

Fibroadenoma of ectopic breast of axilla: A rare case report

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ABSTRACT

Ectopic breast tissue (EBT) is a rare anomaly. Common location of EBT is along the milk line extending from the nipple to the symphysis pubis. EBT is susceptible to same pathologic processes as normal breast. Fibroadenoma though very frequent entity, but is very rarely reported in EBT of axilla. It poses a diagnostic challenge to the treating physician, and high index of suspicion is required for early detection. Here we report a rare case of fibroadenoma of EBT of axilla in a 25-year-old girl, which was managed by excision.

Key words: Ectopic breast tissue, fibroadenoma, polymastia

INTRODUCTION

Ectopic breast tissue (EBT)/polymastia refers to breast tissue at more than two places with or without nipple. EBT occurs in 1-6% of the general population and most commonly develop along the milk lines.^[1] The most common localization of supernumerary breast is the line extending from the nipple to the symphysis pubis. These EBTs are also susceptible to pathologic diseases seen in normal breast.^[2] We are reporting a rare case of fibroadenoma of EBT of axilla in 25-year-old girl. Excision was done under general anesthesia. Postoperative period was uneventful.

CASE REPORT

A 25-year-old young girl presented with the complaints of a lump in the right axilla from 3 years that had gradually increased in size and associated with pain and discomfort. On examination, there was a lump of size 4 × 3 cm in the right axilla, which was soft to firm in consistency, nontender, freely mobile and separate from right breast [Figure 1]. Bilateral clinical breast

examination was normal. Ultrasound examination showed a well-defined homogeneous lesion of size 4 × 3 cm, with internal echoes, in the axilla. Ultrasound examination of urogenital and cardiovascular system was normal. Fine-needle aspiration cytology (FNAC) of the lesion was suggestive of fibroadenoma. Patient underwent excision of right axillary fibroadenoma [Figure 2]. Histopathological examination confirmed the diagnosis of fibroadenoma in EBT [Figure 3]. Postoperative period was uneventful.

DISCUSSION

Mammary ridges develop by thickening of ectoderm during the 5th or 6th week of embryogenesis. These run from axilla to groin. Two segments in the pectoral region develop into normal breasts, rest involutes. Ridges that fail to involute develop into EBT.^[3]

Ectopic breast tissue appears on milk line, but rarely can occur on atypical sites such as face, vulva, perineum, posterior neck, thigh, shoulder, and axilla.^[4]

Ectopic breast tissue have been classified by Kajava into eight types:^[5]

- Complete supernumerary nipple: Nipple, areola, and glandular breast tissue; known as the polymastia
- Supernumerary nipple: Nipple and glandular tissue without areola
- Supernumerary nipple: Areola and glandular tissue without nipple
- Aberrant glandular tissue only

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Figure 1: Preoperative photograph - Fibroadenoma of ectopic breast tissue of axilla



Figure 2: Intraoperative picture of fibroadenoma in ectopic breast tissue

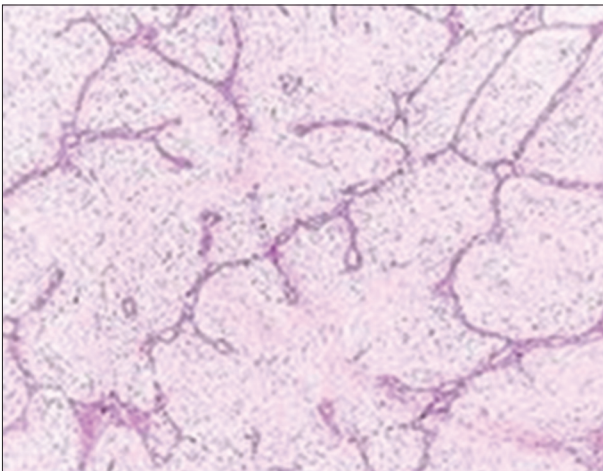


Figure 3: Histopathology - Fibroadenoma

- Supernumerary nipple: Areola only, which is known as polythelia areolaris
- Patch of hair only, which is known as polythelia pilosa.

Clinical significance of EBT:^[6,7]

- All pathologic changes that occur in normally positioned breast can develop in EBT
- It may be associated with malignancies and other congenital abnormalities such as pyloric stenosis and urinary tract abnormalities (renal malformation, carcinoma)
- Pathology in EBT poses a diagnostic challenge and should be differentiated from lipoma, follicular cyst, hamartoma, enlarged lymph node and torn muscle belly.

Fibroadenoma is a common benign disease of the breast in young age group. However, its occurrence in EBT is very rare and very few cases have been reported.^[8]

Amaranathan *et al.*^[9] have reported fibroadenoma of 4 × 4 cm in EBT in the axilla in a 31-year-old Asian female. Ultrasonogram of the local parts showed 2.8-1.6 cm space occupying lesion in the right axilla with well-defined and smooth margins and homogenous, hypochoic internal echoes were noted. FNAC was suggestive of fibroadenoma. Patient underwent excision biopsy that was also suggestive of fibroadenoma in EBT.

Goyal *et al.*^[10] reported fibroadenoma of EBT in the axilla, in a 23-year-old female, presenting as axillary masses. Mammograms of both pectoral breasts were normal. Ultrasonography of both urogenital and cardiovascular system was normal. Both axillary breasts were excised under general anesthesia and histopathological report revealed a well-defined, capsulated intracanalicular fibroadenoma in left accessory breast tissue

Borsook *et al.*^[11] reported fibroadenoma of EBT of axilla in a 10-year-old female. Ultrasound revealed a solid mass with nonspecific features. Excisional biopsy showed a fibroadenoma arising in EBT.

Diagnosis of EBT is strongly suggested by history of cyclic changes during the menstrual period or by initial appearance during pregnancy. Pathology in EBT should be evaluated by the same methods as in normal breast tissue. Radiological examination should be done to rule out the urogenital malformation as supernumerary kidneys, renal agenesis, and carcinomas.

Ectopic breast tissue harbors the risk of malignant transformation and in the absence of nipple can delay the diagnosis. Such cases are associated with early and frequent metastasis.

- Supernumerary nipple: Nipple, areola, and pseudomamma, which is fat tissue that replaces the glandular tissue
- Supernumerary nipple: Nipple only, which is known as polythelia, is the most common type

CONCLUSION

All axillary lumps should be seen with high index of suspicion. EBT in axilla poses a diagnostic challenge to the treating physician. Fibroadenoma is a common benign disease of young females, but its occurrence in EBT is very rare. It should be kept in the differential diagnosis of axillary swelling. Excision is treatment of choice for symptomatic EBT. Early detection of malignancy affects the prognosis of the patient.

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