Management of Locally Advance Carcinoma Breast (Stage III)

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The aim of this study was to see the prognosis of patients with locally advanced carcinoma breast after primary surgical intervention followed by adjuvant therapy and to evaluate possible complications. The study includes 50 patients; Most of them were postmenopausal with stage IIIA carcinoma breast with age ranging from 51-60 years. Modified radical mastectomy was the primary procedure followed by radiotherapy and chemotherapy. Tamoxifen given to postmenopausal women. Patients were followed up for one year. Locoregional recurrence and distal metastases occurred mostly in stage IIIB patients and also that the prognosis of patients with LABC is poor due to late presentation, bigger size of tumour and axillary metastasis

Key words; LABC, MRM, Tamoxifen.

Carcinoma of breast has been called the "foremost cancer" of females. This is also a spectrum of diseases, ranging from its in-situ lesions minimal malignant potential to extremely aggressive lesions, such as inflammatory carcinoma

Breast cancer in women remains the most common cancer in the developed as well as in the developing countries, but its incidence is increasing in the developing countries in the recent years. But parallel to this increase in incidence rate and high mortality, the diagnosis is arrived at earlier, and disease is staged precisely, so that survival is becoming better and treatment less severe.

Surgery still has a central role to play in the management of breast cancer but there has been a gradual shift towards more conservative techniques. It was initially anticipated that avoiding mastectomy would help to allay the considerable psychological morbidity associated with breast cancer, but recent studies have shown that over 30% women develop significant anxiety and depression following radical as well as conservative surgery. As far as breast cancer management is concerned, mastectomy is now only strictly indicated for large tumours (in relation to the size of the breast), central tumour beneath or involving the nipple, multifocal disease, local recurrence or per patient preference. Modified radical (Patey) mastectomy is more commonly performed 1.

The aim of this study is to see the influence of primary surgical intervention in the management of locally advanced carcinoma breast. During the last two decades, surgeons have become more conservative in their approach towards patients with breast cancer

Purpose of the study

The purpose of this study is to seek out the prognosis and different post operative complications, Early (wound infection, seroma, and flap necrosis) and Late (local recurrence, distant metastasis and

lymphedema) after primary surgical treatment of patients with locally advanced carcinoma breast.

Patients & methods

Setting: This study was carried in Surgical Department of Mayo Hospital Lahore.

Study design: This is cross sectional, comparative study carried out in a total of 50 patients admitted through OPD with proven carcinoma breast on FNAC.

Patient sampling: Patients included are those having Stage III carcinoma, including pre and post menopausal women with no age specification and Patients excluded are those already on chemotherapy and radiotherapy or patients having another concomitant malignancy.

Method: This study is carried out in a total of 50 patients admitted through OPD with proven carcinoma breast on FNAC. Staging of tumour done and stage III patients selected, including pre and post menopausal women (no age specification). For the purpose of staging, patients were initially assessed clinically and then investigated. CBE, ESR, BUN were done along with Bone scan, USG abdomen and X-ray chest PA view were done to rule out metastasis. ECG was done to see the cardiac status and fitness for general anaesthesia. Modified Radical Mastectomy with level II axillary dissection carried out by consultants of the unit. Patients were given single dose (Igm intravenous) of first generation cephalosporin preoperatively at the induction of anaesthesia and two doses after operation. Postmenopausal patients were given antiestrogen therapy. After the wound was healed and stitches removed, patients were referred to Oncology Department for radiotherapy and chemotherapy where patients were reassessed according to diagnoses made on histopathology reports including margins of dissection, Lymph node status, ER/PR. Patients followed up for their postoperative course in two weeks, one month, six months and one year.

Results

Fifty patients fulfilling inclusion crieteria were included in this study. All patients were female.

