



Surgical Management of Breast Lesions at Tertiary Care Centre: An Institutional Experience of 100 Cases

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ABSTRACT

Surgery is the mainstay of the treatment of breast swellings. Clinical examination and the diagnostic modalities are being used to identify the type of lesion and plan their surgical management. Here we are discussing our experience of management plans according to guidelines and application of new techniques. An audit of the 100 patients who presented in surgical outpatient door with various breast swellings was done. Data was analyzed from diagnosis and types of surgical management. Of the 100 breast lesions, 63 (63%) underwent modified radical mastectomy with axillary lymph node dissection, thoracoabdominal skin flaps were applied on eight patients. Sentinel lymphnode dissection was done in five (5%) cases followed by axillary dissection in four with one case managed with breast conservative surgery. Total 17 cases (17%) were not diagnosed definitely before operation hence underwent diagnostic excision biopsy. In clinically node negative cases of carcinoma breast, accuracy of ultrasonography guided fine needle aspiration cytology was found to be more than 80%. Preoperatively diagnosed 11 (11%) benign cases underwent surgical excision. Incision and drainage was performed in 2 cases. In our experience of 100 cases of breast lesions, surgical management done as per guidelines provided good outcome. New techniques applied also gave fine results with good accuracy.

Keywords-*Breast carcinoma, core needle biopsy, sentinel lymph node dissection, thoracoabdominal flap, Lumpectomy.*

Introduction

Clinical guidelines have been established regarding the management of breast lesions in the terms of investigations and surgical management. ^[1] Breast lesions in females are a common finding. The guidelines recommend that fine needle aspiration cytology (FNAC) or core needle biopsy (CNB) should be performed on all lesions preoperatively to

establish a diagnosis and allow better planning of surgical intervention in palpable lesions. In cases where definitive preoperative diagnosis is not possible or carcinoma is suspected lumpectomy with wide margins should be the treatment of choice. This method can prevent a second operation and also reduces local recurrence. ^[2,3,4,5]

Material and Method

An audit of 100 patients who presented in surgical outdoor patient with various breast swellings was done. The patients presented with F:M ratio of 49:1 with mean age of 47.25 ± 13.37 (range 15–88) years. The results of diagnostic tests, including FNAC, ultrasonography, mammography (USG) and CNB were analysed. Type of surgery was obtained from retrospective analysis of operative notes.

Results

In the audit of total 100 cases, maximum surgeries done were Modified radical mastectomy (MRM) with axillary lymph node dissection (ALND) with skin flaps application where needed. Skin flaps were successful in 70% of the cases (Figure 1). USG guided FNAC was performed in 30/63 MRM cases with 83.33% accuracy. Sentinel lymphnode dissection (SLND) (Figure 2) was done in five (5%) cases followed by complete axillary dissection in four and one case was managed with breast conservative surgery successfully.

Table: 1 Types of surgeries performed

	No	F	M	Max. age (years)	Min. age (years)	Mean (age) \pm SD
MRM	63	62	1	88	23	50.18 \pm 13.05
Lumpecto-my	17	17	Nil	60	28	45.26 \pm 9.8
Excision biopsy (Benign)	11	10	1	60	15	37.46 \pm 16.07
Axillary dissections post operative cases	02	02	Nil	45	32	38.5 \pm 6.5
Abscess	02	02	Nil	42	28	35 \pm 7
SLND	05	05	Nil	42	Nil	Nil
Total	100	98	2	88	15	47.25 \pm 13.37

Fig. 1 Thoracoabdominal flap after mastectomy in patients with locally advanced disease



Fig. 2 Sentinel lymphnode dissection using methylene blue dye.



