

Breast Imaging of Axillary Supernumerary Breast: About a Clinical Case

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DOI: [10.36347/sjmcr.2024.v12i02.005](https://doi.org/10.36347/sjmcr.2024.v12i02.005)

| Received: 25.12.2023 | Accepted: 29.01.2024 | Published: 02.02.2024

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Abstract

Case Report

Axillary breast is a subject that is poorly studied in the medical literature. We report the case of a 41-year-old woman who consulted for a painful right axillary mass, increasing in volume during menstrual cycles. The clinical examination revealed a 3 cm diameter axillary swelling, mobile, soft, without inflammatory signs or discharge. The mammography showed a dense and homogeneous area in the right axillary region, corresponding to an ectopic mammary glandular parenchyma. The ultrasound confirmed the presence of an axillary fibroglandular component, without focal anomaly or adenopathy. The diagnosis of accessory axillary breast was retained. This case illustrates the interest of imaging for the diagnosis and assessment of the accessory axillary breast, a rare anomaly but potentially at risk of neoplastic degeneration.

Keywords: Axillary ectopic breast tissue, mammography, ultrasound.

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1. INTRODUCTION

The supernumerary breast is a rare anomaly of breast development, characterized by the presence of breast tissue outside the normal breast. The supernumerary breast or polymastia results from the existence of a supernumerary breast gland in ectopic location, usually axillary. This anomaly can be asymptomatic or cause pain, palpable masses or nipple discharge. Imaging plays a crucial role in the diagnosis and management of this anomaly. We report through this clinical case an example of axillary supernumerary breast discovered following the appearance of painful axillary swelling.

2. OBSERVATION

This is a 41-year-old woman, with no notable medical history, post-delivery of 10 months, who consulted following the appearance of a right axillary swelling, during pregnancy, and became annoying and painful after the postpartum. The patient also reported a change in the size and shape of the mass during the menstrual cycle. The clinical examination found a right axillary bulge, more than 3cm, soft, well defined, of glandular consistency, painless on palpation, adherent to the superficial plane and mobile with respect to the deep plane, probably the seat of supernumerary areola without

nipple or, nor sign of palpable mass intra mammary and axillary (figure 1).

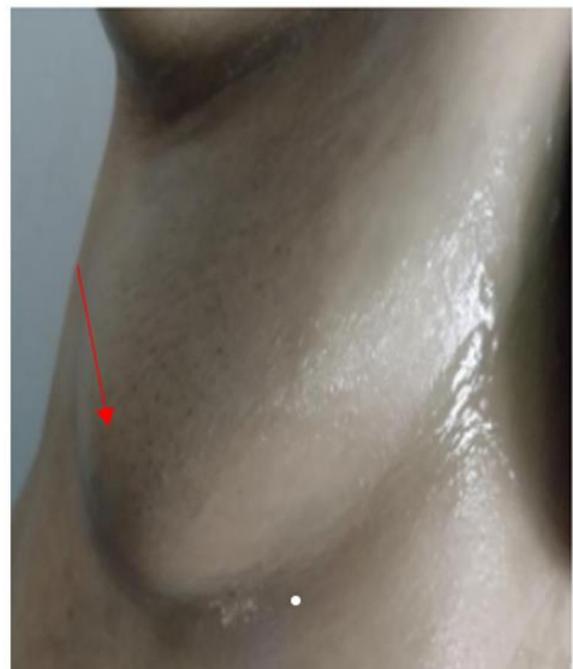


Figure 1: Right axillary arch with a small brownish plaque

Imaging consisting of mammography and breast ultrasound was requested to assess the nature of the swelling and rule out any underlying suspicious masses.

Mammography showed the presence of fibroglandular and fatty tissue in the right axillary extension without architectural distortion or foci of suspicious microcalcifications (figure 2a,2b).

Breast ultrasound confirmed the presence of an axillary mass, homogeneous, hypoechoic, well-defined, measuring 3 cm by 2 cm, without vascularization on color Doppler (figure 3). The diagnosis of accessory axillary breast was made on the basis of radiological and clinical data. The patient was informed of the benign nature of the lesion and the potential risk of neoplastic degeneration. She opted for regular imaging surveillance rather than surgical excision.