Most of them were Muslim housewives. Only two of them were non-muslim (Christians) and two were working women (school teachers). Age ranged from 28 years in the youngest patient to 71 in the oldest, with the mean age of 45.66 years. The range of age at menarche was from 11 years to 20 years with a mean age of 13.54 and a median of 13 years. Out of 50 patients, 4 were unmarried and 46 married. Amongst married women, 7 were nulliparous and others had an average of 5.02 with a range of one to ten. The range of age at first pregnancy was from 15 years to 38 years, with a mean of 21.27 years, and a median of 18 years. All women who had been mothers, had breast fed their babies. Five patients gave history of breast cancer in one of their family members. Among them two had elder sisters, one had a mother, one had a mother as well as maternal grand mother and another had one of a first cousin with a history of breast cancer. So, four patients had one of their first degree relatives while one had second degree relative with a history of breast cancer.

Out of 50 patients, four patients gave history of breast disease in the past, three at the same site (fibrocystic disease) and one on the other side (serosanguinous discharge from the nipple). Two patients gave the history of trauma to the same breast.

Although all patients had a breast lump, it was the chief presenting complaint in 50 cases. In addition one had an axillary lump and an ulcer on the breast was present in another case. The most common associated complaint was pain in the lump which was present in 19 cases. Systemic complaints like weight loss and anorexia were present in only 7.02% cases. Most patients (34) presented with a breast problem of six months or less duration. The mean duration of symptoms was 8.19 months with a range from 6 day to 6 year

Out of 50 patients 37 were diagnosed as stage IIIA carcinoma breast and rest of 13 were stage 11IB carcinoma breast., 16 were premenopausal and 34 were postmenopausal.. 23 patients were between 51-60 years of age i.e. (46%) Seven patents were in the age group 28-40 years, 11 patients were between 41-50 years and 9 patients between 61-71 years.

Tumour size in 39(78%) patients is more than 5cm (T_3) , and only 18(36%) cases had mobile axillary lymph nodes, rest of them had fixed lymph nodes.

Complications encountered in the first year after Modified Radical Mastectomy were Wound infection in 5(10%) patients with flap necrosis in 10(20%) patients. Seven patients developed seroma in the axillary wound. Lymph edema developed in 4(8%) patients after surgery. Local recurrence occurred in 8(16%) patients (one patient presented after 3 months, 3 patients after 6 months and 4 patients after 12 months). and distal metastases in 7(14%) patients(Three patients after 6 months and 4 patients after one year showed distal metastases with bone

metastases in 3 patients and liver metastases in 2 patients. One patient showed lungs and one brain metastases.)

Age	=n	%age	
31-40 years	07	14	
41-50 years	11	22	
51-60 years	23	46	

18

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Complications	=n	%age	
Wound infection	5	10	in the second se
Flap necrosis	10	20	
Seroma	07	14	
Lymphedema	04	08	
Local recurrence	08	16	
Distal metastases	07	14	

Distant metastases (n=07)	:07)	
Follow up	n=	
03 months	00	
06 months	03	
12 months	04	

Sites of metastases	=n
"Bone	03
Liver	02
Lungs	01
Brain	01
Local recurrence	
Follow up	=n
03 months	01
06 months	03
12 months	04

Discussion

61-70 years

Breast carcinoma is almost exclusively a disease of women, men account for less than 1% of all cases ².It is the most common cancer all over the world. The incidence is also increasing in population of south East and Asian countries ³. Incidence in this region appears to be less as main risk factors associated with this disease do not exit

The mortality due to breast cancer has remained relatively unchanged even with therapeutic advancment⁴ Recent studies have shown improvement in 5 years survival rate with new therapeutic modalities. Successful treatment of breast cancer should always include control in breast as well control

of regional lymph nodes. Axillary lymph nodes the most important prognostic factor influence both adjuvant and surgical therapy⁵.

Hagensen in 1996 concluded that no age group has any significant relationship to the occurrence of breast carcinoma. Influence of age, if any, may depend to some extent on the grade of tumour and stage of the disease. Ahmad et al 1991⁶ and Usman et al, 1996⁷, in their studies concluded that patients presents late in our setup with tumour size more than 5cm. Yeh K et al (2000)⁸. Hoff PM (2001)⁹, Olson JE (1997)¹⁰ in their study for T4 breast carcinoma performed Modified Radical Mastectomy followed by chemotherapy and radiotherapy and concluded that average time for local recurrence was 7-8 months and also multimodality treatment provided good locoregional control.

