lactation; Pregnancy; Pregnancy Complications

Palavras-chave: Adenoma/diagnóstico; Complicações da Gravidez; Gravidez; Lactação; Neoplasias da Mama/diagnóstico

Dear Editor,

Breast masses are common in women of childbearing age. Of note, the incidence of malignant tumors in pregnancy is rising, probably due to increasing maternal age. International data estimates that up to 4% of breast cancers are diagnosed during this period.¹

The differential diagnosis of breast masses presenting during pregnancy includes fibroadenomas, galactoceles, cysts, lactating adenomas, and breast cancer.²

This case illustrates the diagnostic challenge that these masses present, given the reduced sensitivity of both clinical examination and radiological findings, due to the high density of breast tissue. Pregnancy-related changes in the breast are induced, mainly, by elevated estrogen levels, which in turn stimulate the proliferation of blood vessels and glandular tissue, while simultaneously reducing stromal tissue.^{2,3}

The authors report the case of a 27-year-old woman, G1P0, presenting at 29 weeks of gestation with a fast-growing nodule in the left breast. Her medical history included obesity and chronic hypertension. During pregnancy, she received treatment with nifedipine, acetylsalicylic acid, iodine and iron. She did not smoke and had no family history of cancer.

Upon physical examination, a firm, mobile, painless, 3 cm-mass was palpable in the upper quadrants of the left breast. No inflammatory signs or nipple discharge were

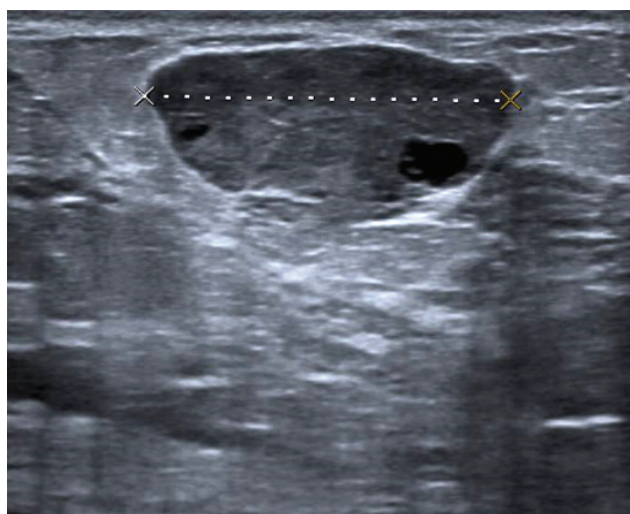


Figure 1 – Ultrasonographic appearance of the nodule, demonstrating an oval well-circumscribed lesion with cystic areas inside

present. The ultrasound revealed an oval, well-delineated, 32 mm-mass of solid nature, containing multiple small liquid areas (Fig. 1). No other breast or axillary lesions were found. An ultrasound-guided biopsy was performed, and the histopathology examination revealed a lactating adenoma. The patient received no further treatment and the nodule disappeared spontaneously six weeks after delivery, when lactation was interrupted according to her preference.

Lactating adenomas are benign stromal tumors of the breast that usually appear during the third trimester of pregnancy or postpartum, with most lesions resolving after cessation of breastfeeding.⁴

Clinically, masses are solid, mobile and nontender, varying widely in size. Ultrasound features suggestive of a lactating adenoma include an oval hypo/isoechoic lesion with posterior enhancement, with sharp margins and which may contain cystic areas, especially when infarcted. A core biopsy should be performed to exclude malignancy, due to the ultrasonographic resemblance with other breast entities.⁴

Although the prognosis of lactating adenomas is very good, this case emphasizes the importance of thoroughly investigating breast nodules during pregnancy, given that the rates of breast cancer in pregnancy are rising and, in these situations, early diagnosis is essential to ensure a better prognosis and should not be delayed until the postpartum period.

AUTHOR CONTRIBUTIONS

AFM: Conception and writing of the manuscript.

RVC, MS: Conception of the work.

OA: Data acquisition and analysis.

MN: Data acquisition, critical review and approval of the manuscript.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

PATIENT CONSENT

Obtained.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

FUNDING SOURCES

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

1. Andersson TM, Johansson AL, Hsieh CC, Cnattingius S, Lambe M. Increasing incidence of pregnancy-associated breast cancer in Sweden. *Obstet Gynecol.* 2009;114:568–72.
2. Alipour S, Omranipour R, Kulkarni D. Clinical presentations of breast disorders in pregnancy and lactation. In: Alipour S, Omranipour R, editors. *Diseases of the breast during pregnancy and lactation.* Berlin: Springer; 2020. p.33-9.
3. Sabate JM, Clotet M, Torrubia S, Gomez A, Guerrero R, de las Heras P, et al. Radiologic evaluation of breast disorders related to pregnancy and lactation. *Radiographics.* 2007;27:S101-24.
4. Parker S, Saettele M, Morgan M, Stein M, Winkler N. Spectrum of pregnancy- and lactation-related benign breast findings. *Curr Probl Diagn Radiol.* 2017;46:432-40.

Ana Filipa MAIA^{✉1}, Mariana SOLINHO¹, Rita VICENTE COSTA¹, Olga ALVES¹, Madalena NOGUEIRA¹

¹. Serviço de Ginecologia/Obstetrícia. Hospital Distrital de Santarém. Santarém. Portugal.

✉ **Autor correspondente:** Ana Filipa Maia. afpbmaia@hotmail.com

Recebido/Received: 22/09/2022 - **Aceite/Accepted:** 26/12/2022 - **Publicado/Published:** 01/02/2023

Copyright © Ordem dos Médicos 2023

<https://doi.org/10.20344/amp.19118>

