

CASE REPORT

Axillary Fibroadenoma: Case Report and Review of Literature

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ABSTRACT

Fibroadenoma of breast and ectopic breast tissue is common pathology. Sometimes, it may be associated with hormonal imbalance. However, the presence of fibroadenoma in the axilla without ectopic breast tissue and hormonal imbalance is a rare presentation. We are presenting a rare case report of fibroadenoma developing in the right axilla in a 28-year-old woman. Clinical examination of both breasts revealed no abnormalities and no lymph nodes or supernumerary breasts were detected in the axilla or the neck. No associated urologic or cardiovascular abnormalities were found and the histopathological examination of the excisional biopsy samples showed a well-defined, capsulated type of fibroadenoma similar to that of ectopic mammary tissue.

Key words: Axilla, breast surgery, excisional biopsy, super numerary breast

ملخص البحث :

يعتبر الورم الغددي اللثي من الحالات الشائعة ويرتبط أحياناً باضطراب الهرمونات . وحدث هذا الورم في الإبط دون مصاحبة للأنسجة الثديية أو اضطراب الهرمونات من الحالات النادرة . يعرض الباحثون حالة ورم غددي لثي نادرة في الإبط الأيمن لدى سيدة في الثامنة والعشرين من عمرها . لم يظهر الفحص السريري علاقة غير طبيعية أو غدد لمفاوية أو ندي زائد في الإبط أو الرقبة ، كما لم توجد أية تغيرات مصاحبة في القلب أو المسالك البولية . بين الفحص المجهرى للعينة وجود ورم غددي لثي مشابه للأنسجة الثديية والتي قد توجد خارج الثدي .

INTRODUCTION

Breast associated anomalies are not very uncommon. 1% of women and 5% of men presents supernumerary nipples and less often, supernumerary breasts. These alterations are more common in women and are most frequently located along the mammary line, extending from the axilla to the pubic region.^[1-3]

Since publications describing this anomaly are rare in the literature, we decided to report on a case of fibroadenoma in axillary breast tissue.^[4-6]

CASE REPORT

A28-year-old woman was admitted because of a 2 cm × 2 cm × 2 cm right axillary mass, which had first appeared 1 year earlier. The mass increased in size within the past year. The mass was painless, firm, freely mobile and completely isolated from the right breast. Both breasts and nipples were clinically normal and there were no lymph nodes in the axilla and neck. The general and radiological examination of the urinary system showed no associated abnormalities. The hormonal examination was also normal.

The patient had no personal or family history of breast cancer. The preliminary cytological examination of the material obtained by needle aspiration biopsy from the mass revealed many clusters of cohesive epithelial cells with clusters of mesenchymal cells. A provisional diagnosis of fibroadenoma with no malignant changes was made. The entire surgically excised mass had a whitish lobular cut surface [Figures 1 and 2]. Samples from different levels of the mass were taken. The samples

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Figure 1: Reveals swelling at right axilla

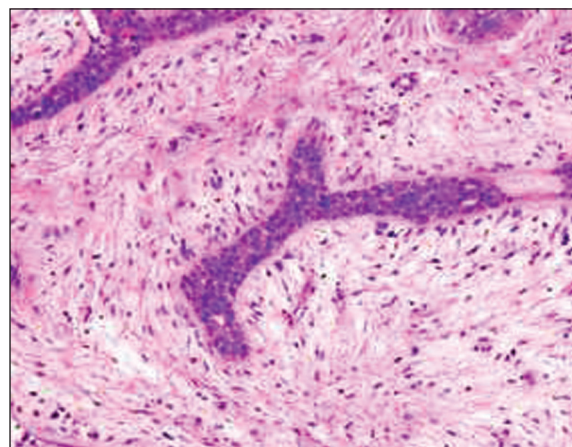


Figure 2: Histopathological appearance of fibroadenoma

were processed for a routine histological examination and stained with hematoxylin and eosin. The histopathological examination of the sections taken from the sample showed ductules lined by cuboidal epithelial cells resting on the myoepithelial cells layer and surrounded with abundant mesenchymal loose fibro-collagenous tissue. The fibroadenoma had a well demarcated margin. The histopathological picture was a fibroadenoma similar to the conventional type arising in normal breast tissue.

DISCUSSION

In normal development, most of the embryologic mammary ridges resolve, except for two segments in the pectoral region, which later become the breast. Supernumerary breast may be clearly visible and palpable or very small and not palpable. In our case, breast tissue was not palpable in axilla but the presence of fibroadenoma suggestive of existence of supernumerary breast.

Two hypotheses have been proposed on the embryogenesis of the supernumerary breast. One attributes the anomaly to the failure of regression and displacement of the milk line while the other believes it develops from the modified apocrine sweat glands.^[7-9]

Supernumerary breast tissue is well documented in the medical literature and polymastia is one of its most common presentations. However, reports of benign and malignant tumors in supernumerary breasts are rare.^[9-12]

As compared to pectoral breast tissue, ectopic breast tissue demonstrates the same hormonal effects and is at risk of developing breast diseases. During the menses or pregnancy, hormonal stimulation may cause enlargement and discomfort. Ectopic breast tissue can undergo

lactational changes during pregnancy and in the presence of a nipple-areolar complex, it can give rise to lactational secretion.^[10,11]

Fibroadenoma is a frequent cause of nodules in young women, with the highest incidence between the ages of 20 and 30 years. It is rarely described in axillary supernumerary breasts. Evidence from the natural history of fibroadenoma suggests that less than 5% of these tumors increase, whereas approximately one-fourth decreases in size.^[13]

Tumors in supernumerary breast tissue should be diagnosed with the same methods applied to normal breast tissue (mammography, ultrasonography, cytology and biopsy), observing specific indications. However, due to its low incidence, diagnosis may be delayed or even ignored, thus making treatment more difficult. When tumors or nodules are found along the mammary line, the presence of breast tissue should be considered during the investigation.^[10,14,15]

Axillary fibroadenoma or supernumerary breasts are not very common in the population.^[1]

On the basis of history and literature evidence of fibroadenoma proves that approximately 5% of these fibroadenoma increases in size with time and approximately 25% become smaller with the period.^[2,6,16]

Same like our case, a case of 28-year-old woman with fibroadenoma in the axilla, with normal clinical and radiological findings reported by Aughsteen *et al.* Post-excision biopsy revealed fibroadenoma in the axilla.^[1]

This case demonstrates a rare occurrence of fibroadenoma in an axillary non-palpable supernumerary breast. The

origin of fibroadenoma is basically from the non-palpable normal breast tissue located at the axilla at the milk line. Although the benign nature and natural history of fibroadenoma are well-known, biopsy should be considered for women aged 40 years or older, due to the increased rate of cancer in this age range. Breast surgery has a major role and surgical excision is a choice of treatment. Among women of this age, if conservative management is chosen, periodic clinical and mammographic control is required, following negative cytological tests.

In the view of malignant transformation of the axillary for women aged, this entity requires careful investigation and diagnosis.^[6,16]

CONCLUSION

The need for careful investigation with aggressive treatment of any swelling in the axilla and breast region should be emphasized, because it may be affected by benign and malignant diseases.

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