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Case Report

Giant fibroadenoma of the breast treated with reduction mammoplasty and excision of lesion: A case report

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ABSTRACT

Oncoplastic surgery was developed to allow for large tumor excision, immediate breast reconstruction, and optimal breast shape and symmetry. These techniques, used in past for malignant tumors, are useful for cosmetic issues caused by benign breast disease. Here, we present a case report Wise-pattern reduction mammoplasty for oncoplastic reconstruction of a giant fibroadenoma. A 29-year-old woman with 40 C size breasts presented to the clinic with the left breast enlargement from the past 7 months. Breast surgery team excised the mass with a Wise-pattern reduction technique. Immediately postoperatively, the patient showed excellent symmetry. Follow-up postoperatively showed good wound healing, preserved symmetry, and a viable, sensate nipple. Oncoplastic breast reconstruction in a reduction pattern technique after giant fibroadenoma removal provides an excellent outcome, allowing for improved symmetry.

Keywords: Giant fibroadenoma, Young female, Reduction mammoplasty, Oncoplastic reconstruction

INTRODUCTION

Fibroademonas are described as benign breast neoplasms that arise from the epithelium and stroma of the terminal-duct lobular unit.[1] They are quite common and are very often found in premenopausal women in their 20–40 years but can be appreciated in women of any age. Most fibroadenomas present as a distinct, painless breast mass that is patient's self-discovered and are usually <3 cm in size.[2] The tumor may exceed to 5 cm and is labeled as giant fibroadenoma.[3-5]

The usual clinical course for breast lumps consistent with fibroadenomas on physical examination and imaging is observation.[4] Although benign, giant fibroadenomas are treated with surgical excision due to patient's discomfort, back pain, progressive growth, and esthetic concerns.[3] It may also be necessary to rule out other forms of malignancy, as both benign and malignant phyllodes tumors can mimic presentation of fibroadenomas.[2,3]

The standard treatment of giant fibroadenomas is excision, but the extent of surgery is somehow controversial and ranges from excisional biopsy to reduction mammoplasty or even subcutaneous mastectomy.[4,6] Simple excision is satisfactory for patients with smaller lesions; however, those with larger tumors can be left with a displeasing, loose, and ptotic breast and may require secondary surgery to address these issues.[7]

CASE REPORT

We present a case of 29-year-old girl who noticed a discrete left-sided breast enlargement since October 2020. A surgical excision was performed, and the mass was diagnosed as a giant

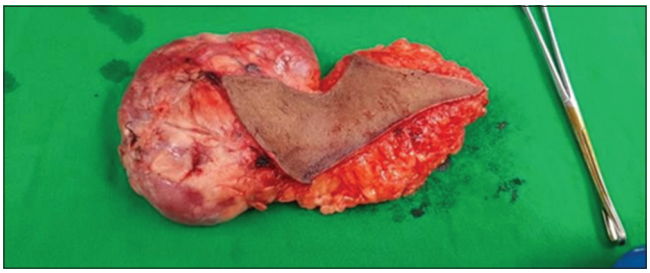

Figure 1: Tumor excision through a Wise incision.

Figure 2: Delivered specimen.

fibroadenoma. The etiology is believed to be an end-organ hypersensitivity to normal levels of estrogen. We report a case of giant fibroadenoma with final histopathology as fibroadenoma with no evidence of malignancy.

Pre-operative workup including mammographic studies showed a large well- circumscribed mixed density mass measuring 143 × 105 mm in the retroalveolar region and lower half of the left breast. Ring like benign calcification was identified in the mass too. Ultrasound scan showed a well-defined mixed echogenicity lesion having appearance of breast within breast in the upper half measuring 142*115 mm. No abnormal vascularity is seen with high frequency probe. No other solid or cystic lesions were identified. These features were most likely suggestive of Hamartoma.

Pre-operative markings were based on a breast reduction technique with Wise-pattern skin reduction. The left nipple was displaced laterally compared with the right, and skin excision was planned as a Wise incision with vertical limb under General anesthesia [Figure 1]. The lesion was resected and intact specimen including the lesion and minimal breast tissue and overlying skin with this exposure weighing 860G [Figure 2]. Skin over upper aspect of areola was de-epithelialized and nipple-areola complex was mobilized from lateral edge to medial and superior aspect.

Figure 3: Post-operative day 02.

DISCUSSION

In recent years, oncoplastic surgeries have become increasingly popular combining the principles of oncology and plastic surgery for best outcomes.[8,9] Oncoplastic techniques account for tumor location and size, tumor to breast ratio, and the desires of the patient.[10] Although giant fibroadenomas are benign lesions, the surgeon face reconstructive challenges similar to when a large malignant breast neoplasm is removed. There are two main principles in oncoplastics: volume displacement and volume replacement.[9] In this case, a volume displacement technique was chosen.

CONCLUSION

At the completion of the procedure, the patient had excellent symmetry and the nipple had appropriate color and capillary refill [Figure 3]. Final pathology was benign and showed fibroadenoma. At 3-month follow-up, the surgical site demonstrated well-healed incisions with preserved symmetry and a viable, sensate nipple-areolar complex.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of Interest.

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