



Axillary Unilateral Ectopic Breast Tissue in Pubescent Teenager - A Case Report

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Abstract

Ectopic mammary gland tissues are an entity affecting 2% to 6% of women. Its origin is embryonic with development on the “milk line” most of the time.

It can be asymptomatic or present as pain or tenderness. Its symptomatology is often variable according to hormonal cycles.

We present here the case of a 15-year-old child with a unilateral sub axillary mass present during her menstrual cycles.

The treatment was surgery and the diagnosis was confirmed by anatomopathological analyses.

Introduction

Ectopic mammary gland tissues are a pathology affecting 2% to 6% of women in the general population. It is an embryological remnant that persists during the period of fetus' development [1]. These anomalies mostly develop along the embryonic “milk line”. The “milk line” is a remnant of bilateral ectodermal ridges extending from the anterior axillary folds to the inguinal folds. Most of the time, these ridges regress during embryogenesis, except in the thoracic region, where they form the breasts. If this regression isn't done correctly, Ectopic Breast Tissue (EBT) develops. The axilla is the most common site of development [2,3]. This ectopic breast tissue usually only becomes visible after hormonal stimulation. This usually occurs during puberty, pregnancy, or lactation. The presence of this ectopic gland during hormonal secretion can therefore cause pain, restriction of arm movement when located in the axilla, cosmetic problems and anxiety. The most common symptoms are swelling, tenderness and, sometimes, milk secretion.

Diagnosis is made only after a histopathological analysis of the tissues [4].

This case report describe a case of an ectopic breast tissue presenting as an axillary mass at the beginning of pubescent period.

Case Presentation

A 15 year-old girl, referred to the pediatric surgery service at university hospital of Poitiers on July 2020, with a right axillary mass, swelling and tenderness during her periods. She noted the mass by herself with an evolution during her periods and regression after it, with no other symptoms. She has her period since one year.

She had no history of any medical illness or allergies except a surgery for a clitoral hemangioma during the childhood.

Abdominal and thoracic examinations were normal. Axillary examination revealed a single ovoid mass which measured about 3 cm × 4 cm. It was soft in consistency, without deep adhesion, the surrounding skin didn't show any lesion. There wasn't supernumerary nipple. There was no palpable axillary lymphadenopathy.

Ultrasound reveals a hyperechoic breast tissue of 28 mm × 40 mm visible in the right axillary hollow. There isn't axillary adenopathy (Figure 1).

At this point we decided to proceed with wide local excision under general anesthesia.

The surgery was realized in December 2020 without any complications and the lesion was sent for histopathology. The histopathological assessment revealed a well structured mammary parenchyma, made up of ductulo-lobular units dispersed within abundant adipose tissue. Some

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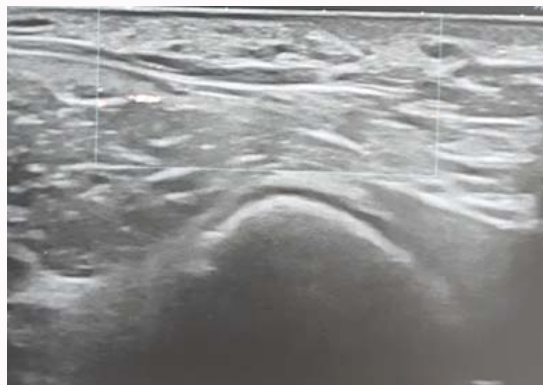


Figure 1: Right axillary ultrasounds.

lobules are the site of an eosinophilic apocrine metaplasia. The patient was discharged home the same day than surgery with oral analgesia and drainage to remove at day 4.

Postoperatively, she developed an effusion in the excision lodge which required local care and wicking during 1 month.

Discussion

The ectopic mammary glands extend along the milk lines, on both sides, from the mid-axillae through the normal breasts and up to the groins [5]. In the normal development, these tissues disappeared soon after their formation. However, ectopic breast tissues may persist anywhere along the milk line (mostly just below the breast). In the present case, we describe an axillary mammary ectopy in a pubescent teenager patient.

Generally, these ectopic breast tissues are asymptomatic. However, they can become painful during periods of strong growth of breast tissue such as during puberty and menstruation. They also respond to hormonal stimuli that affect normal breast tissue such as breastfeeding or pregnancy resulting in engorgement and discomfort

for the patient [4,6,7]. These masses didn't show pathognomonic signs and therefore may go unnoticed for several years. The only way to confirm the diagnosis is a histopathological examination of a tissue sample.

In addition, to adverse effects due to hormonal stimulation, these ectopic breast tissues may be the bed of breast cancer. The extreme rarity of this pathology (0.3% of all breast cancer) contributes to initial diagnosis wandering for the management of these cancers [8].

Conclusion

Ectopic breast tissue is a rare entity and often unknowns by nonspecific clinician. It seems to be important to remain vigilant in front of an axillary mass (or other milk line localization).

References

1. Velanovich V. Ectopic breast tissue, supernumerary breasts, and supernumerary nipples. *South Med J.* 1995;88(9):903-6.
2. Goyal S, Puri T, Gupta R, Julka PK, Rath GK. Accessory breast tissue in axilla masquerading as breast cancer recurrence. *J Cancer Res Ther.* 2008;4(2):95-6.
3. Gutermuth J, Audring H, Voit C, Haas N. Primary carcinoma of ectopic axillary breast tissue. *J Eur Acad Dermatol Venereol.* 2006;20(2):217-21.
4. Deshmukh SN, Maske AN, Deshpande AP, Shende SP. Unilateral ectopic breast tissue on vulva in an adult female. *Indian J Surg.* 2012;74(4):340-1.
5. Rosen PP. *Rosen's Breast Pathology.* Lippincott Williams & Wilkins; 2001. p. 1028.
6. Baradwan S, Wadi KA. Unilateral ectopic breast tissue on vulva in postpartum woman: A case report. *Medicine (Baltimore).* 2018;97(6):e9887.
7. Irvin WP, Cathro HP, Grosh WW, Rice LW, Andersen WA. Primary breast carcinoma of the vulva: A case report and literature review. *Gynecol Oncol.* 1999;73(1):155-9.
8. Amsler E, Sigal-Zafrani B, Marinho E, Aractingi S. Ectopic breast cancer of the axilla. *Ann Dermatol Venereol.* 2002;129:1389-91.