

CASE REPORT

Fibroadenoma in supernumerary breast

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Summary

The presence of supernumerary breast (or polymastia) is not uncommon; however, reports of fibroadenoma in supernumerary breast tissue are rare. The present article reports a case of fibroadenoma developing in the supernumerary breast located below the normal left pectoral breast in a 26-year-old woman. Clinical and ultrasonographic

examination of both pectoral breasts revealed no abnormalities but a mass was found in the third breast. The patient underwent resection of the supernumerary breast and the histopathological examination showed an intracanalicular type of fibroadenoma within the breast tissue.

Key words: breast, fibroadenoma, polymastia, supernumerary breast

Introduction

Supernumerary breast or polymastia commonly presents along the embryonic milk line extending from the axilla to the groin. The most common location of polymastia is the axilla [1-3]. Breast tumors that develop in normally positioned breast, including fibroadenoma, can also occur in supernumerary breast tissue [2-6]. Polymastia can coexist with other congenital anomalies of the urinary and cardiovascular systems [3].

The medical records of over 2000 patients with benign breast diseases who were treated at the Numune State Hospital, Surgical Oncology Unit, during a 3-year period were reviewed. Among them we registered 17 operated cases with axillary polymastia (2 patients with bilateral polymastia) and one patient with supernumerary breast in which a fibroadenoma was diagnosed. This patient is described in this paper.

Case presentation

A 26-year-old woman presented with a mass located below the left pectoral breast. Her complaint concerned the disfiguration created by that mass. The patient had no family history of breast cancer. On physical examination, there was an 8×6×2 cm mass with nipple. Palpation revealed a 2×2 cm-sized movable lump in the upper outer quadrant of this third breast. There were no lumps in both normal breasts and bilateral axillary examination was normal. No other swellings or accessory nipples along the milk line were found.

Urologic or cardiovascular abnormalities were not found. A mammogram was not advised because of the patient's young age. The ultrasound examination of both pectoral breasts revealed no abnormalities and no lymph node was detected in the axillae. The ultrasonography reported a 2 cm-sized solid mass with well-circumscribed border in the supernumerary breast.

The patient underwent resection of the supernumerary breast. On gross examination, there was a brown 5 mm central papule without surrounding hyperpigmentation in the skin of the mass (Figure 1a) and a firm, round, 2×2 cm-sized mass was seen in the resected specimen (Figure 1b). Microscopic examination of paraffin sections stained with hematoxylin & eosin revealed a well-defined, encapsulated intracanalicular type of fibroadenoma similar to cases found in eutopic mammary tissue.

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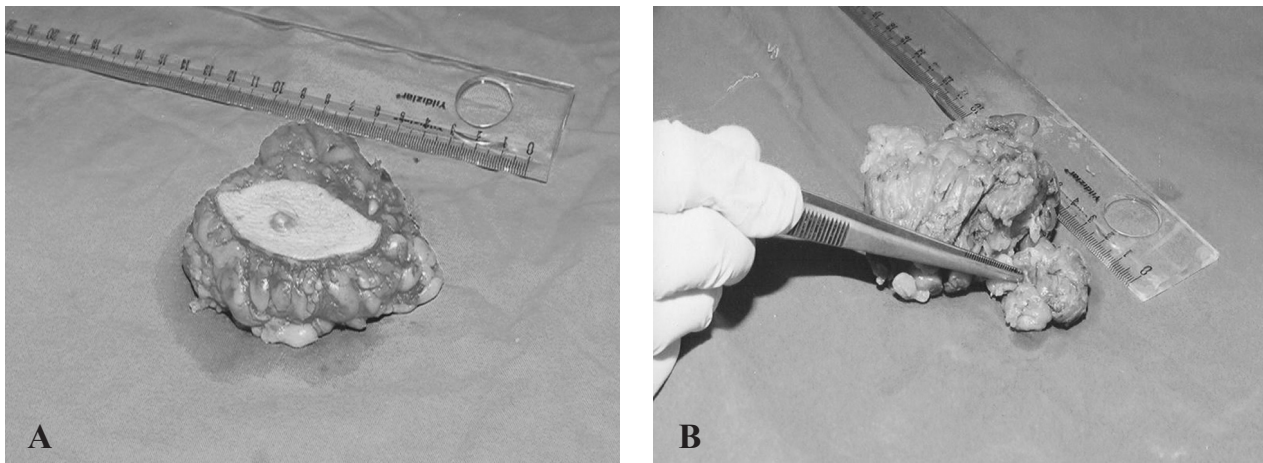


Figure 1. Gross appearance of supernumerary breast, complete with nipple (A), and a mass within the specimen (B).

