

## **Evaluation of Types and Treatment Protocols for Breast Cancer: A Retrospective Cohort Study from Palestine**

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### **Abstract:**

**Objectives:**The aims of this study are to find the most common histological types of the breast cancer in the west bank, their stages, receptors' types and the strategies of treatment.

**Method:**The study was a cross-sectional study that was conducted in two major outpatient clinics for oncology in Palestine; (Al-Watani Governmental Hospital / Nablus and Beit Jala Governmental Hospital/ Beit Jala) between August and December 2016. The data collection form was completed by reviewing patients' medical records. SPSS program was used for data analysis.

**Result:**The study included 400 patients; their average of age was 52.16 years. A total of 295(73.8%) were married, 166 (41.5%) of them were pregnant before. Regarding breast feeding 118 (29.5%) were not breast feeding before, 120 (30.0%) of patients had strong family history of cancer, 275 (68.8%) of them were diagnosed before one to five years. About 252 (73.0%) of them had no co morbid diseases. Four histological types of breast cancer were identify in the patients, ductal carcinoma was the most common 317 (79.3%), then lobular 60 (15.0%), invasive 18 (4.5%) and inflammatory 5 (1.3%) which was the least common. About potential predictive biomarkers, it was found that most patients 353 (88.3%) did not test BRCA1/BRCA2, among the rest who had the test 21 (5.3%) were positive and 26 (6.5%) were negative. Regarding estrogen Receptor (ER), 249 (62.3%) had positive test and 137 (34.3%) were ER negative. Whereas Progesterone receptor (PR) test was positive in 255 (63.8%) women and 160 (40.0%) had negative results. Finally for HER2 receptor, most of patients had negative results 306 (76.5%) and 75 (18.8%) of them had positive results. There were 4 major treatment types for patients; 366 (91.5%) patients received chemotherapy where as 185 (46.3%) underwent radiotherapy. Surgery was part of treatment for 127 (31.8%) and hormone therapy 95 (23.8%). Cyclophosphamide was the most common medication, being used by 277 patients. Followed by adriamycin, paclitaxel and tamoxifen which were used by 202, 140 and 128 patients respectively.

**Conclusion:**The most common type of breast cancer among Palestinian women was invasive ductal carcinoma. Around half of the patients were diagnosed in stage three and four, so better awareness regarding this disease is recommended to diagnose it earlier. A high percentage of patients had estrogen and progesterone positive receptors, this makes hormone therapy an important part of treatment.

