



REDUCTION MAMMOPLASTY FOR BENIGN PHYLLODES TUMOUR IN AN ADOLESCENT FEMALE

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ABSTRACT

Phyllodes tumours are rare neoplasm of female breast especially among adolescent women. We present a case of 17 year old female patient present with large benign phyllodes tumour. The patient was treated with one stage excision with reduction mammoplasty. Symmetry of the breast contour and nipple areola complex position could be restored. Standard plastic surgery techniques like reduction mammoplasty might be applied in treating large benign tumours not compromising the aesthetic aspect of the breast.

KEYWORDS : Phyllodes Tumour , Maffucci's Syndrome, Reduction Mammoplasty

INTRODUCTION:

Phyllodes tumour of the breast constitute about 0.3- 0.9% of all the neoplasms of the breast[1]. They have been classified into benign, borderline and malignant types[2]. Wide local excisions and mastectomy are the standardized treatment modality considered only in cases of malignant and extended benign lesions[3]. Reduction mammoplasty techniques are widely used to correct mamma hypertrophy. By using reduction mammoplasty as a surgical approach, results can be obtained, which provide the requirement for a satisfying aesthetical outcome. Large benign lesions also provides favorable outcome with this technique as cited in the following case.

CASE REPORT:

A 17-year-old female patient presented with complains of breast asymmetry pre- existing for 6 months duration and recent rapid growth of a lump in her right breast. A large, painless and mobile retromammary mass was palpable in the 6'O clock position with a clinical diameter of 7 cm. There were no signs of skin involvement. Due to sustained tumour growth, the position of the right nipple-areola complex was displaced more than 5 cm caudally compared to the contralateral side . Mammography revealed a irregular hypoechoic lesion of at least 5*5*3cm in 6'o clock position of right breast. Radiologically there were no signs of malignancy, such as microcalcification or infiltration. MRI of breast revealed T1 isoT2 heterointense lesion measuring 6.4* 5.2* 7cm noted in right breast, possibly of phyllodes tumour- BIRADS 3. Incision lines were marked pre-operatively with the patient in an upright position. Tumour exstirpation was performed under general anaesthesia, showing a well defined lump located centrally in the lower breast quadrant.

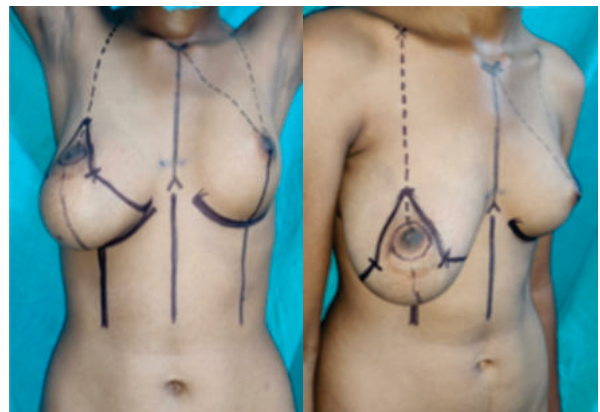


Figure 3: Anterior View Of Incision Marking

Figure 4: Anterolateral View Of Incision Marking

Subsequently reduction mammoplasty was performed by inverted T-technique, as was first described by Strombeck 1960 and (despite several modifications evolving in the following decades) still presents one of the standard operation procedures for reduction mammoplasties of very large breasts. Thus after superficial circumferential incision around the areola and resection of the tumour masses, a superior pedicle of the nipple- areola complex was defined . Subsequently it could be transposed and fixed at a more cranial position in order to achieve symmetry to the position of the contralateral nipple-areola complex. Finally lateral skin resection was performed, followed by direct vertical skin closure and horizontal skin suturing in the newly defined submammary fold.

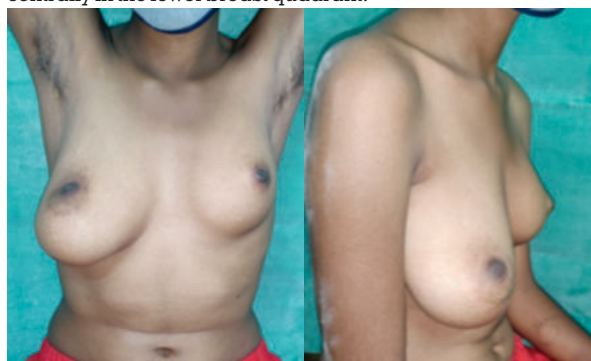


Figure 1 Preoperative Anteroposterior View

Figure 2 Preoperative Lateral View



Figure 6:excision Biopsy With Inverted T Reduction Mammoplasty

Figure 7: Macroscopic Resected Specimen

The patient recovered in appropriate time without any complications. Excision of tumour by reduction mammoplasty technique yielded an excellent cosmetic result.

