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Fibroadenoma in Unusual Site

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IN BRIEF

Fibroadenoma is one of the most common benign breast disease seen in women in their late teens. Although ectopic benign breast tumour is more common along "Hughes line", can also have an ectopic location., Whatever the position of ectopic breast tissue, it can undergo the same pathologic changes as seen in normally positioned breasts such as fibroadenoma and carcinoma., We report a case of fibroadenoma in unusual site, in 25year old female, who presented with painless swelling in the left infra-axillary region since 6months. It was diagnosed as fibroma or rare one fibroadenoma in axillary tail clinically., Fine needle aspiration cytology revealed benign fibro-epithelial lesion. The swelling was excised in toto and processed for histopathological examination. Histopathological examination confirmed fibroadenoma similar to the conventional type arising in the normal breast tissue.

Key words: Fibroadenoma, Unusual site

Introduction

Fibroadenoma is one of the most common benign breast disease seen in women in their late teens, accounting for 7-13% in breast clinics[1].The incidence of extra-mammary fibroadenomas is 1-6% in general population and is most commonly seen along the milk line[2]. The unusual locations are usually referred as "mammae erraticae" i.e. vulva, eyelid, face, peri-anal, buttock, pubic region[3].

Though polythelia is congenital in origin, the ectopic mammary tissue appears during puberty, pregnancy and puerperium due to sex hormones[4]. The cases of ectopic breasts with benign tumors, cystic changes and carcinomas have been documented[5].

We report a rare case of fibroadenoma in the axillary tail, which will be one of the differential diagnosis of axillary mass[6].

Case report

A 25year old female presented with a painless swelling in the left infra-axillary region since 6 months. The swelling increased in size over the last 2 months. There was no history of similar swellings anywhere over the body. No personal or family history of breast malignancy.

The clinical examination revealed a single, oval shaped swelling in the left infra-axillary region measuring 3x2x2cms. (fig1).

The swelling was firm, non-tender, freely mobile and completely isolated from the left axilla and left breast contour. Clinically both mammary glands and axillae appeared normal. Systemic examination revealed no abnormalities. Clinically it was diagnosed as a fibroma or a rare case of fibroadenoma in the axillary tail.

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Fig1. A small swelling in the left infra-axillary region

FNAC of swelling revealed it to be a benign fibro-epithelial lesion with signs of hyperplasia(fig2). The swelling was subjected to histopathological examination after complete excision.

Gross examination

Single tissue piece of size 3x2x2cms soft to firm in consistency. Cut surface was greyish-white in colour(fig3).

Fig 2: FNAC revealed loose to cohesive aggregates, branching fragments and scattered plump ductal cells. Few show large nucleus and variable cytoplasm. Background has scattered round bare nuclei, leucocytes and RBCs.

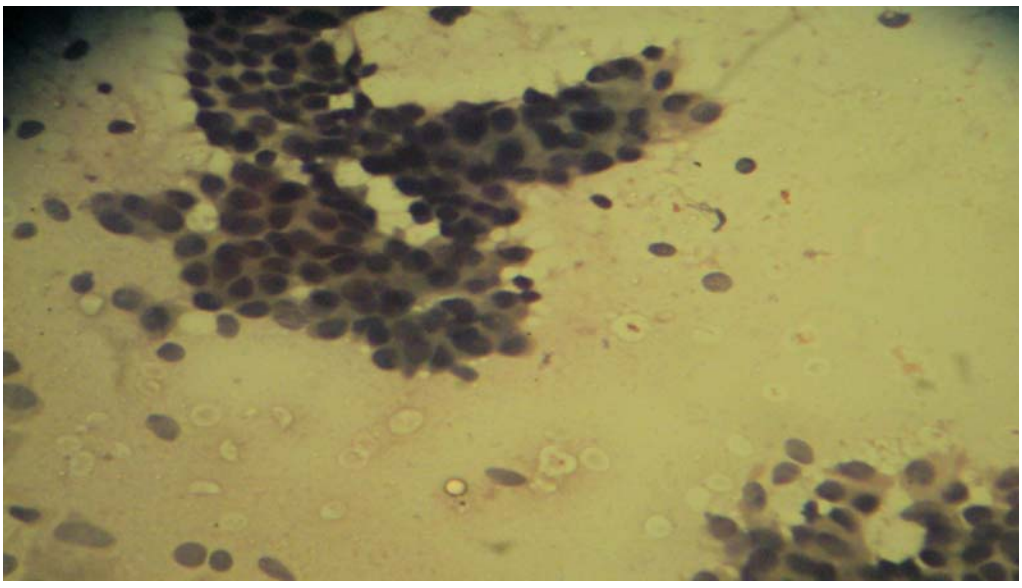

Fig 3: Surgically excised specimen.

