Fibroadenoma arising from axillary accessory breast: a case report

ABSTRACT

Fibroadenoma is a common breast lesion. It can usually be found in the upper outer quadrants where most breast parenchyma is located. Fibroadenoma involving the accessory breast is uncommon. There is clinical significance in accessory breast tissues being affected by the same diseases and alterations that compromise a topical breast tissue. The diagnostic (mammography, ultrasonography, cytology and biopsy) and therapeutic protocol for an accessory breast tissue is prudent in detecting early malignancies. We report a case of fibroadenoma found in accessory breasts.

Keywords: accessory breast, ectopic breast, fibroadenoma, case report

INTRODUCTION

Accessory breasts, also known as polymastia, supernumerary breasts, or mammae erraticae, is the condition of having ectopic breast tissue in addition to normal breasts. It occurs along the thoracoabdominal region of the milk line (67%), which then extends down to the groin, of which the commonest site is axilla.[1] The clinical presentation of accessory breast may be asymptomatic or may present with pain, restriction of arm movement, cosmetic problems and anxiety in the premenstrual phase.[2] Axillary accessory breast tissue is a cause of anxiety among women for fear of malignant change. About 2% to 6% of females and 1% to 3% of males are affected by this condition, a third of whom have more than one area of supernumerary tissue growth.[3,4] Axillary tumors have many differential diagnoses ranging from benign to malignant, and fibroadenoma arising from the axillary accessory breast has rarely been described in the English literature. We describe the clinical, radiological and pathological finding relating to a rare case of fibroadenoma arising in an axillary accessory breast.

CASE PRESENTATION

A 19 years old Chinese female presented with huge swelling over the right axilla for 6 months, progressively increasing in size in the initial 3 months. She does not otherwise complain of tenderness, discharge, or skin changes. Patient is a single, nulliparous female. Her paternal grandmother has an unknown cancer, deceased at age 82 years old.

Upon examination, there was a firm, well defined, mobile and non tender swelling over the right

axilla(Figure 1a), which was not fixed to the skin or the underlying muscles. Contra-lateral axilla was clinically unremarkable. Examination of both breasts revealed no lump palpable. No skin changes or discharge noted at the time of examination from either in normal or accessory breast.

Figure 1a showing lump and surgical landmark prior to surgery

The preliminary cytological examination of the material obtained by fine needle aspiration cytology(FNAC) of the right axillary lump is suggestive of accessory breast.

Ultrasound breast was performed, which revealed the presence of a large, well defined hypoechoic lesion in the right axilla, measuring about 3.4 x 6.7cm(Figure 2a, 2b). Presence of internal vascularity is noted(Figure 2c). A well defined small hypoechoic nodule is also seen in the right breast, at 12 o'clock and 8 o’clock positions, measuring 0.5 x 0.7cm and 0.4 x 0.7cm respectively.There are few subcentimeter lymph nodes seen at the right axilla. No focal lesion seen in the left breast.

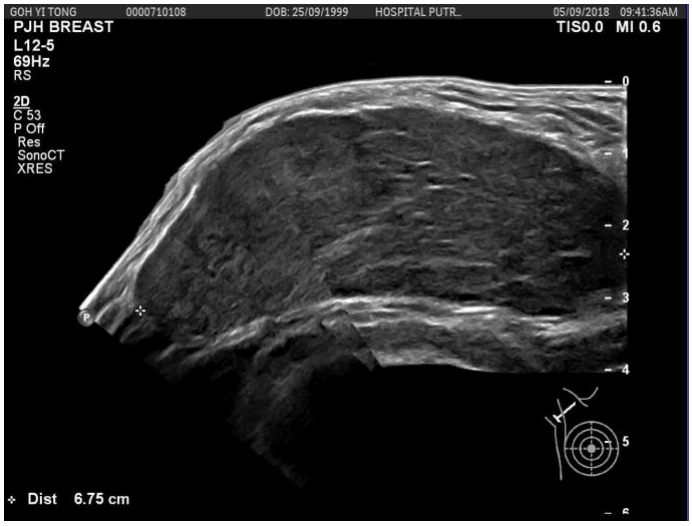


Figure 2a showing ultrasound image of right axilla

Figure 2b showing ultrasound image of right axilla

Figure 2c showing internal vascularity of right axilla

Ultrasound-guided core needle biopsy was done. Local anaesthesia, lignocaine 2% total of 4mls infiltrated along the projected biopsy track. Stab incision made at the axillary tail and two passes rendered, using 14G needle. Good core specimens obtained. No immediate complications encountered during and after the procedure. HPE noted fibroadenoma.

