

# NEO ADJUVANT CHEMORADIATION IN LOCALLY ADVANCED BREAST CANCER - LONG TERM SURVIVAL, TUMOUR AND NODAL RESPONSE

Sridevi Veluswami<sup>1</sup>, Shanta Viswanathan<sup>2</sup>

<sup>1</sup>*Surgical Oncology, Cancer Institute(WIA), India,* <sup>2</sup>*Breast and Gynec Oncology*

## INTRODUCTION

Breast cancer is the most common cancer among urban Indian. Nearly 50% of the patients present to the tertiary centers with locally advanced disease. Primary surgery is fraught with a high chance of recurrence and failure. The use of Neoadjuvant chemo radiotherapy could help in downstaging the tumour and increasing the disease free survival.

## MATERIALS AND METHODS

Between 1990 and 1999, 1117 consecutive cases of locally advanced breast cancer treated at Cancer Institute (WIA), Chennai, India and followed through for a minimum period of 5years were included in the study, DFS was the main outcome and nodal and tumour downstaging were the intermediate outcome measures studied.

Results: The DFS at 5, 10 and 15 years for all the patients (n=1117) was 64.5, 52.6, 41.4%, respectively. The Disease free survival rate at 5, 10 and 15 years for clinically node negative (CN-) and clinically node positive (CN+) was 71.8%, 60.5% and 64.2%, 52.2% and 40.3% respectively (p value less than 0.001).

Primary tumour sterility was achieved in 500 of 1108 (45.1%). However the sterility rate was dependant on 'T' stage with T2 having a sterility rate of 55.7%, T3 having 44.7% and T4 achieving only 35.6%.

The nodal downstaging rate was 60.9% for those treated with CMF and 47.9% for those treated with anthra-cyclines.

The DFS rate at 5, 10 and 15years for pathologically negative (PN - ) patient was 74.4%, 64.0% and 58.6% and for the pathologically node positive group (PN +) was 50.2%, 35.6% and 13.6% respectively.

The DFS for the CN- PN- and CN+ PN- patients at 5, 10, 15years was 69.7%, 59.4% and 74.9%, 64.5% and 58.8% respectively (p=0.43).

The outlook was the worst for the pretreatment clinically node positive patients who continue to be node positive postoperatively (CN+ PN+) ie, patients with no response to chemo radiotherapy. In this group of 442 patients the DFS rate at 5, 10 and 15years was a dismal 49.1%, 34.4% and 12.9% respectively. Neoadjuvant chemo radiotherapy was tolerated with minimal toxicity in our series.

## CONCLUSION:

One data clearly shows the benefit of concurrent Neoadjuvant chemo radiotherapy in locally advanced non-inflammatory breast cancer. It would be essential to study the molecular biology of these tumours, so that the treatment can be better tailored to the patient.