CONSERVATIVE BREAST SURGERY IN MALIGNANT LESIONS

Essay
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In General Surgery

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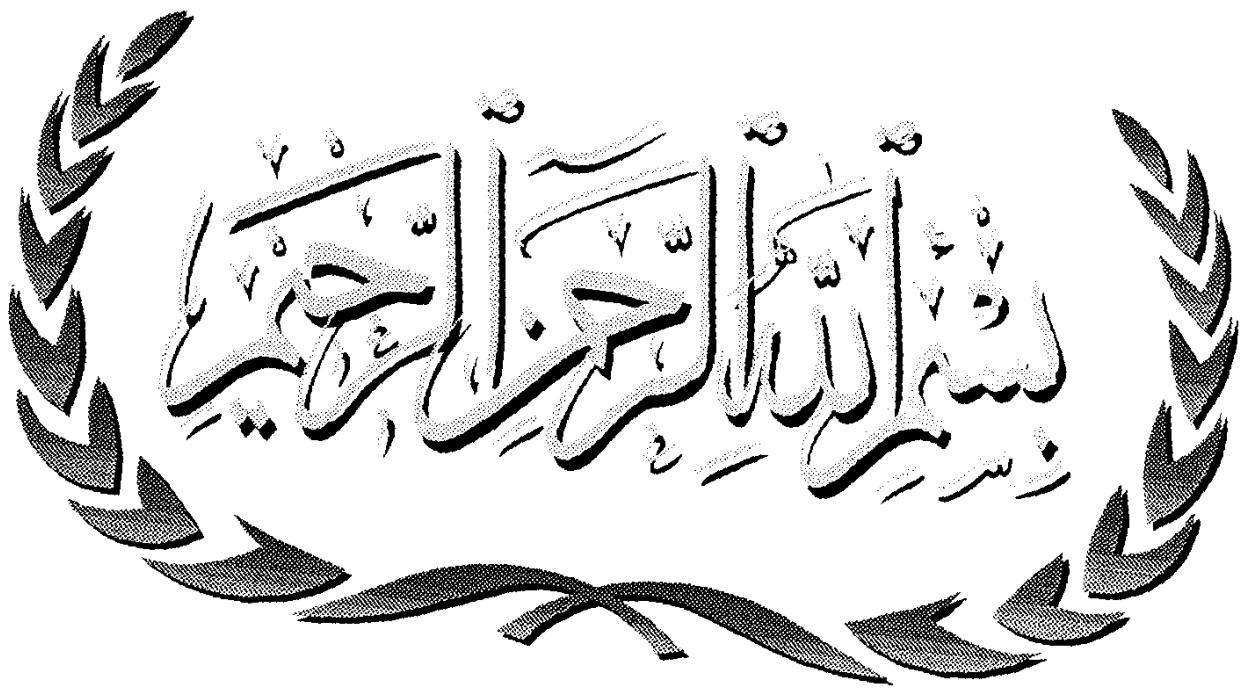
