

CORRELATION OF ESTROGEN RECEPTOR(ER), PROGESTERONE RECEPTOR (PR) AND HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR (HER-2/NEU) STATUS WITH HISTOLOGICAL TYPES, GRADES AND STAGES OF BREAST CARCINOMA

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ABSTRACT

Introduction

Breast cancer is the most common carcinoma in women. The interrelationship of ER, PR, and HER-2 has come to have an important role in the management of breast cancer.

Aims and Objectives

To study Correlation of ER, PR and HER-2-neu status with histological types, grades and stages of breast carcinoma.

Materials and Methods

47 cases of breast cancer were studied during the span of 2 ¹/₂ years in the Department of Pathology, KIMS, BBSR. ER, PR & HER-2-neu receptor expression was studied by Immuno histochemistry.

Results

Out of 47 cases 4%, 70% and 26% cases were in grade I, II and III respectively. 10.6 %, 44.7% and 44.7% cases were in stage I, II and III respectively. ER was positive in 50%, 59.4% and 23.9% cases in grade I, II and III respectively. PR was positive in 50%, 61.2% and 28.6% cases in grade I, II and III respectively. Her-2-neu was over expressed in 50%, 78.1% and 92.3% cases in grade I, II and III respectively. There was an inverse correlation between expressions of ER and PR with grade & stage of the disease. Her-2-neu correlated in a positive manner with increasing grades & stages of the disease.

Conclusions

The expression of ER and PR decreases with increasing grade and stage of breast cancer whereas Her-2-neu is overexpressed in higher stage of breast cancer and reduced expression is seen with increasing grade of tumor.

KEYWORDS: Breast Carcinoma, ER, HER-2/neu, PR