Fig 4: Post operative histopathologicalexamination showed a capsulated benign tumour composed of proliferation of ducts and stroma. Some of the ducts are circular and some are lined by bilayered benign epithelium. Stroma is myxoid

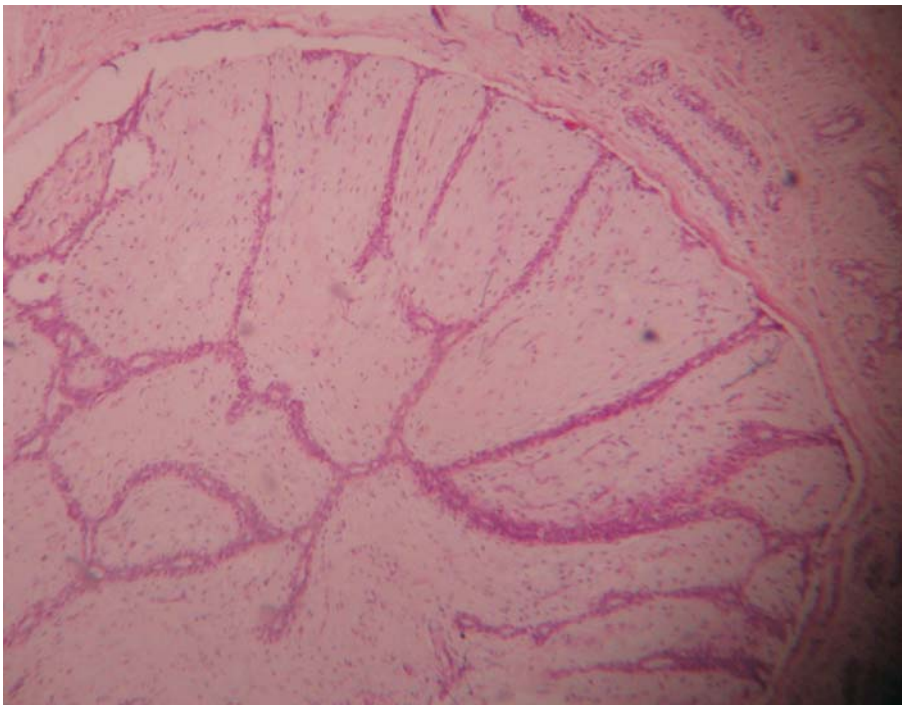

Fig 5: Operative scar following surgical excision of the swelling.

Microscopic examination

A benign tumour, composed of proliferation of ducts and stroma lined by bilayered benign epithelium, characteristic of intra-canalicular type of fibroadenoma(fig4).

The post operative scar seen in the left infra-axillary region(fig. 5).

Discussion

The fibroadenoma is one of the most common benign breast disease seen in women in their late teens accounting for 7-13% patients in the breast clinics[1]. The incidence of fibroadenomas at extra-mammary sites varies from 1-6%[2]. The milk line extends from the axilla to the groin or pubic region[3].

The most cases of supernumerary mammary tissue are described as masses localized within the milk line. The axilla is by far the most frequent location and seldom under valorised because it is mistaken for an enlarged lymph node[3-6,7]. Any mass localized along the mammary ridges should always raise the suspicion of mammary tissue.

Although rare, unusual locations of ectopic breast tissue have also been reported in the literature as "mammae erraticae", such as over the face, eyelid, back of neck, pubic region etc. The ectopic breast tissue has the same physiology and can be the origin of same pathology as normally positioned breasts. The literature mentions of ectopic breasts with benign cystic changes, benign tumours (adenoma and fibroadenoma) and carcinomas[5,7].

There are three types of fibroadenomas; soft, hard and giant (>5cms in size). The giant variety is common in Africa. Microscopically it can be intra-canalicular and pericanalicular[8].

Fortunately the ectopic tissue often represents only a cosmetic problem. In this view, it can be surgically excised and also whenever there are symptoms such as local discomfort or tenderness with milk secretion.

In cases of malignant mass, wide surgical excisions are recommended with appropriate follow up treatment[9].

Polythelia is associated with urinary tract abnormalities such as supernumerary kidneys, failure of renal formation and renal carcinoma, diagnosed by ultrasonography[10]. The presence of extra-nipple in children should always raise the clinical suspicion of renal and urinary tract abnormalities.

In our case, the patient did not have polythelia or polymastia. Anatomically both mammary glands were normal. There was no axillary mass present.

In conclusion, when a swelling is found in the mammary ridge, ectopic breast tissue and all the pathologic changes of breasts must be kept in mind, because early diagnosis leads to better prognosis in case of malignancy.

The ectopic breast malignancy can present a challenge for clinician and pathologist in making correct diagnosis.

In extra-mammary lesions, renal imaging should be considered after a confirmed histopathological diagnosis.

Further research is needed to more deeply understand this phenomenon and its associations and the appropriate clinical workup in such cases.

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