Abstract

Esophageal cancer is one of the most invasive type of gastrointestinal cancer, the most common cause of cancer-related deaths in the world. Most esophageal cancers occur in the age group 70-50 years. The frequency of this disease in men more than women. Astrocyte elevated gene -1(AEG-1, also known as MTDH, and Lyric) has been demonstrated to play a potential role in several significant aspects of tumor progression. Expression or genomic amplification This gene can serve as a biological marker to identify subgroups of patients who require more advanced treatments targeting AEG-1 and benefits are used. In the present study, the expression of AEG-1 in formalin fixed paraffin-embedded (FFPE) Esophageal cancer tissue samples in the Iran were studied. Fifteen FFPE Esophageal cancer tissue samples from medical centers were analyzed for AEG-1 gene expression level by real-time quantitative reverse transcriptase polymerase chain reaction. All PCR reactions were performed in triplicate for both target gene (AEG-1) and internal control (B-actin) with the 2 ΔΔCt method.Differences in target gene expression levels in patients and controls were evaluated with t-test. $P \le 0.05$ was considered to be significant. All analyses were performed using the SPSS 13 software (SPSS, Inc., Chicago, IL). The results showed AEG-1 gene over expression. There was a statistically significant difference in the prevalence of AEG-1 expression between patients and control (p<0.05). Our results demonstrated AEG-1 gene over expression in formalin fixed paraffinembedded(FFPE) esophageal cancer tissue samples compared with controls.

Key words: Esophageal cancer, *AEG-1*, Reverse transcriptase real-time polymerase chain reaction



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Evaluation of *Astrocyte elevated gene -1* expression in patient whit esophageal cancer by RT-qPCR

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