

عنوان مقاله:

Molecular Expression of Some Oncogenes and Predisposing Behaviors Contributing to the Aggressiveness of Prostate Cancer

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خلاصه مقاله:

Background: Prostate cancer is the second most common cancer in men in Iran. It can be treated in the early stages of the disease; therefore, early diagnosis can be lifesaving. The aim of this study was to investigate the molecular expression of some oncogenes and predisposing behaviors contributing to the aggressiveness of prostate cancer. Methods: In this case-control study, prostate cancer specimens were collected from both patients and healthy volunteers. Several factors such as age, family history, smoking, and stage of the disease, were investigated based on the criteria of this study. Real-time PCR was used to measure the expression of four oncogenes. Statistical analysis of our data was carried out using SPSS software version ۲۲. Results: The χ^2 test showed that there was a difference in the incidence of prostate cancer in different age groups ($\chi^2= ۹.۳۰$; $p= ۰.۰۲۶$). Although data analysis by the χ^2 test showed that family history had a significant effect on prostate cancer ($\chi^2= ۱۴.۴۳$; $p= ۰.۰۰۱$), smoking did not show a significant effect on the incidence of this disorder ($\chi^2= ۴.۶۷$; $p= ۰.۰۹۷$). The T_۲N_۱M_۰ stage is the most common form of prostate cancer in patients with family history of prostate cancer and the habit of smoking. Also, the expression of KRAS^{۱۲}, GLB^{۱۲}, SChLAP^۱ and PACSIN^۳ oncogenes reduced in prostate cancer samples compared to the control group. Conclusions: Overall, functional interpretation of gene expression in the prostate tissue can affect tumor progression. Yet, further practical studies are required to reveal the accurate underlying mechanisms

کلمات کلیدی:

.Age, Family History, Oncogenes, Prostate Cancer, Smoking