Discussion

Polymastia and polythelia are common developmental abnormalities of the breast and nipple which usually present as a lesion along the embryologic milk line that extends bilaterally from the axillary region to the groin. However, such lesions have been reported in various locations outside the milk line [7,8]. The most common location of supernumerary breast is the axillary region and it is uncommon below the pectoral region [1,3,9-11]. Accessory nipple may be found in addition to the breast tissue.

Although its incidence is uncertain, this condition has been reported in 2-6% in women [1,11] and it is probably as common in women as in men [6]. Polymastia may not appear until enhanced by sex hormones during puberty or early pregnancy. In women, the accessory breast tissue may respond to the hormonal fluctuations of the menstrual cycle [3,9,10].

Supernumerary breast tissue has the potential to undergo the same benign and malignant changes as the normal pectoral breast tissue [2-6,11]. Carcinoma of the accessory breast is a rare condition, accounting for 0.3% of all breast cancer cases [2,6], and occurs more frequently than benign tumors. Benign breast conditions such as fibroadenoma, fibrocystic disease, and intraductal papilloma have been described, however the most common benign lesion found in accessory breast tissue is fibroadenoma [3-5]. Lesavoy et al. reported that 28 cases with axillary polymastia who underwent surgical excision had normal histology or fibrocystic characteristics [11]. In the present series, one of 18 patients with accessory breast tissue had a benign tumor, but the rest of them had normal breast

histology. In the presented case the histology was identical to the fibroadenomas seen in the normal breast and those observed along the milk line.

When a mass is located along the milk line, the possibility of the presence of breast tissue should be considered.

References

1. Burdick AE, Thomas KA, Welsh E, Powell J, Elgart GW. Axillary polymastia. *J Am Acad Dermatol* 2003; 49: 1154-1156.
2. Marshall MB, Moynihan JJ, Frost A, Evans SR. Ectopic breast cancer: case report and literature review. *Surg Oncol* 1994; 3: 295-304.
3. Grossl NA. Supernumerary breast tissue: historical perspectives and clinical features. *South Med J* 2000; 93: 29-32.
4. Code DM, Torresan RZ, Kashimoto E, Carvalho LE, Cardoso-Filho C. Fibroadenoma in axillary supernumerary breast: case report. *Sao Paulo Med J* 2005; 123: 253-255.
5. Coras B, Landthaler M, Hofstaedter F, Meisel C, Hohenleutner U. Fibroadenoma of the axilla. *Dermatol Surg* 2005; 31:1152-1154.
6. Cheong JH, Lee BC, Lee KS. Carcinoma of the axillary breast. *Yonsei Med J* 1999; 40: 290-293.
7. Leung W, Heaton JP, Morales A. An uncommon urologic presentation of a supernumerary breast. *Urology* 1997; 50: 122-124.
8. Irvin WP, Cathro HP, Grosh WW, Rice LW, Andersen WA. Primary breast carcinoma of the vulva: a case report and literature review. *Gynecol Oncol* 1999; 73: 155-159.
9. Hardikar JV, Nadkarni SV. Polymastia of axilla (a case report). *J Postgrad Med* 1984; 30: 53-54.
10. Jordan K, Laumann A, Conrad S, Medina M. Axillary mass in a 20-year-old woman. Diagnosis: axillary accessory breast tissue. *Arch Dermatol* 2001; 137: 1367-1372.
11. Lesavoy MA, Gomez-Garcia A, Nejdil R, Yospur G, Syiau TJ, Chang P. Axillary breast tissue: clinical presentation and surgical treatment. *Ann Plast Surg* 1995; 35: 356-360.