Original Paper

Expression of MDM2 gene in primary breast cancer and it's relationship with prognostic factors

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Abstract

Background & Objective: The breast cancer is the most common malignancy in women. MDM2 expression is determined in some carcinomas, sarcomas, leukemias,and breast cancer. The purpose of this study was to determine the expression of MDM2 gene in primary breast cancer and it's relationship with grade, stage and axillary lymph node involvement.

Materials & Methods: the study was the cross-sectional one, that was performed on 75 samples of patients with breast cancer admitted in Mostafa Khomeini hospital Tehran, Iran (2000-05). After preparing the samples, a tissue section from each samples was obtained. One of the tumoral sections and one of the lymph node sections were stained by H&E. We determined the type of the tumor, the number of lymph nodes, the stage and the grade of the tumor. We studied MDM2 with polyclonal antibody by IHC.

Results: The mean±SD of patients were 54±12.5 years old. 69.3% of patients had lymphoid involvement. 32% of samples were positive for MDM2. 58.7% of samples were in stage II and the most of patients (42.7%) were in grade III. In this study, there was not any relationship between MDM2 and tumor grade, but there was a relationship between stage of tumor and lymph node involvement with MDM2 gene ($P<0.05$).

Conclusion: This study showed that MDM2 gene is a prognostic factor in breast cancer.

Keywords: Breast cancer, MDM2, Grade, Stage, Axillary lymph node involvement

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