Excision biopsy of right axillary swelling was done. Patient was put under general anaesthesia. Surgical area cleaned and draped. Incision made over the lump at the right axillary region. Intraoperatively noted right accessory breast fibroadenoma at right axillary region weighing 146g, measuring 11cm x 8cm(Figure 3a). Right axillary mass excised as a whole(Figure 3b). Hemostasis secured. Radivac drain inserted and subsequently removed at day 3 post operatively.

Figure 3a showing intraoperative section of the lump

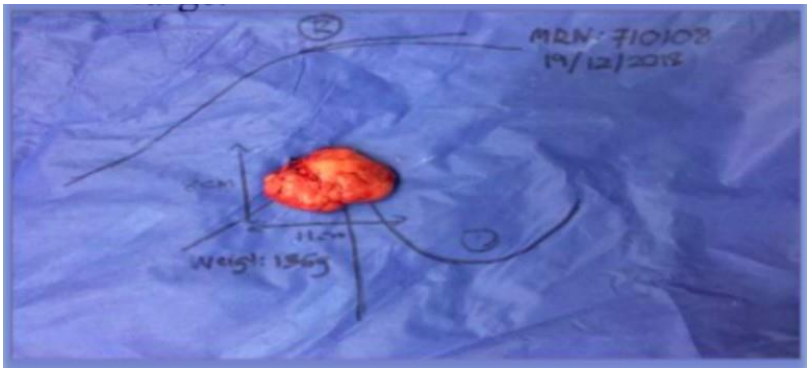
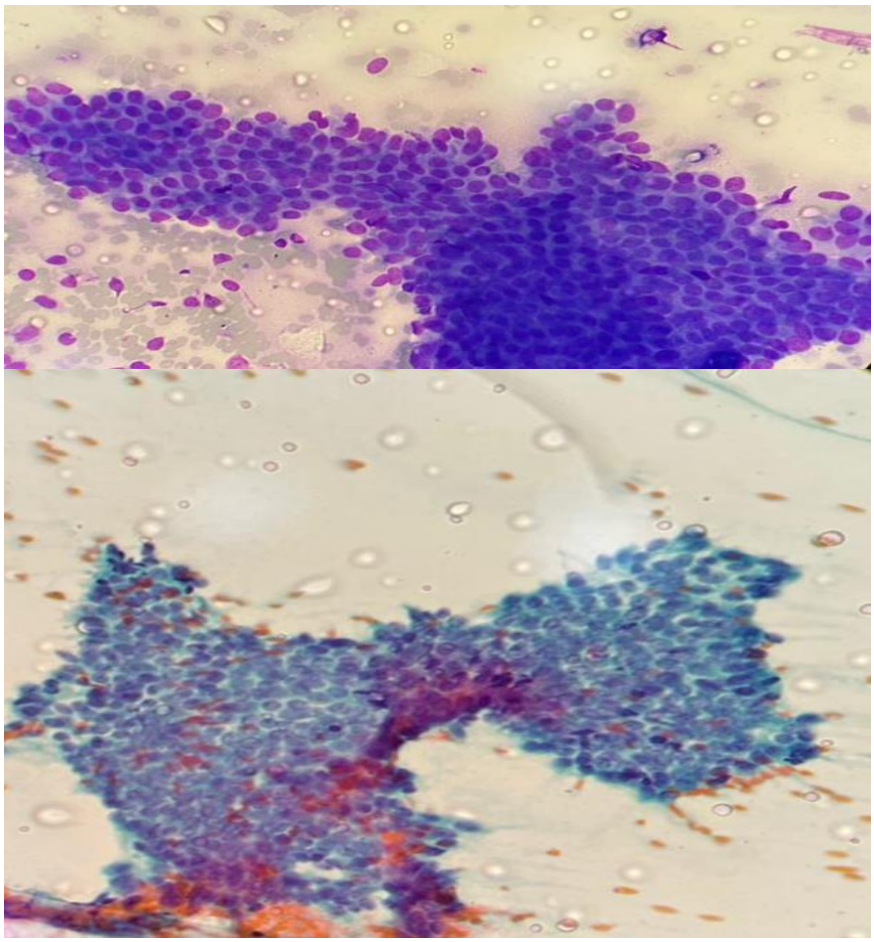


Figure 3b showing the description of the lump excised

Figure: 4a: Fine needle aspiration Cytology (FNAC) show cellular smears composed of cohesive clusters of benign ductal and myo-epithelial cell