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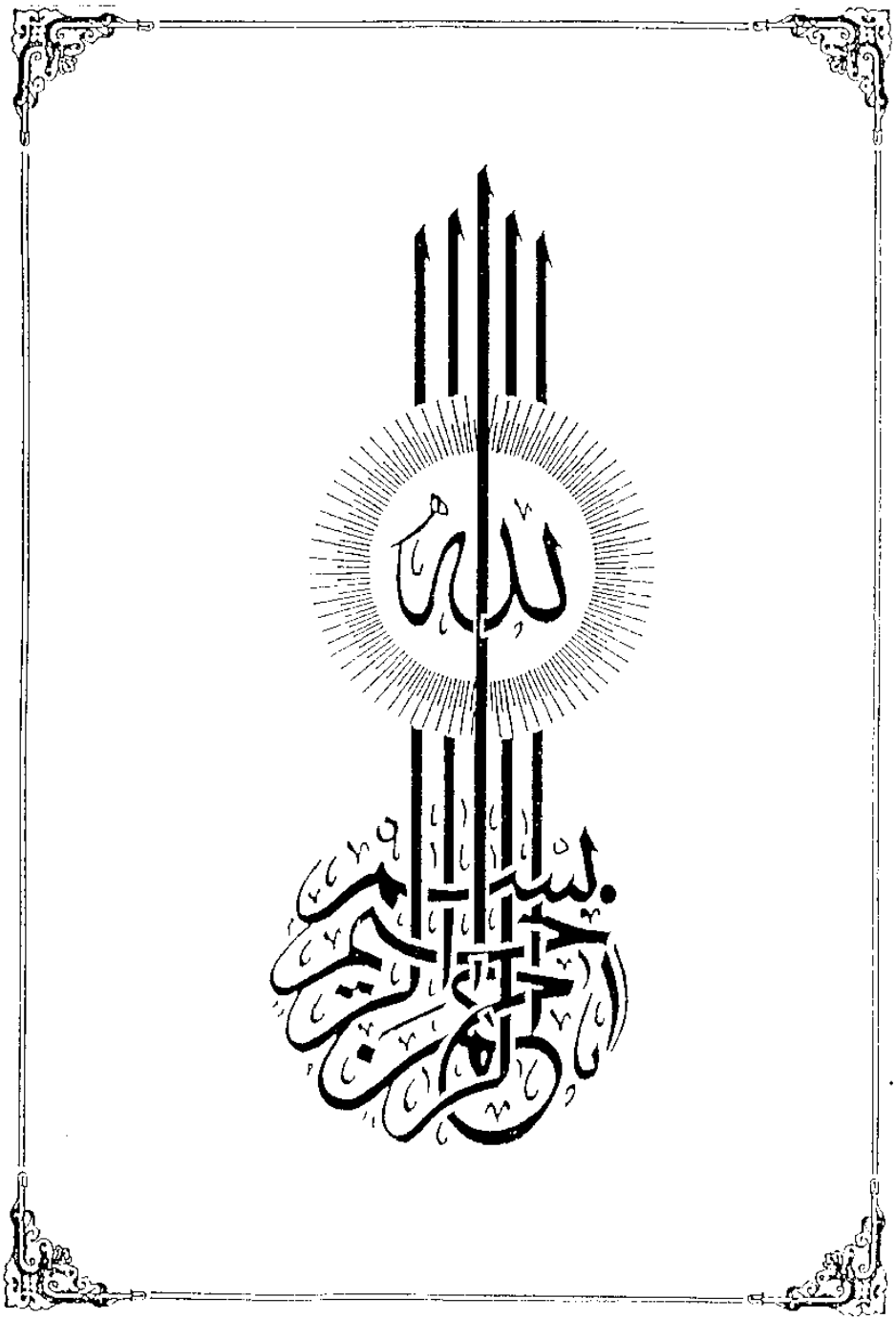
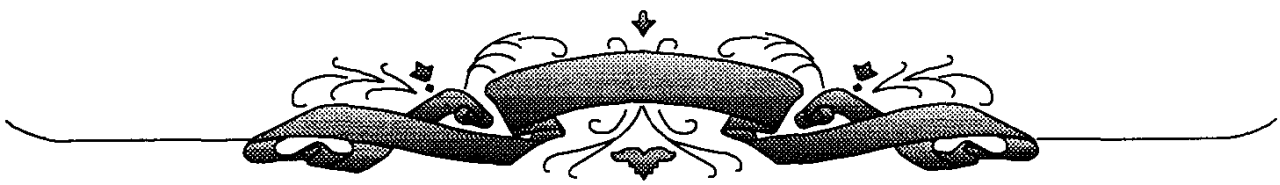
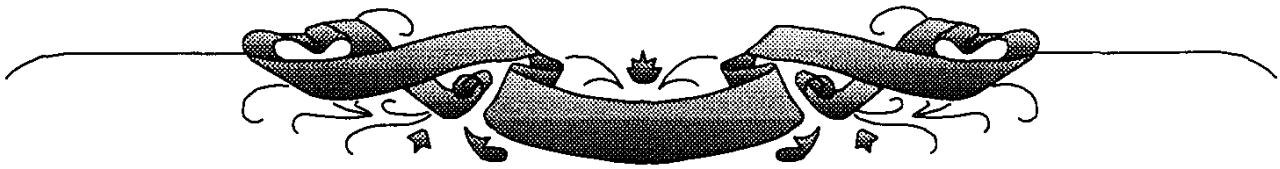




