ABSTRACT

BACKGROUND: Recently in breast cancer, the inflammatory cells present in the tumor stroma have gained more interest. Aim of this study is to find the prognostic impact of the stromal mast cells in breast cancer.

METHODS: 108 Cases of breast carcinoma blocks were stained with routine Haematoxylin and Eosin and Giemsa staining for identification of mast cells. These sections were evaluated for the presence of stromal mast cells and correlated with age of the patient, tumor grade, ER positivity, PR positivity, and HER 2 Neu positivity.

RESULTS: Median age of the study subjects was 52 years. Tumours were graded according to Nottingham Modification of the Bloom-Richardson system. 21 (19.4 %) women had grade I tumour, 65(60.19 %) had grade II tumor, and 22 (20.37 %) had grade III tumor. Presence of stromal mast cells correlated significantly to low tumor grade (grade I) with p<0.01 and ER positivity (p<0.05). There was no significant correlation between the presence of stromal mast cells and PR positivity, HER 2 Neu positivity. (p>0.05).

CONCLUSIONS: This study results indicated that the presence of stromal mast cells correlated well with grade I tumour. And there was a positive correlation between ER receptor positivity and the presence of stromal mast cells in breast cancer.

KEY WORDS: Breast cancer, Stromal mast cells, Prognosis.