CASE REPORT

Giant accessory breast: a rare occurrence reported, with a review of the literature

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SUMMARY

Polymastia, or the presence of supranumerary breasts, occurs in 2–6% of the female population, the spectrum of the disorder ranging between a small mole and a fully functional ectopic breast. They are often asymptomatic but require treatment when symptomatic or if they harbour malignancy. We present a case of a 41-year-old woman with an accessory breast in the left inframammary fold, which increased in size over the decade following her first pregnancy, to reach a size almost three times that of her right breast. Preoperative fine-needle aspiration and ultrasound was suggestive of accessory breast tissue, distinct from the left breast. Intraoperatively, a 14×10×8 cm accessory breast was found in the inframammary fold, distinct from the left breast and having an accessory nipple areola complex as well. A simple mastectomy was performed with trimming and rotation of the inframammary flap. The patient was happy with the cosmetic outcome. This article also reviews the literature and covers classification of polymastia, diagnostic complexities and challenges associated with surgery.

BACKGROUND

We present a case of a 41-year-old woman who had progressive enlargement of an accessory breast in the left inframammary fold over the previous 10 years, beginning after her first pregnancy and growing until it was around thrice the size of her right breast. She had previously neglected to undergo treatment, possibly due to the stigma associated with her condition, and had become a social recluse with negative body image and poor self-esteem. Although she had come to terms with her cosmetic disfigurement, she presented with recent onset of back and left shoulder pain. After confirming the diagnosis, she was planned for a simple mastectomy.

The surgical challenge in this case was resecting the accessory breast without causing deformity of the left breast. Usage of an inframammary incision was helpful in providing adequate exposure and allowed us to hide the scar. Appropriate excision of skin was also important—excess excision would have resulted in a contracted scar with breast asymmetry, and redundancy causes an equally non-cosmetic result. Use of oncoplastic principles, such as employing a rotation flap, yielded a good result.

Polymastia is an important clinical condition because of the symptoms it produces, the psychological impact on patients and the possibility of it harbouring a malignancy. Thorough preoperative evaluation by triple assessment is mandatory for

appropriate treatment. Each case is unique and, in spite of several complexities in management patient outcomes are often favourable. The expertise of those experienced in breast surgery, wherever available, is preferable.

CASE PRESENTATION

A 41-year-old woman presented to us with a 10-year history of enlargement of the left breast, initially beginning in the inframammary fold. She noticed a rapid increase in size following her first pregnancy and period of lactation, after which the swelling increased in size until it reached its current size of around three times that of the right breast. The patient gave a history of recent onset of pain in the left shoulder and back, which she first noticed a few weeks earlier. She denied having undergone any previous evaluation, and had not had medical or surgical treatment for her condition.

On examination, the left breast was massively enlarged, around thrice the size of the right breast. The inframammary fold was stretched and a distinct swelling was noted below it, measuring roughly 15×10 cm, separate from the left breast parenchyma. A discrete rudimentary nipple-areola complex inferomedial to the nipple-areola complex of the left breast was noted in the overlying skin, along with dilated veins (figure 1). The lump was firm in consistency, with no surface irregularity, and there were no palpable axillary lymph nodes. The right breast was normal on examination.

INVESTIGATIONS

Sonomammography of the left breast showed a 14×8×10 cm soft tissue mass in the subcutaneous plane, distinct from but having similar consistency

Figure 1 Preoperative image of giant accessory breast.

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Figure 2 Intraoperative exposure of accessory breast tissue.

to the left breast parenchyma. There were no features suggestive of malignancy and axillary lymph nodes were normal. Fine-needle aspiration showed breast parenchyma with adipose tissue.

DIFFERENTIAL DIAGNOSIS

- ▶ Lipoma
- ▶ Lymphoedema
- ▶ Fibroadenoma
- ▶ Gigantomastia
- ▶ Phyllodes tumour
- ▶ Breast malignancy

TREATMENT

In view of the absence of features of malignancy and the constant symptoms that the patient experienced, the patient was planned for a simple mastectomy. After an inframammary incision was placed and a flap raised, a distinct accessory breast was noted with a clear line of demarcation from the normal breast tissue (figure 2). The accessory breast was removed in toto along with its own nipple areola complex. The excess skin was trimmed and the edges were closed as a rotation flap. The patient had no postoperative complications and was happy with the cosmetic result (figure 3). She was discharged on postoperative day 3.

OUTCOME AND FOLLOW-UP

The final histopathological examination confirmed the presence of accessory breast tissue with an accessory nipple areola complex, measuring 14×10×8 cm. The diagnosis precluded

Figure 3 Postoperative image showing left breast with minimal scarring.

any additional treatment. The patient was comfortable and had no symptoms at follow-up, 6 months later.

DISCUSSION

The classification of accessory breast was proposed by Kajava,¹ where class I has complete breast with nipple, areola and glandular tissue, class II comprises nipple and glandular tissue but no areola, class III consists of areola and glandular tissue but no nipple, class IV consists of glandular tissue only, class V consists of nipple and areola but no glandular tissue (pseudo mamma), class VI consists of a nipple only (polythelia), class VII comprises an areola only (polythelia areolaris) and class VIII consists of a patch of hair only (polythelia pilosa). This classification is more to satisfy academic interest than it is therapeutic—the decision to operate rests largely on symptoms, secondary changes and the presence of malignancy.^{2 3}

This is the first reported case of an accessory breast in this position—the differential diagnosis for this includes lipoma, lymphoedema, fibroadenoma gigantomastia and malignancy⁴ and standard triple assessment often yields a satisfactory pre-operative diagnosis.⁵

These accessory breasts themselves may often harbour benign or malignant pathologies, such as fibroadenomas or breast carcinoma, necessitating appropriate surgical management, which may pose quite a challenge.⁶ When associated with massive mammary hypertrophy (excessive growth of the in situ breast tissue), these patients may also need mammoplasty, following which a cosmetically favourable outcome is a difficult task.⁷

Patient's sibling's perspective

My sister had a large deformity of the breast, which had gradually increased in size over the preceding 10 years. Due to her disease she had become socially withdrawn and avoided all social interaction—she was reclusive and rarely ventured out of her home fearing other people's response to her deformity. She was resigned to this fate, and sought medical treatment only when she developed pain in the left shoulder and arm. After surgery, she was delighted with the outcome and began going out and meeting other people. We're happy she benefited so much from the surgery.

Learning points

- ▶ Polymastia occurs in 2–6% of the female population; the spectrum of the disorder ranges between a small mole and a fully functional ectopic breast; it is often asymptomatic but requires treatment when symptomatic or if harbouring malignancy.
- ▶ The various symptoms that these growths may produce include pain, restriction in limb movement and other functions, cosmetic impairment, psychosexual dysfunction, negative body image and social stigma.
- ▶ Triple assessment is a must to rule out malignancy in the ectopic tissue.
- ▶ In giant accessory breast excision, use of oncoplastic breast techniques such as local rotation flaps and use of inframammary incisions help improve cosmesis. Experience in breast surgery is preferred when operating on these cases.

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Contributors BH identified the patient, worked up the case and operated on the patient. She guided the residents on research and in writing this article. NS and NC carried out literature search and wrote the article.

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