

Study of the effective factors on HER2 receptor expression and its prognosis in patients with gastric Adenocarcinoma in Ardabil province.

Abstract

Background and Objective: Gastric cancer is the fourth most common cancer, and is the second leading to death cancer in the world. It seems that the incidence of gastric cancer is significantly different depending on the geographical situation, race, and gender. Common treatments for gastric cancer include surgery, chemotherapy, radiation therapy, or a combination of these. In this research, we try to investigate the presence of HER2 receptor and its role in prognosis of gastric cancer in a population of patients with the help of some laboratory methods. According to the results of studies in several research groups on the excessive expression of the HER2 gene expression, and the increased protein-induced expression of the gene in several cancers, including gastric cancer, as well as the positive effects of the compounds inhibiting the activity of this receptor, Including Trastuzumab - In order to increase the survival rate of the infected, it is important to consider this factor as a selective basis for treatment.

Methods: Seventy patients who referred to Ardabil hospitals who have been diagnosed with gastric cancer by a pathological laboratory have been examined by using the IHC method in terms of HER2 receptor status. Also, information about the age, sex, weight and height of the stage and tumor grade patients were extracted and based on the type of cancer, degree and stage, age, other diseases and other factors, the prognosis of the patient was determined.

Results: The mean age of the participants in this study was 62.13 ± 11.49 years old. Also, in terms of sexual composition, 46 (65.7%) of the patients were men and the rest were women. 41 patients (58.57%) were rural and the rest were urban. The history of alcohol and tobacco usage were also studied in subjects with 51 (72.9%) and 5 (7.1%) positive cases respectively. Results showed that 48 (68.6%) patients had lower BMI than normal. HER2 was detected in IHC patients. Results indicated that 11 (15.7%) of subjects were HER2 positive and had a significant correlation between BMI Sex, history of alcohol and smoking, and HER2 expression, and there was also significant relationship between HER2 incidence and age and grade of tumor.

Conclusion : There was a significant relationship between HER2 incidence and age and grade of tumor in patients. These findings can indicate the diagnostic value of this marker in the prognosis of people with gastric acid congestion.

Keywords: HER2 receptor, prognosis, gastric constriction