

Abstract

Esophageal cancer is one of the most common malignancies in different regions of Iran. The recognition and evaluation of tumor-forming mechanisms and, in particular, the role of important tumor-forming genes (oncogenes) and tumor suppressor genes are of great importance in this disease. The *BRCA1* and *BRCA2* genes are one of the most important genes in controlling mutations and changes in cancer. These genes recover the failures which occur in DNA. The present study aims to investigate the changes in *BRCA1* expression in esophageal cancer patients. Thirty paraffin-embedded tissue samples of normal esophageal and cancer tissues were analyzed to measure the *BRCA1* expression. The real time-PCR reactions for *BRCA1* and β -*actin* were carried out by the Livac method. All data were analyzed by SPSS 13 (SPSS, Inc., Chicago, IL) software. The results showed that *BRCA1* expression in tumor samples decreased compared to the control ($p < 0.05$).

Keywords: Esophageal cancer, Real time- PCR, *BRCA1*



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