

## STATUS OF TRIPLE NEGATIVE BREAST CANCER PATIENTS AND ITS CORRELATION WITH TUMOR VASCULARITY IN INDIAN SCENARIO

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### ABSTRACT

**Background:** Triple negative breast cancer (TNBC) patients have poor prognosis in terms of disease-free and overall survival. In an attempt to predict the fate of patients, various prognostic factors have been identified among which tumoral vascularity is an important parameter.

**Methods:** The primary aim of this study was to *evaluate triple negative receptor status in breast cancer patients being treated in our University hospital between January 2011 to December 2012 and comparison between TNBC and non TNBC patients in terms of the color Doppler parameters (RI, PI and Vmax) and micro vessel density (MVD) by immunohistochemistry using anti human CD31 antibody.* The secondary aim was to compare these two groups with presently established clinicopathological prognostic parameters in breast cancer like age, duration, tumor size, lymph node status, stage and grade of disease.

**Results:** The total number of patients enrolled was 40 with mean±SD age of 44.40±10.37 years. The incidence of TNBC was 17.5%. The mean±SD of RI, PI, Vmax and MVD were 0.89±0.12, 2.42±0.12, 20.80±8.27 and 8.37±2.59 respectively in TNBC group compared to 0.65±0.18, 1.46±0.12, 16.44±6.28 and 5.28±1.89 in non TNBC group (p value<0.05). Younger age of presentation, tumor size, number of positive lymph nodes, stage and grade of tumor was significantly higher in TNBC group.

**Conclusion:** The present study revealed TNBC breast cancer is not uncommon. Triple negative cases are aggressive and have higher vascularity. Clinico-pathologically they have poor prognosis as compared to non triple negative cases.

**KEYWORDS:** Triple Negative, Breast Cancer (TNBC), Prognostic and Indian Scenario