Discussion

Global cancer statistics show that breast cancer is the most frequently diagnosed cancer and the leading cause of cancer death among females, accounting for 23 percent of total cancer cases and 14 percent of cancer deaths. Breast cancer is now also the leading cause of cancer death among females in economically developing countries. [6] The diagnosis and surgical management of breast cancer is very critical to the prognosis of disease. We have tried to manage the patients as accurate as possible. Breast cancer surgeries were done as per the guidelines and an audit of 100 cases was carried out. Although incidence of benign breast disease increases in the fourth and fifth decades and in malignant diseases the incidence continues to increase after menopause. In the current experience of 100 cases, mean age affected in 11 benign cases was 38.5 years \pm 6.5 and in 63 malignant cases was 50.18 years \pm 13.05. [1,3,7,8] It was suggested in the literature that FNAC results are benign with normal mammographic findings, patients should be kept under observation for 3–6 months. Excision biopsy was performed in all the FNAC proven benign cases. [1]

A variety of inflammatory changes can be seen in the breast. It can be a result of infectious agents, or without any etiology. It is to be differentiated from inflammatory breast cancer. In the present study 2% cases were of inflammatory breast disease and presented with abscess. After mammographic and

sonographic evaluation surgical management was done. One young patient underwent incision and drainage as per requirement of the management. ^[9] In the second case tissue was also excised for histopathological examination. ^[10]

The management of palpable breast lesions is to attain preoperative diagnosis from biopsy and it is suggested in the literature that diagnosis is to be confirmed preoperatively with FNAC or CNB to reduce the number of surgical procedures. ^[1,5,11] In the present institution maximum efforts were done to reach at definitive diagnosis preoperatively. In the audit of 100 cases, 68 % cases were diagnosed preoperatively for carcinoma and surgery was performed as single-stage procedure. Catherine Hanley and fellow have mentioned preoperative diagnosis in 49.4% of the cases in their study. ^[12] Amongst 68% cases, 98.5% cases were FNAC proven with only 0.5% cases undergone CNB. ^[1] As survival with breast-conserving therapy is comparable to that achieved with mastectomy in early-stage cancer, breast conservative surgery was performed in five patients. ^[13] As we are in learning stage of sentinel lymph node (SLN) biopsy, we performed SLN biopsy in five cases using methylene blue dye but followed by complete axillary dissection to check our results which were encouraging. In expert hands SLN biopsy results in decreased morbidity by avoiding complete axillary dissection to decide metastasis in axilla. ^[14,15,16]

In cases of carcinoma breast with clinically node negative disease, ultrasound of axilla to find out axillary metastasis and ultrasound guided fine needle aspiration cytology of suspected node was done and it was observed to be more than 80 percent accurate which is comparable with results shown by various authors. ^[17,18,19]

Amongst 63% cases of MRM, one (1.5%) case was male patient. As treatment of male breast cancer parallels that of carcinoma of the female breast. Although mastectomy is the mainstay of treatment, but for the fixed tumors radical mastectomy or modified mastectomy is the treatment of choice. ^[20,21]

In high number of cases (17%) with palpable lesions definitive diagnosis was not achieved on FNAC or mammography. It is a well known fact that excisional biopsy should be performed as wide local excision with resection of normal tissue around the lesion. ^[5] According to the Clinical Practice Guidelines for the Care and Treatment of Breast Cancer a lumpectomy was done using wide local excision of the intact tumour surrounded by tumour-free tissue in each and every case. ^[11] Seventeen lumpectomies were performed in our institution as single-stage operations. Also critical point is to remove the whole lesion in 1 piece with a surrounding cuff of normal tissue. Majority of the specimens were sent as per recommendations with specimens oriented for pathology using sutures. Amongst 17, only 6/17 (35%) cases were positive for malignancy and underwent second stage surgery. ^[1, 22]

In cases of carcinoma breast with extensive disease, after MRM autologous reconstructive surgery is the treatment of choice now days. Thoracoabdominal flaps were applied in eight cases of locally advanced cases of carcinoma breast with involvement of skin as fungating growth or ulcer. ^[23,24,25] Amongst that three showed flap necrosis and needed revision. Main cause of necrosis was infection due to co morbid condition like diabetes mellitus. Small marginal necrosis was observed in patients who have received neoadjuvant chemotherapy.

Conclusions

All the patients of breast lesions, managed surgically were analysed for the outcomes. It was concluded that the majority of the cases were treated as per the guidelines. Maximum efforts were done to reach at preoperative definitive diagnosis as well as preoperative plan of surgery. The results obtained were very good and satisfying.

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