

Introduction

Locally advanced breast cancer (LABC) constitutes a problem that affords most of surgeons and makes a challenge that is difficult to be overcome. It is generally referred either to patients with large primary tumors (> 5cm) with skin or chest wall involvement or to those with fixed axillary nodes or internal mammary nodal metastasis (T3 / T4 and N2 /N3) (**Eva Singletary, 2001**).

The standard regimen for such cases consisted of surgery or radiation or combination of the two had little effect on overall survival in patients with LABC; hence the introduction of systemic chemotherapy was attributed to increase the cure chance of patients. Preoperative neoadjuvant chemotherapy was planned as a tool for converting non resectable tumors to small tumors. These trials have addressed major concern of surgeons (**Hortobagyi et al., 1988**).

- First many surgeons believed that the tumor was likely to progress during this period of neoadjuvant chemotherapy and that the best window of opportunity for surgery might be missed. In fact, tumor progression rarely occurs during neoadjuvant chemotherapy (**Hortobagyi et al., 1988**).
- Second, concerns about increased operative morbidity have proved to be unfounded. Wound infection and necrosis are no more frequent in patients receiving neoadjuvant chemotherapy followed by mastectomy than in patients receiving mastectomy alone (**Broad Water et al., 1991**).
- Third, histological staging information obtained from surgery after neoadjuvant chemotherapy doesn't lose its prognostic value; surgical node staging remains significantly associated with

overall and diseases-free survival (**Me Ready et al., 1989**). As pathologically positive lymph nodes after neoadjuvant chemotherapy are associated with a worse prognosis than the same nodal status before chemotherapy (**Meric et al., 2000**).

The primary rationale for the use of any chemotherapy is to reduce the mortality risk associated with occult micro metastasis. Neoadjuvant has been postulated to provide effective downstaging of the tumor and improving the over all survival rates (**Eva Singletary, 2001**).

So long, the preoperative neoadjuvant chemotherapy becomes more widespread .So, its effects on tumor size, and hormone receptors must be clearly studied (**Susan et al., 2003**).

Some authors reported that estrogen or progesterone receptors expression both changed in good deal of patients (**Jain et al., 1996**) and (**Makris et al., 1999**).

However, other authors have reported no significant change in estrogen or progesterone receptors expression or both after induction chemotherapy (**Schneider J. et al., 2000**).

So, the benefit of preoperative neoadjuvant chemotherapy in downstaging the tumor, and on the hormone receptor (ER, PR) expression and hormonal receptor (HR) status is the matter of controversy to be proofed or denied (**Susan et al., 2003**).

Aim of the work

Evaluation of the role preoperative neoadjuvant chemotherapy in patients with LABC as regarding tumor progression, tumor operability, morbidity and overall survival rates.