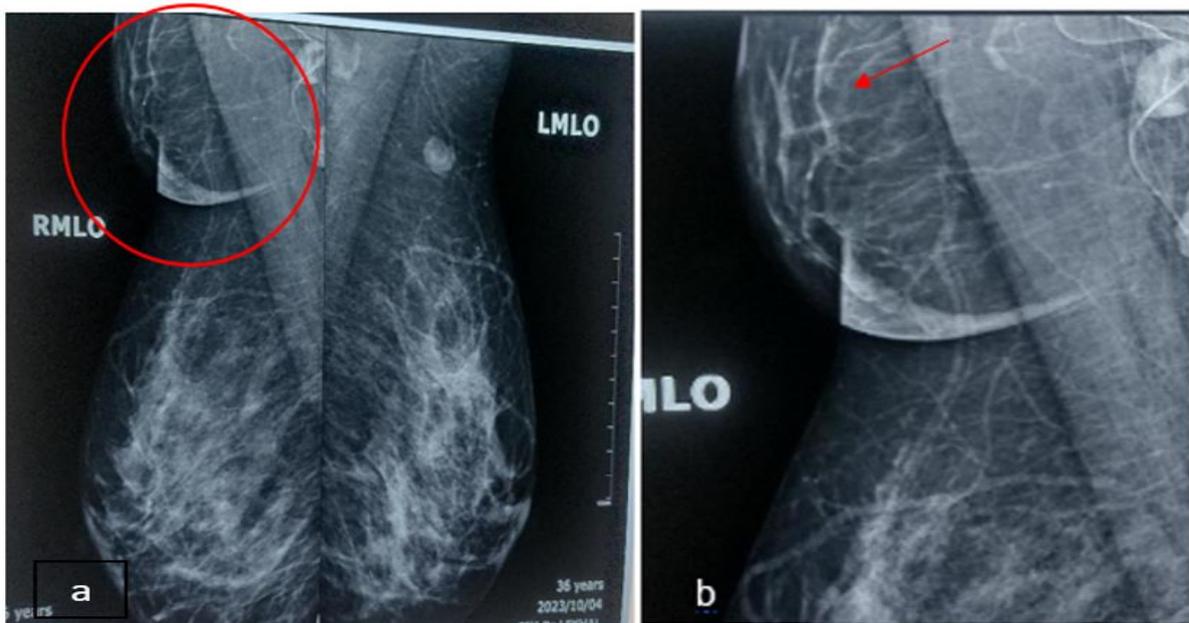


Figure 2: Bilateral mammography. a. External oblique views, b. magnification view of the axilla shows a supernumerary breast with fibro-glandular pattern

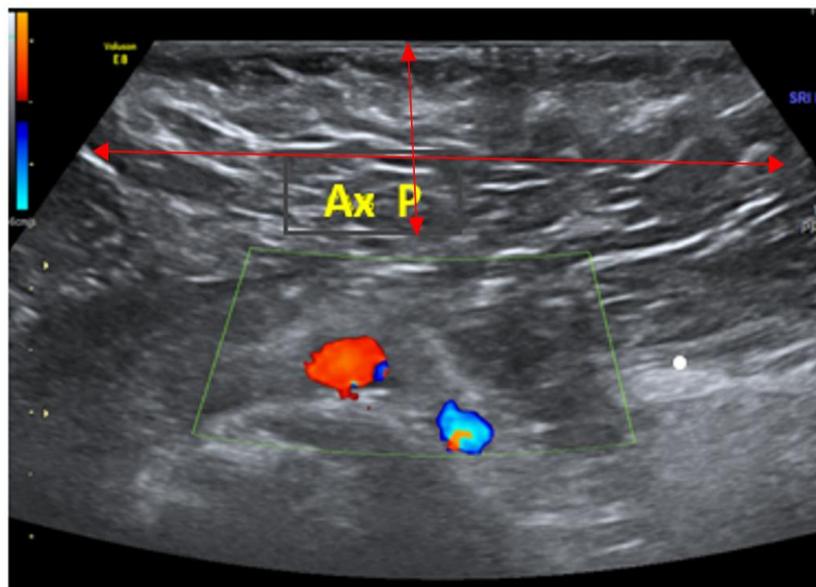


Figure 3: Axillary ultrasound. a. External oblique views, b. magnification view of the axilla shows a supernumerary breast with fibro-glandular pattern

3. DISCUSSION

The accessory axillary breast is an anomaly of embryonic development that results from the persistence

of breast tissue along the milk line that normally goes from the axillary fossa to the groin. The frequency of this malformation is estimated between 2 and 6% in women

and between 1 and 3% in men. The most common site is the chest, followed by the axilla and the abdomen [1].

The accessory breast can be isolated or associated with other breast malformations, such as the supernumerary nipple or areola, hypoplasia or agenesis of the breast, or symmastia [2]. Initially asymptomatic, the accessory axillary breasts usually become symptomatic after puberty, or during pregnancy: increase in size, cyclic pain, discomfort, milk secretion and local skin irritation [5].

The symptomatology of our patient was triggered by pregnancy, with an increase in size of the right axillary swelling. Clinically, the misdiagnosis of the accessory axillary breast is frequent in the absence of areola and nipple, confusing with a lipoma or an adenopathy [2]. This is the case of our patient. The diagnosis of accessory axillary breast is based on the correlation between clinical and radiological data. Radiologically, mammography and ultrasound are the first-line examinations to explore the accessory axillary breast.

Mammography shows a typical appearance of mammary glandular parenchyma of axillary seat, without architectural anomaly or suspicious calcification [3].

Ultrasound allows to confirm the glandular nature of the mass, to evaluate its volume, its vascularization and its relationship with the adjacent structures [4, 6]. Breast MRI can be useful in case of diagnostic doubt or to look for an associated lesion in the ipsilateral or contralateral breast [7].

Histology is not essential for the diagnosis of accessory axillary breast, but it can be performed in case of surgery or biopsy [10]. The treatment of the accessory axillary breast depends on the clinical context, the patient's desire and the risk of complications. The conservative treatment consists of regular imaging surveillance, with a frequency adapted to the age and risk factors of the patient. Please translate to medical English. Indeed, the accessory axillary breast can be the seat of all breast pathologies, benign or malignant, such as cysts, fibroadenomas, hamartomas, phyllodes tumors or carcinomas [8, 9].

4. CONCLUSION

The accessory axillary breast is a rare congenital malformation, often unrecognized, which can be discovered incidentally during a screening mammography or, following the appearance of an axillary swelling. Its diagnosis is based on the correlation between clinical and radiological data. Its management depends on the clinical context, the patient's desire and the risk of complications. The accessory axillary breast can be the seat of all breast pathologies, benign or malignant, requiring regular monitoring and biopsy in case of doubt.

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