

## عنوان مقاله:

The relationship between TGF- $\beta$  and P12CDK2-AP1 gene in esophageal squamous cell carcinoma

## محل انتشار:

همایش بین المللی پزشکی، بهداشت عمومی و علوم زیستی (سال: 1395)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

P12CDK2-AP1 suppresses the growth that regulates cyclin-dependent kinase2 activity and is expressed in the esophageal squamous cell carcinoma. By this function, it plays the role of tumor suppressor in ESCC and its absence has some consequences. Smad2 and Smad4 transcription factors are mediators of TGF- $\beta$ 1 signaling. TGF- $\beta$ 1 is a potent growth inducer for many types of cells including epithelial and hematopoietic cells. The growth-inhibitory effect of TGF-1 is exerted through expression of inhibitory proteins of cell cycle like P21WAF1, P12CDK2-AP1, P27KIP1, and TGF- $\beta$ 1 growth inhibitory mechanism for epithelial cells is partially dependent on P21WAF1 expression induction. P12, is automatically involved in TGF- $\beta$ 1-dependent growth inhibition through regulating the activity of CDK2 and pRb phosphorylation. The aim of this study was to evaluate the immunohistochemistry expression of P12CDK2-AP1 and its importance in esophageal squamous cells carcinoma. During this research and search in scientific-medical databases, Some of related articles were studied and evaluated. The rate of lymph node metastasis in patients with p12CDK2-AP1 negative-T1 ESCC was significantly higher than that in patients with p12CDK2-AP1 positive one. These findings point out the relationship between lack of P12CDK2-AP1 expression and lymphoid spread of cancer cells. Expression of P53 and VEGF C in patients with ESCC is related to lymph node metastasis and immunohistochemical analysis of these molecules can be useful. It has been demonstrated in our study that Smad2 and p-Smad2 are present in normal epithelial cell nucleus. Statistical analysis showed that there is a significant correlation between TBR-II and p-Smad2 expression in OSCC. Our immunohistochemical studies were indicative of decrease in expression of P12CDK2-AP1 and P21WAF1 in OSCC. This study showed that TBR-II and controlling protein of cell cycle have an important role in cell progress in OSCC. Overexpression of CDK2 may promote abnormal proliferation of cells during colorectal carcinogenesis. The results obtained from this study are confirmatory of remarkable resistance of human OSCC against TGF- $\beta$ 1 and researches show that P12 is differently expressed in normal and tumor oral mucosa which indicates the potential role of P12CDK2-AP1 as a tumor inhibitor in oral keratinocytes.

## کلمات کلیدی:

TGF- $\beta$ , P12CDK2-AP1, Esophageal squamous cell carcinoma

## لینک ثابت مقاله در پایگاه سیویلیکا:

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