



Accessory breast tissue in axilla: a case report

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ABSTRACT

Breasts are modified sweat glands which develop from mammary ridge (milk lines) during 5th or 6th week of fetal development. This milk line extends from axilla to inguinal area. Persistence of any other part of the original mammary ridge may result in a supernumerary breast or nipple. This supernumerary breast conditions have familial as well as syndromic association. Though it is ectopic, there is also a high chance of inflammation and neoplastic transformation like normal breast tissue. A subset of ectopic mammary tissue, aberrant breast tissue may constitute a diagnostic challenge and is often misdiagnosed as lipoma, hybernoma, hidradenitis, follicular cyst, or lymphadenopathy. Due to cosmetic problems as well as neoplastic tendency local excision is the treatment of choice. A definitive diagnosis is drawn after the histopathological study. Thus aberrant breast tissue should be kept in mind while evaluating a case of axillary swelling & malignancy should be ruled out.

INTRODUCTION

Polymastia means the accessory breast glandular tissue with or without nipple and areola.[1] Breast develops at 5th to 6th intrauterine life from milk lines (mammary ridge) that extends from axillary to inguinal region[2]. The breast tissue continues to develop in the pectoral region with regression of the rest of the mammary ridge. Persistence of any part of the original mammary ridge may result in a supernumerary breast. Due to some embryological migration or displacement, accessory breast tissue may be found elsewhere other than the milk line.

Axilla is a common location[3]. Normally this ectopic tissue is physiologically non functional[4]; whereas it behaves like normal breast tissue to hormonal changes. So Pain, tenderness, and milk secretion can occur with fluctuating hormonal levels from puberty, menstruation, pregnancy and lactation.

Various other diseases like lipoma, lymphadenopathy, lymphoma, hydraadenitis suppuritiva comes into mind while evaluating an axillary mass. Due to cosmesis and chance of malignancy surgery should be done.

Here we present a case of accessory breast tissue in axillary region.

CASE REPORT

A 23-year-old, multiparous woman presented with asymptomatic bilateral axillary swellings. She noticed them three years back, during her first pregnancy [Figure 1]. During the periods of lactation and next pregnancies, they increased in size

and persist in lactation causing cosmetic problem. It also was showing some variation in sizes during menstrual cycles. There was no family history of such swellings in her mother and sister.

On examination revealed bilateral, solitary, lobular, soft, non-tender, mobile swellings, with size 7 × 6 cm and 11 × 8 cm diameters in the right and left axillae, respectively without any fixity to skin [Figures 1].

Routine hematologic and biochemical parameters were within normal limits. Ultrasonography of these masses showed ectopic breast tissue. A FNAC of the axillary swelling showed good no of macrophages and occasional duct epithelial cells in fatty back ground consistent with accessory breast tissue with lactational changes.

After confirmation of the diagnosis, surgical excision of bilateral swellings (Figure-2) has done under general anaesthesia. Cut section shows lobules with altered milk inside the lobules (Figure-3). Histopathology confirms as breast tissue with lactation changes.

DISCUSSION

Most cases are sporadic, but approximately 6% are familial variety⁵. This may be inherited in autosomal dominant or X linked fashion. Approximately 67% of accessory breast tissue occurs in the thoracic or abdominal portions of the milk line and more often on the left side of the body; another 20% occurs in the axillae[4]. They are also found in buttock, back of neck, face, flank, upper arm, hip, shoulders, and midline of the back, chest, and vulva.

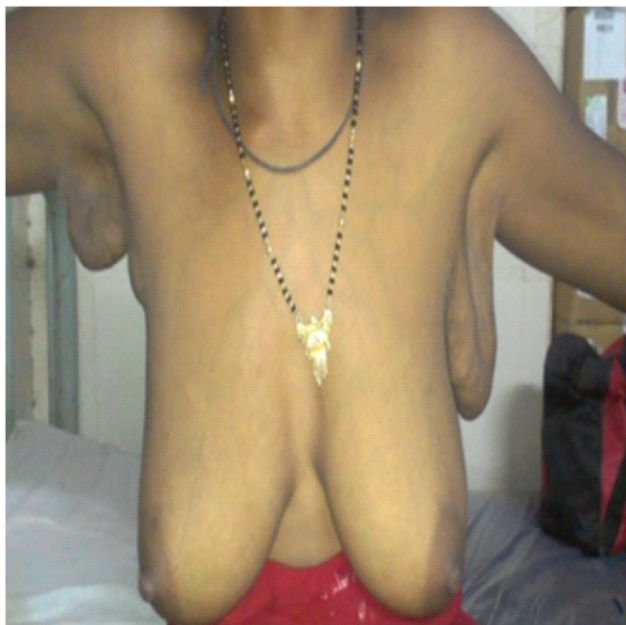


Fig 1.



Fig 2.



Fig 3.

Kajava in 1915 classified supernumerary breasts and nipples into 8 categories:

- complete breast with nipple, areola, and glandular tissue (polymastia);
- supernumerary breast without areola but with nipple and glandular tissue;
- supernumerary breast without nipple but with areola and glandular tissue;
- aberrant glandular tissue only (ectopic breast tissue);
- nipple and areola with gland replaced by fat (pseudomamma);
- nipple only (polythelia);
- areola only (polythelia areola);
- patch of hair only (polythelia pilo-sis)

This classification is still in use, though newer classification schemes have been proposed.[3,6]

Most of this accessory breast tissue has no physiological significance. In females, it usually manifests during pregnancy or lactation. Rarely, polymastia during puberty been reported. Any disease that can occur in normally located breasts can occur in supernumerary breasts. Processes include abscesses, mastitis, benign and malignant tumors, and cysts. Some studies have suggested that aberrant breast tissue may be at a higher risk of malignant degeneration.[7]

Polythelia or supernumerary nipple is the most common form of accessory breast tissue malformation that has been reported to be associated with nephrourological anomalies, but no such reports are there in relation to polymastia. However, as polythelia and polymastia may coexist, all cases of polymastia should be subjected to a thorough physical examination, urine analysis, and renal ultrasound, to exclude renal pathology[4]

Fine needle aspiration cytology gives presumptive diagnosis. Due to the chance of malignancy, surgery with excision of the mass is preferred. Post-operative histopathological report gives definitive diagnosis. Histologically, polymastia may contain smooth muscle and mammary glands in the deep dermis. Histopathology also rules out malignancy.

CONCLUSION

Though not very rare, accessory breast tissue makes an important differential diagnosis of axillary lesions. Normal breast tissue functions in response to hormonal changes occur during active periods. A Surgeon should be aware of its malignant transformation nature, so surgical excision is the treatment of choice.

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