

ABSTRACT

BACKGROUND

Triple-negative breast cancer (TNBC) is defined by the lack of expression of estrogen receptor (ER), progesterone receptor (PR) and human epidermal growth factor 2 (Her2) expression. It is characterized by distinct clinical, morphological and molecular features and associated with aggressive clinical course and poor prognosis.

PURPOSE

This study is aimed at examining the clinicopathologic features of triple-negative breast cancer and at evaluating the expression of CK 5/6 and epidermal growth factor receptor (EGFR) among 50 cases of triple-negative breast cancers and to correlate the expression of basal markers with the clinicopathologic prognostic parameters.

MATERIALS AND METHODS

Fifty female patients with triple-negative breast cancer were studied for clinical and pathological features and by immunohistochemistry for CK 5/6 and EGFR expression. Statistical analysis was done using descriptive analysis and correlation tests.

RESULTS

The mean age of the patients was 50.4 years. Infiltrating ductal carcinoma IDC, NOS type was the predominant histological type (46/50 [92%]). The commonest histologic grade was grade II (27/50 [55%]). Tumour necrosis was seen in 70% of the cases (35/50). 72% of the cases were positive for at least one of the basal markers CK 5/6 and EGFR. We observed a statistically significant correlation between tumour size and lymph node metastasis.

CONCLUSION

The triple-negativity of tumours should not be used as a marker for basal-like tumours. The use of CK 5/6 and EGFR can define basal phenotype. A majority of the cases show EGFR expression. Hence TNBCs could be treated with EGFR targeted therapies.

KEYWORDS

Breast cancer, triple-negative, basal-like, CK 5/6, EGFR