Research article

Bilateral axillary accessory breasts with multiple fibroadenomas

Agrawal A, Mathew J

Division of Breast Surgery, University of Nottingham, UK

Correspondence
Agrawal A
Division of Breast Surgery
University of Nottingham, United Kingdom
NG5 5PB

LMRJ.2020:2(2)
DOI: 10.3810/LMRJ.2020.2.2.01

Received: 2 Jan 2020
Revised:14 Feb 2020
Accepted for publication 19 Feb 2020

INTRODUCTION:

Developmental anomalies of the breasts are rare presenting complaints. They occur along the milk line of the mammary gland development, which extends from axilla to groin. These anomalies include accessory breasts (polymastia), absent breasts (amastia) and accessory nipples (polythelia). The development of accessory breasts is seen in 2- 6 % of normal population [1], the incidence in females being twice as higher as compared to males. The most common site of accessory breasts is in the axilla, where they are seen in about 70% of cases [2], comprising 23.2% of all axillary lumps, but they can occur at ectopic sites anywhere in the body. We report a clinical case of multiple fibroadenomas in bilateral axillary accessory breast tissues.

CASE REPORT

A 41 years old woman was referred to our breast unit with a lump in the right axilla for 4 weeks. The lump was painless without any history of discharge. There was no association with menstrual cycle and there was no known family history of breast cancer. She had two children.

On examination, she had bilateral accessory breasts with a 1 cm nodule in the right axillary accessory breast tissue. Ultrasound of both axillae confirmed accessory breasts on both sides and showed a 10 mm lump consistent with a lymph node in the right axilla. An ultrasound guided core biopsy was taken. Histopathology of the core biopsy, however, revealed it be a fibroadenoma. As per patient's wishes, bilateral accessory breast tissues were excised along with the aforementioned nodule in the right side. Histopathological examination of the tissues confirmed bilateral accessory breast tissues with multiple fibroadenomas.

DISCUSSION:

The breast development begins at about 6 weeks of intrauterine life as mammary ridge bilaterally on the ventral surface of embryo extending from axilla to groin and by the end of 6 months has multiple duct systems. This ridge then starts to regress and at birth a single fully developed duct system remains which is capable of lactation in both sexes. The accessory breast and nipple develop as a result of incomplete regression of the mammary ridge.

Accessory breasts contain normal breast parenchyma; hence they too can be the site of spectrum of diseases which affect normal breasts, including fibroadenoma and carcinoma. The incidence of the

diseases in the accessory breasts is quite low resulting in delay in the diagnosis. The most common site of accessory breasts is the axilla (about 60- 70% of cases [4]), and they are usually bilateral. They can present anywhere from axilla to the groin. In females the mammary ridge extends to the vulva bilaterally, therefore accessory breast tissue can be found in the external genitalia. These accessory breast tissues become evident during pregnancy and lactation and also show some cyclical changes under the influence of the sex hormones.

Majority of the cases of the accessory breasts are asymptomatic and may be found incidentally on the imaging done for some other reason. Histopathological examination is mostly required to confirm the diagnosis. In the axilla, accessory breast tissue can be found separately from the axillary tail, and this confirms its independent entity.

The incidence of fibroadenoma in the accessory breast is extremely low and as reported by Alghamdi et al, it is only 1.51% [2]. To date only few cases of fibroadenomas in the ectopic breast have been reported. Most of the reported cases of fibroadenoma in the accessory breast are in the axilla although a case of fibroadenoma in accessory breast in pubic area has been reported [5] . In another case ectopic breast tissue in the perianal region was found to contain a fibroadenoma [6] .

Literature also comments on the presence of ectopic breast tissue on the face, neck, back, thigh and perianal region[7]. Therefore, any of these sites can be a possible presentation site for fibroadenoma or even carcinoma of the accessory or ectopic breast tissue.

Due to the low incidence of these cases and thus low suspicion rate, majority of these cases are mistakenly diagnosed as lymphadenopathy and lipomas or even sebaceous cysts. Fibroadenoma in the axillary accessory tissue is often misdiagnosed as lymph node even on ultrasound as in our case. The only reliable and confirmatory method of diagnosis is the histopathology.

Both the accessory breasts and the fibroadenomas do not usually require any treatment but on the wish of the patients these may be excised so as to reduce the anxiety of the patients due to apprehension of development of cancer; and also for cosmetic reasons and symptomatic accessory tissues. Alghamdi et al reported the reasons for excision of the accessory breasts as cosmetic, pain and discomfort, cyclical mastalgia, fear of malignancy and lactational abscess[2]. However, cosmetic disfigurement remains the reason in majority of cases.

The literature available is controversial regarding the association of congenital breast anomalies with the renal and cardiac malformations. Previously in some studies [8] it has been suggested that the breast anomalies might be a marker of the underlying anomalies of the urogenital system and cardiac system. Therefore, thorough examination of these systems is recommended in patients presenting with accessory nipples and breast, but other studies [8] on the subject did not show any association.

In the case of our patient there was no clinical history, symptoms or signs attributable to any of these systems so the patient was discharged from further follow-up.

REFERENCES

1. Coras B, et al., Fibroadenoma of the Axilla. American Society for Dermatologic Surgery, 2005. 31: p. 1152-1154.

2. Alghamdi H and Abdelhadi M, Accessory Breasts: When to Excise? The Breast Journal, 2005. 11(2): p. 155- 157.

3. Ciralik H, et al., Fibroadenoma of the Ectopic Breast of the Axilla-a Case Report. Polish Journal of Pathology, 2006. 57(4): p. 209-211.

4. Loukas, et al. (2007) Accessory Breasts: A Historical and Current Perspective.

5. Lilaia C, et al., Ectopic Breast Fibroadenoma. The internet Journal of Gynecology and Obstetrics, 2007. 6(2).

6. Siam GA, et al., Fibroadenoma of ectopic breast tissue in the perianal region. The Breast Journal, 2001. 11: p. 202-207.

7. Rho, J., S. Juhng, and K. Yoon, Carcinoma Originating from Aberrant Breast Tissue of the Right Upper Anterior Chest Wall: A Case Report. Journal of Korean Medical Science, 2001. 16: p. 516-521.

8. Rosen PP, Rosen's Breast Pathology. 2 ed. Vol. 1: Lippincott Williams & wilkins.