

Case Report

ISSN: 2347-8330



Journal of Pharmaceutical and Biological Research

Online at www.pharmaresearchlibrary.com/jpbr

JPBR, 2014, Vol.2(1): 85-87



Fibroadenoma of the ectopic breast of the axilla in Male Patient: Case Report

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Received: 20 April 2014, Accepted: 27 May 2014, Published Online: 21 June 2014

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Manuscript ID: JPBR2083



PAPER QR-CODE

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Abstract

Polymastia is a term that is used to describe the presence of more than two breasts in human beings. It is synonymous with supernumerary or accessory breast tissue. Ectopic breast tissue (EBT) may occur anywhere along the primitive embryonic milk lines, which extend from the axilla to the groin, and may occur unilaterally or bilaterally. In the EBT any disease can develop that affects the normal breast, including fibroadenoma. We report a very unusual case of fibroadenoma in axilla of a young male.

Keywords: Fibroadenoma, Axilla, Ectopic breast tissue, Male patient.

1. Introduction

Anomalies associated with breast development are not uncommon. The incidence of supernumerary or ectopic nipple is around 1-5% and even less is the incidence of ectopic breast tissue (EBT) [1]. Pathologies developing in an EBT are reported as a rare entity in the literature. Carcinoma is reported as the common pathology followed by inflammation and fibroadenoma [2, 3]. Diagnosis of EBT is important because EBT shows similar pathologic changes that occur in naturally positioned breasts. Although controversial, an association between these anomalies

and renal malformations has been described [4]. We present a rare case of a 29 years old male with a subcutaneous tumour in left axilla that was histologically identical to the fibroadenoma seen in the breasts.

2. Case Report

A 29 year old male patient presented with a mass in the left axilla of 2 years duration. The mass was initially small and gradually increased in size. There was no family history of breast cancer or polymastia. On local examination we found one globular tissue measures 3.5x 2.8 sq.cm in left axilla. The mass was subcutaneous in position, firm, painless, freely mobile and completely isolated from the left breast. The left breast and both the nipples were normal. Examination of right axillae and neck was normal. No similar alteration was found in other parts of the body. Excision was planned with clinical impression of fibroadenoma.

Investigations

Ultrasonogram of the local parts showed 3.5 to 2.0 cm space occupying lesion (SOL) in the left axilla with well-defined and smooth margins and hypoechoic echotexture were noted, no marginal speculated are seen. Color flow Doppler study showed low vascularity in the lesion, characteristic of a benign SOL, likely to be fibroadenoma. Both breasts are normal. Ultrasonogram of the abdomen showed no renal anomaly.

Microscopic Examination

The mass was nodular measurement 3.2x2.4x2.0 cm, outer surface lobulated, grayish white, cut surface whitish, firm [Figure. I]. Sections shows fibroadipose tissue along with duct lobular units histologically resembling breast tissue. Focal epithelial proliferation, apocrine metaplasia and cystic dilatation of glands seen. Stroma shows elastosis. There is no evidence of malignancy [Figure. II].



Figure. I Gross Tissue Specimen



Figure. II Microscopical Examinations
[H& E Stain, 10X10X Objectives]

3. Discussion

Polymastia is a term that is used to describe the presence of more than two breasts in human beings. It is synonymous with supernumerary breast, accessory breast, and ectopic breast tissue (EBT). During the 6th week of embryonic development, the mammary milk lines, which represent 2 ectodermal thickenings, develop along the sides of the embryo, extending from the axillary region to the groin. In normal development, most of the embryologic mammary ridges resolve, except for 2 segments in the pectoral region, which later become breasts. Failure of any portion of the mammary ridge to involute can lead to ectopic breast tissue with (polythelia) or without (polymastia) a nipple-areolar complex. Therefore, ectopic breast usually occurs along the “milk line” or mammary line [5].

Ectopic breast tissues are reported in locations other than the milk line, face [6], foot [7], lumbar region, vulva [8], and perineum. Supernumerary tissues present in any location other than along the milk line are supported by two beliefs. One is that it represents a migratory arrest of breast primordium during chest wall development [9]; the other belief is that it develops from the modified apocrine sweat glands [10]. Usually ectopic breast tissue occurs sporadically, but a hereditary predisposition has also been reported [11].

In most cases, accessory breasts are asymptomatic and cause nothing more than a visible distension which may resemble a tumour. Sometimes it could cause psychological disturbances in adolescence and it may give pain and discomfort especially during menstruation, pregnancy, and lactation [5]. The clinical significance of the polythelia

and polymastia lies in the fact that apart from the psychological and cosmetic impact, it develops the same pathological changes as the normally located breast tissue such as inflammation, fibrosis, fibroadenoma, cystosarcoma phyllodes, and carcinoma [3, 5]. Usually carcinoma arising from the ectopic breast presents late with poorer prognosis due to delay in the diagnosis. This delay happens due to a broad differential diagnosis for an axillary lesion, including lipoma, sebaceous cyst, vascular lesions, suppurative hidradenitis, cat scratch disease, lymphadenopathy, secondaries in lymph nodes, tuberculosis, axillary tail of Spence, or even a torn muscle belly and malignancies [12].

The next important point is that these ectopic breast tissue patients, especially polythelia cases, have been associated with urinary abnormalities such as supernumerary kidneys, failure of renal formation, renal adenocarcinoma, hydronephrosis, polycystic kidney disease, duplicate renal arteries, and ureteric stenosis. This association can be partly explained by the parallel development of mammary structure and genitourinary system [4]. Even though this association needs further studies to say more about the exact frequency of association, precautionary measures should be taken in these patients to rule out any renal problem. If EBT is associated with any suspicion of pathology, then further investigation with FNAC, ultrasonogram, mammography, and biopsy should be done as for any other breast lesion [8]. In routine screening programmes for breast cancer, a clinical examination should be made for the presence of EBT, and, if present, that should be subjected to routine screening as well, along with the normally positioned breast.

4. Conclusion

In conclusion, when tumors or nodules are found along the mammary line, the presence of breast tissue should be considered during the investigation [3]. It is clinically wise to evaluate and screen carefully cases of supernumerary breast for any pathology and for any associated urogenital anomalies. FNAC is very valuable in diagnosing the lesion in EBT. The treatment options for EBT depend upon the psychological factors, symptoms, and the presence of pathology. Although very rare, breast neoplasm should be considered in differential diagnosis of swelling along mammary line in male patients also.

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