In our study all the included cases were of females amongst whom 34(68%) were postmeno-ausal, mostly 23(46%) belonged to the age group 51-60 years (late age group), clearly reflected the mean duration of symptoms which was quite prolonged. Also in 37(74%) cases tumour size was more than 5cm (T3). Only 18(36%) cases had mobile axillary lymph nodes, rest of them had fixed lymph nodes. In two cases, Supraclavicular lymph nodes were also found. This also reflects the late presentation in our community. This has been attributed to a number of factors including poverty, illiteracy, lack of health education and awareness regarding the disease itself and its fatal consequence, fear of surgery and of losing breast and painlessness of the lump.

In our study, all patients underwent MRM followed by radiotherapy and adjuvant chemotherapy. Most of our patients were postmenopausal 34(68%) and Tamoxifen has been shown to have survival benefit in postmenopausal women¹¹.

High incidence of post operative complications particularly flap necrosis, local recurrence and metastasis in our study are sequele of advanced disease. Local recurrence and distant metastases, at first relapse were respectively 16% and 14%.

Patients with wound infection treated by local measures that is wound wash, daily dressings and antibiotics according to culture sensitivity report. Flap necrosis treated by daily dressing, secondary closure and skin grafting. Needle aspiration was done in cases of seroma formations. Although there is no cure for lymphoedema, it is possible to reduce the size of the arm. The most effective management and maintenance comprises multimodal physical therapy (skin care, external support, exercise and

massage) and education Management strategy of local recurrence determined by the previous treatment, site of recurrence, its operability and hormonal receptor status.

Patients with distant metastasis were treated by systemic therapy or symptomatic treatment to alleviate symptoms with surgery.

Conclusion

This study shows that prognosis of patients with locally advanced breast cancer is poor due to late presentation, bigger size of tumour and axillary metastases. This requires need of awareness among community about breast cancer by regular self examination, screening programmes involving periodic physical examination of high risk patients. There is a need to explore new yet economical modalities of breast imaging in a third world country like ours. Automated breast ultrasonography could supplement physical examination and mammography in screening for breast cancer.

References

- RCG Russel, Williams NS, Bulstrole CJK. Bailey & Love's Shot Practice of Surgery. 23rd ed. 2000.
- Dotiegan WL, Reddich PN. Breast cancer in men. Surg Clin North Am 1996; 76: 343-63.
- Guyton AC, hall JE. Textbook of Medical Physiology. 9th ed. Philadelphia: WB Saunders 1996; pp. 1044-46.
- Kingsmore DB, Hole D, Gillis CR. Can the mortality and breast cancer be reduced? Br J Surg 1998; 85 (supp!2): 146.
- Kett K, Szilagyi K, Anga B. Using Sappey's anatomy for identifying sentinel lymph nodes in breast cancer. Br J Surg 1998; 85 (Supp) 2): 146.
- Ahmad N. breast carcinoma in Pakistani women: How it differs from the West J Surg 1991; 2: 56-8.
- Usmani K, Khanum A, Afzal H. Breast carcinoma in Pakistani women. J Environ Pathol Toxicol Oncol (JEPTO) 1996; 15(2-4): 2151-3.
- 8. Yeh KA, JillelU AP, Wei JP. Surgery for T4 breast carcinoma: Implication for local control. Am Sug 2000; 66: 250-4.
- 9. Hoff PM, Valero V, Buzdar AV. Combined modality treatment of locally advanced breast carcinoma in elderly patients or patients severe comorbid conditions using tamoxifen as a primary therapy. Cancer 2000; 88(9); 2054-6.
- Olson JE, Neubery D, Pandya KJ. The role of radiotherapy in management of operable locally advanced breast carcinoma. Cancer 1997; 79(6): 1139-49
- 11. Dana I, Bemhaim, Richard Lpchinsky, Paul I. Totter. Am Surg 2000; 180:162-66.