

Summary

Breast cancer is the most important malignancy of women of the world's industrialized nations. It is second only to lung cancer in cancer related mortality. Early detection is the best means of improving survival, the cornerstone of early diagnosis is mammography. Given the endemic nature of breast cancer, screening mammography has secured a routine place in health maintenance for women, although it's less than perfect. To aid in the diagnosis of malignant breast diseases other imaging modalities has evolved Ultrasound, Magnetic resonance imaging (MRI), Positron Emission Tomography (PET), and scintimammography (SMM) (*Kakuda, et al. 1999*).

Detection and management of breast mass requires an optimal environment for interpretation, relevant use of clinical information technology, excellent imaging procedures, proper interpretation of the findings. Masses suspicious for malignancy by only a single modality ideally should undergo some form of biopsy (*Evan, 1995*).

The management of early breast cancer has undergone remarkable changes over the past two decades . In the 1970s, the Halsted operation was abandoned for the modified, muscle sparing, radical mastectomy by Madden or Patey. In 1980s breast - conserving surgery was accepted in the surgical treatment of early breast cancer, and during the last years of this century sentinel node biopsy has emerged as method to avoid axillary clearance for node - negative axillae (*Von Smitten, 2000*).

The majority of women presenting with apparently localized breast cancer have micrometastatic disease which is undetectable by currently available screening investigations. As survival is determined by the presence or absence of this micrometastases, the aim of locoregional treatment is to achieve long term local disease control. Numerous studies had show that although local recurrence may be slightly more common after breast conservation than mastectomy, disease - free survival and overall are the same.

(*Fisher, et al. 1989*)

The advantages of conservation therapy are that in the majority of women suitable for this treatment, it produces an acceptable cosmetic appearance and when compared with mastectomy, it result in an improvement in patient body image, allows increased-freedom of distress (*Mansfield, et al. 1995*).

Although local therapy has little influence on survival, systematic therapy does, and breast conservation treatment should be combined in the majority of women with some from of systematic therapy given either as an adjuvant following, or as primary systemic therapy prior to breast conservation (*Recht, et al. 1996*).

Conservative surgery is now the usual therapy for small in situ or invasive tumours, but many problems must be solved. Practically, one can either be a maximalist, doing the upmost independently of the histology and biology of the tumour, carrying out as large an excision as possible, or a minimalist, guided by global evaluation of the situation and therefore highly personalised. Certainly the former is easier, more traditional and more easily repeatable in terms of respecting guidelines. The second is more eclectic, requires a deep knowledge of the problem and therefore patient management becomes more complex and difficult. However, in the near future there will certainly be quality improvement in the diagnosis and treatment of breast cancer and keener attention to individual situations. In particular, everything should be codified, registered and subject to quality control. Every

phase of the surgical procedure must be accurately recorded to favour quality control, to ensure completeness of excision, to avoid overtreatment of women with favourable lesions, to ensure that all necessary data are obtained for making decisions on adjuvant radiotherapy or adjuvant systemic therapy (*Cataliotti, 2003*).