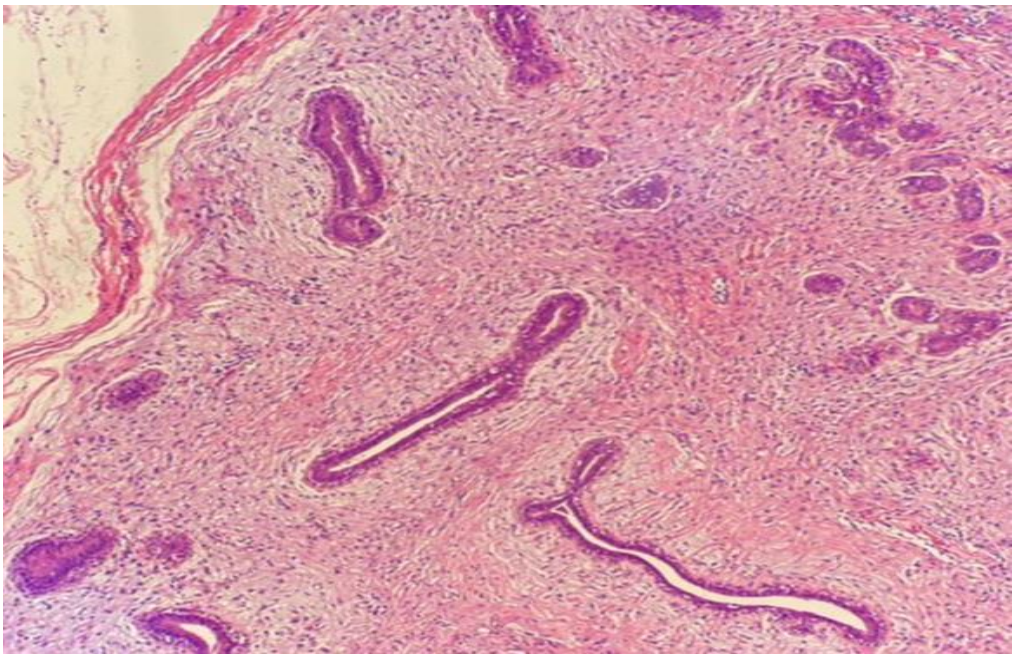


Figure: 4b: Microscopic: H&E (x100)

Histopathology

Histologically, the tumor was diagnosed as fibroadenoma arising from the axillary accessory breast. Microscopically the tumour is a well circumscribed lesion composed of proliferation of benign ductal epithelium with fibro-myxoid stroma. A few ducts are compressed into slit-like spaces. There is no cellular atypia or evidence of malignancy seen.

The patient has had no local recurrence at 2 years after excision of the tumor.

Discussion

Ectopic breast arises in 1-6% in the general population.[5] It is twice as common in female patients as in male patients.[6] Ectopic breast tissue is usually found in proximity to the normal breast, most commonly in the axilla. As compared to pectoral breast tissue, ectopic breast tissue is subject to the same hormonal response and is at risk of developing benign and malignant pathologic processes similar to those seen in normally located breast tissues, including fibrocystic disease, fibroadenoma, intraductal papilloma, lactating adenoma and carcinoma.[7,8]

Fibroadenomas account for approximately 12% of all palpable symptomatic breasts. The highest incidence of fibroadenoma in the breast is between the ages of 20 and 30 years. Fibroadenomas of the breast occur predominantly in the upper outer quadrants where most breast parenchyma is located.[9] It is rarely described in axillary supernumerary or ectopic breasts.

Fibroadenomas are usually felt as discrete lumps. They are classically round or oval in shape, firm and rubbery in consistency, smooth, and very mobile; hence their common name - a breast

mouse. Although they are generally not painful, they can be associated with some tenderness. They vary in size, ranging from very small to giant fibroadenoma.[9,10]

Clinical accuracy is therefore limited, even in experienced hands. Several studies have shown that a clinical diagnosis of fibroadenoma is correct in only a half two-thirds of cases.[8] Despite this, clinical assessment remains an important component of the triple test, and plays a role in clinical surveillance of women with a proven fibroadenoma who choose non-surgical management. The key message is that, even in young women, all women with discrete masses should have imaging and fine needle aspiration or core biopsy to exclude the possibility of malignancy.

Conclusion

Ectopic breast is common in masses in the axilla and may develop into malignant and benign tumors. One of the benign lesions is also fibroadenoma, albeit its location in the axilla is rare. This case report underscores the need for careful workup and treatment for masses along the milk line including the axilla, as there is a risk of malignant transformation.

References

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