ABSTRACT

**Aims of study.** To investigate the characteristics and outcome of BBC in comparison to unilateral breast cancer.

**Methods:** Retrospective study of BBC patients who were registered in Tripoli medical Center in the period between Jan 2005 and Dec 2012. BBC is considered synchronous if it occurs within 3 months from the first breast cancer BC and metachronous if it occurs after 3 months.

**Results:** 437 breast cancer BC patients registered and included in the study. Their median age was 46 years. 25 (5.7%) patients of them developed BBC. 11 (2.5%) of them were synchronous and 14(3.2%) were metachronous BC. Median age of those patients who had BBC was 41 years. 76% of them were premenopausal. Median time for development of metachronous breast cancer was 22.3 months. Compared to unilateral BC, the BBC group had a younger age (p=.02) They also had a more advanced stage according to TNM classification 56% vs. 37.9% (p=0.038) and had more negative hormone receptor status 66.7% vs. 38% (p=0.007). Overall survival in unilateral BC, synchronous BBC and metachronous BBC was 166.8 months, 89 months, 72 months respectively. There was no significant difference in overall survival of patients with unilateral and synchronous BBC p=0.355. However, patients with unilateral BC had better overall survival in comparison to metachronous BBC p=0.003 and there was no significant difference between synchronous and metachronous BBC p=0.554.

**Conclusion:** Patients with BBC were younger and presented with a more advanced tumor size and were more likely to have Estrogen receptor( ER) and Progesterone receptor (PR) negative receptor status. Patients with metachronous BBC had shorter survival.