Conservative Breast Surgery



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First & before all I want to thank God for his care &passion.

This paper is dedicated to the spirit of my father who gave me every thing and also dedicated to my mother for her great kind care & support, it is also dedicated to my brothers who supported me so much.

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Introduction

Recently, cancer therapy has been evaluated not only for the therapeutic results themselves but also in the quality of life of the treated patients. The first category of such efforts in breast cancer surgery is the introduction of conservative surgery. The most important factor which led to introduction of conservative breast surgery is the psychic trauma from which the patient suffers after mastectomy (Izuo ; 1988).

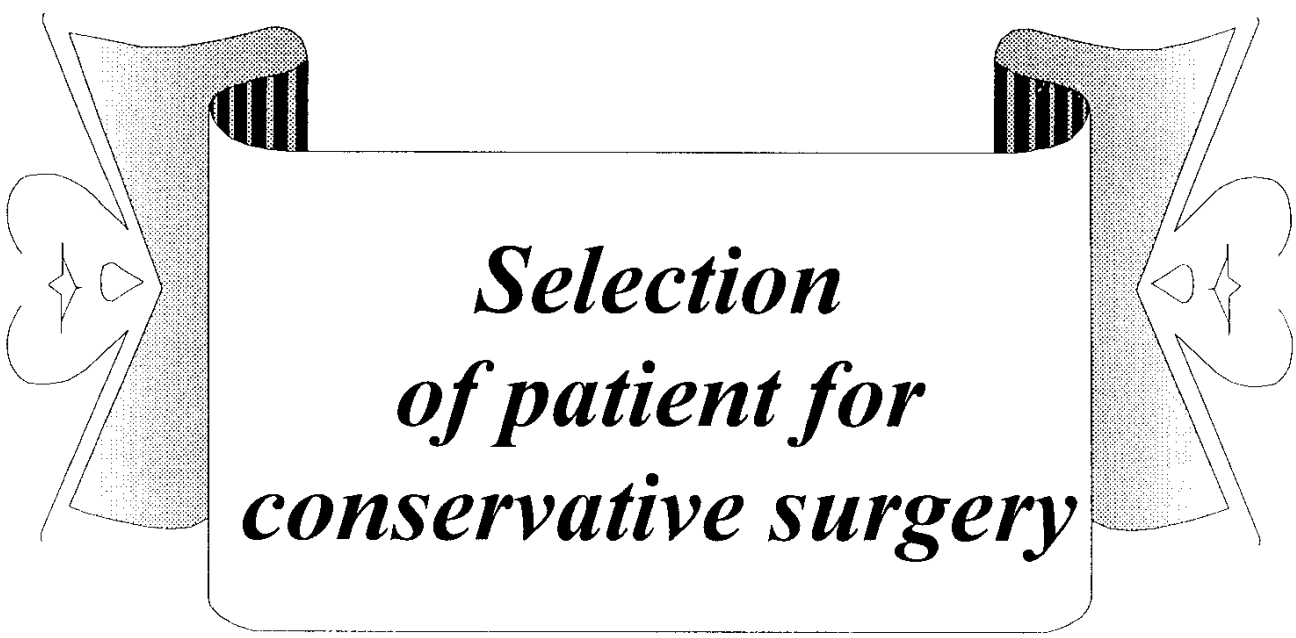
Conservative treatment of breast cancer is a well established technique as long as some basic principles concerning indication, technical details and general therapeutic plans are respected (Harder and Laffer, 1992).

At present, the same carcinological results are obtained with conservative surgery and radiation therapy as with radical surgery, and the aesthetic of functional results have improved. Several parameters should be taken into account, (i.e. tumor volume, breast volume, multifocal nature and histologic type) (Touboul et al., 1992).

Current surgical techniques in conservative treatment of breast cancer are: quadrantectomy, tumorectomy and axillary dissection (Kleine ; 1987).

The risk of conservative treatment depends on the frequency of local recurrence and on the potential vital risk of such recurrence, knowing that half of these recurrence will develop in an invasive, and no longer in situ pattern (Garbay et al., 1993).

