

Evaluation of E-cadherin expression in tissue samples of patients with gastric cancer in Fatemi hospital

Abstract

Background and Objective: E-cadherin is a calcium-dependent molecule that contributes to intercellular adhesion. Its proper functioning is important in the maintenance of epithelial structure and integrity. E-cadherin serves as a very important tumor suppressor. In this study, we aimed to determine the frequency of E-cadherin expression aberrancy and its relationship to the biological behavior of gastric adenocarcinoma.

Methods: A total of 70 patients with gastric cancer who underwent gastrectomy in Fatemi Hospital were investigated in a cross-sectional study. Their tissues were stained by immunohistochemistry methods to investigate the expression of E-cadherin. Patients' information including age, gender, lesion location, adenocarcinoma subtype, differentiation.

Results: 33 of the samples (47.14%) had adenocarcinomas and E-cadherin status was abnormal in 29 (87.87%). There was a significant relationship between the cancer subtypes and the results of (IHC) for the incidence of E-cadherin. ($P=0.016$)

Conclusion: The present study assessed the frequency and relationship between abnormal E-cadherin expression and certain biological variables of tumor behavior in Iranian patients with gastric adenocarcinoma. A significant correlation existed only between diffuse sub-typing and reduced E-cadherin expression.

Keywords: E-cadherin, Immunohistochemistry, Gastric adenocarcinoma, Biological behavior.