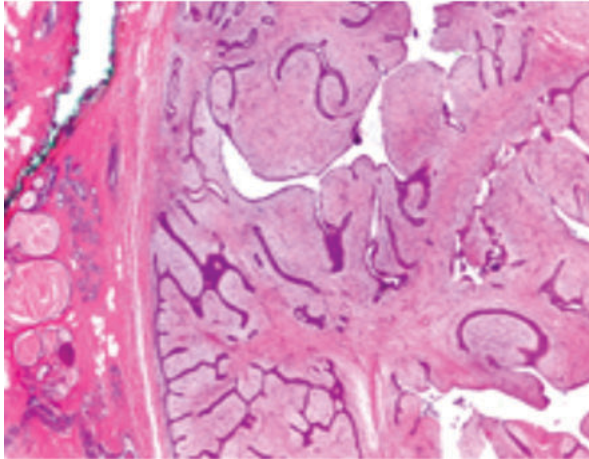


Figure 8: Microscopic photograph of specimen showing typical features of benign phyllodes tumours- multinodular and clefted structures with stromal hypercellularity and no stromal atypia

DISCUSSION:

Phyllodes tumour are usually very rare making up only 0.3 – 0.9 % of all breast neoplasm. Its highest incidence among women is found between the ages of 40 – 50 years[1]. Patients with increased body mass index (BMI) are often denied of reduction mammoplasty due to concern for high morbidity. A phyllodes tumour in adolescent female patients is a very rare condition. The majority of phyllodes tumours are benign lesions. Hence surgical treatment is used as treatment measure. The only concern about this fraction is a typically radial growth thus compressing surrounding adjacent breast parenchyma and local recurrence. Reports often describe the complication after reduction mammoplasty as minor with little effect on aesthetic outcomes[4,5]. Association with Maffucci's syndrome[6] has been reported in one case[7], however these is a fraction of malignant phyllodes tumours with a potential of infiltrative growth and metastasis. Currently accepted terminology categorises phyllodes tumours into benign, borderline and malignant. Primary excision with a one centimetre margin[8] may also be recommended but generally not supported. While some claim that the same surgical treatment guidelines as for the other benign lesions like fibroadenomas to be sufficient. However large lesions are commonly treated by mastectomy.

Symmetry in shape of breast shape, size and in particular nipple areola positioning are psychologically important factors especially for young and adolescent women[9]. Immediate reconstruction of these features should be an important goal apart from oncological considerations. Phyllodes tumours of the breast - stromal overgrowth and histological classification are useful prognosis and hence predictive factors for local recurrence in patients with positive surgical margin. The reduction mammoplasty technique which was first described by Strombeck in 1960[10] with the course of time and medicine has undergone several changes and refinements but still reminds and retains a standard technique in reducing, remodelling of very large breast. This operation procedure involves excision of the lump and transposition of the nipple areola complex in cranial direction, therefore reduction mammoplasty appealed to us as the treatment of choice in the presented case. Complete excision of the phyllodes tumours can be achieved as well as regaining good symmetry of the breast size and shape. From our point of view the choice for either superior or inferior pedicle technique should be dependant on tumour localization, i.e. superior

pedicle for lower quadrant and inferior pedicle for upper quadrant lesions. Yilmaz et al.[11] described a similar case of an adolescent female patient treated for a phyllodes tumour causing asymmetry by reduction mammoplasty. However in cases of suspected malignancy wide segmental excision might be necessary, including resection of the nipple areola complex, in order to obtain margins free of carcinoma.

Conclusion:

In our opinion reduction mammoplasty should be considered and may give better results in the treatment of large benign breast lesions whenever oncological considerations are not compromising, especially when the nipple-areola is malpositioned. Thus reconstitution of breast contour and nipple- areola complex symmetry, as well as an adequate excision of the neoplastic lesion, can be achieved.

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