The great interest in early breast cancer is caused by hope in the future of treating especially early cancers, extending the indications to a local conservative treatment of breast with more and more efficient general treatment (Zanon et al., 1993)



Selection of patient for conservative surgery

Anatomic versus biologic model of breast cancer :

Until the 1960s, the dominant biologic model of breast cancer was of a disease that spread centrifugally along anatomic pathways, with time being the only determinant of prognosis. It followed, therefor, that anatomically based radical operations would be the treatment of choice. Mortality rates from breast cancer remained (stubbornly) constant in spite of perfect anatomic dissections until a group of scientists proposed an alternative model of biologic determinism. This model suggested that, the outcomes of treatment were determined by the extent of microscopic dissemination that occurred before the disease was clinically detectable and therefor that the extent of local therapy was irrelevant, with the prognosis being determined not only by time but by the biologic heterogencity of the primary Tumor .There were two therapeutic sequelae of this revolutionary model: first, that conservative surgery could achieve the same results as radical surgery at the expense of much less morbidity, both physical and psychological, and second, that survival would be improved only as a result of the exhibition of drugs targeted at the putative micro metastases present at the time of diagnosis (Baum ; 1990).

Patient involvement in treatment selection :

In discussion with patient about the selection of therapy for primary invasive, breast cancer in the 1990s, the principal management decision which governs all other choices is the patient desire regarding preservation of the breast. In those patient who do not desire to preserve the breast, the choice of operation obviously easy. This selection of mastectomy is more often made by older women but also by those younger women who do not want to be plagued with the uncertainty of the follow - up of the intact breast or who have other reasons for avoiding radiation therapy. Of course some patients will arrive in treatment facilities, even in the 1990s, with an advanced presentation of the primary breast cancer, categorically ruling out conservative surgery. In addition, various pathologic features related to a likelihood of local recurrence may bear on treatment selection. However even women with high risk of local recurrence may be perfectly happy to accept that high risk for the ten percent chance of retaining the breast long term. Twenty years ago, the selection of treatment for primary breast cancer was simple: breast cancer equaled mastectomy. Currently however, there is a wide variety of options for treatment of the primary cancer in the breast, the regional lymph. Nodes in the axilla and the distant preclinical micro metastases. Patient should understand that, recently, it was discovered that the details of local resection do not govern survival, that recurrence in the breast alone does not impair survival. The details of local resection may have a great deal to do with the recurrence rate in the breast but once the primary invasive cancer has been removed, Its potential for shedding cells

into the hematogenous & lymphatic channels has been eliminated, the fate of the patient has been determined, other details of local therapy will not exert a controlling influence on that prognosis. Death from breast cancer results from distant metastases not local growth per-se. So the program requirement for breast-preserving surgery in primary cancer involves permitting the patient to select treatment options, because survival is identical with mastectomy or local excision plus radiation therapy (Cady and Stone ; 1990).

Factor affecting selection of patient for conservative surgery:

1. Tumor size:

The largest prospective randomized trial of conservative surgery and radiation therapy have used tumor sizes of 4 cm (Fisher et al 1989). Osteen and Smith (1990) have used tumor size of 2 cm as a maximum for eligibility for conservative surgery & radiation therapy.

2. Tumor location :

The location of the tumor within the breast does not affect the outcome of conservative surgery & radiation therapy. A review of tumor location & outcome at the institute of Gustave-Roussy found no increase in loco regional recurrence rates with central, subareolor, or medial tumors and primary tumor location had no effect on prognosis in the NSABP [National Surgical Adjuvant Breast Project] studies (Osteen and Smith ; 1990).

3. Breast size :

The breast size should be reasonable as regard the tumor size to give the desirable cosmetic outcome (Osteen and Smith ;1990)

4. Review of Pathology :

For adequate decisions about breast preservation, the surgeon needs to review the lesion with the pathologist. Aspects that need understanding are, first, the extent of intraductal component within and around the primary cancer. The presence of an extensive intraductal component has been strongly correlated with a high recurrence rate in numerous studies. Extensive intraductal component means that > 25% of the area of the primary invasive cancer displays an intraductal component with a moderate or extensive amount of ductal carcinoma in situ in the tissue immediately surrounding the invasive component. A second aspect is the condition of the margins. Thirdly, the size of the invasive component should be measured accurately if possible. Fourthly, other aspects of pathology such as extensive lymphatic invasion, or dermal lymphatic involvement, must be noted. The fifth aspect, is the pathologic variant of invasive carcinoma that indicates better prognosis, as tubular carcinoma, papillary carcinoma, colloid medullary carcinoma need recognition as does diffuse, invasive, lobular carcinoma which indicates a worse prognosis. Any of these findings may help the surgeon in choosing the most suitable local treatment of breast cancer. Finally, the size of the ductal cancer in situ and the presence of microinvasion are important to categorize according to their relative relation