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## Triple negative breast cancer (TNBC), the surgeons and physicians dilemma in Pakistan

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**Introduction:** Breast cancer is one of the most common feminine cancers globally. There are four molecular subtypes, luminal A, luminal B, Her 2 positive cancer and triple negative breast cancer (TNBC/BLBC). It accounts for about 15-20% and among these TNBC accounts for 15% of all breast cancer patients. This is one of the most aggressive forms of breast cancer.

**Study design:** Cross sectional study.

**Duration:** 2007-2013

Settings: Civil Hospital, DUHS, Mayo Hospital Lahore and University of Karachi

**Methods:** The patients are recruited from the OPD of civil hospital. Total 437 breast cancer patients were screened and after immunohistochemistry and FISH analysis 146 patients, estrogen receptor negative, progesterone receptor negative and her 2/ neu receptor negative were selected.

**Results:** The total frequency in this group for TNBC is 33.5%. The mean age is  $45.69\pm13.9$  and BMI is  $28.2\pm5.21$ . The type of each patient is categories as ILC 6.55%, Mucinous 2.45%, Invasive adenocarcinoma 0.81%, metaplastic 4.09%, and IDC 86%. Position of tumor left (48%) and right (52%). Consistency is hard and firm mostly margins are well defined. Tumor size ranges  $\leq 2 \text{ cm } (0\%)$ , 2-5 cm (65.5%) and  $\geq 5 \text{ cm } (34.5\%)$ . The largest size of tumor was 15 cm x 10 cm. Tumor site centrally placed (8%), lower inner quadrant (6%), lower outer quadrant (32%), upper inner quadrant (4%), upper outer quadrant (38%) and upper outer inner quadrant (12%).

**Conclusions:** TNBC/BLBC is a subtype of breast cancer with challenging biological features. It has no known specific target so far and is usually considered an aggressive treatment-resistant disease. TNBC accounts 15% globally and it is present in our population at a higher rate 33.5%. The genetic makeup and environmental factors are needed to explore. The rate of occurrence is lower in our population but death rate is higher may be due to increase number of TNBC patients.

## **Biography**

Afsheen Arif had completed her Ph D (Biotechnology) in 2013 from The Karachi Institute of Biotechnology and Genetic Engineering, KIBGE, University of Karachi and currently working as an Assistant Professor. She had more than 12 years of research experience. She has expertise in biotechnology, genetics and molecular biology. Research is her passion and she has keeninterests are to study molecular genetics of rare diseases. She has ten publications in reputed journals. In Future, She would like establish stem cell and regenerative medicine laboratory.

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