البحث الأول

تعبير بروتين الكي آرأي إس KRAS في سرطان الخلايا الحرشفية الفموي كدليل محتمل علي تطور الورم

KRAS Protein Expression in Oral Squamous Cell Carcinoma: A Potential Marker for Progression and Prognosis

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Iranian Journal of Pathology. 2022; 17(4): 464-474

بحث مشترك غير مشتق من رسالة

Abstract

Background: Emerging evidence suggests that KRAS could play an important role in squamous cell carcinoma; however, its role in oral squamous cell carcinoma is largely unknown.

Aim: The aim of the current study was to investigate the expression of KRAS, Ki-67, Cyclin D1 and Bcl2 in oral squamous cell carcinoma and their association with clinicopathological features.

Material and methods: Forty paraffin blocks of retrospective histologically diagnosed cases of oral squamous cell carcinoma and 20 blocks of oral leukoplakia with epithelial dysplasia cases were recruited from two hospitals between 2018 and 2021, the paraffin-embedded tissue was submitted for expression of KRAS for oral epithelial dysplasia and oral squamous cell carcinoma, ki-67, Cyclin D1 and Bcl2 in oral squamous cell carcinoma and the results were correlated with each other and with different clinicopathological features and were statistically analyzed.

Results: KRAS was significantly associated with tumor histologic grade, tumor extent, presence of nodal and distant metastasis, pathological stage and with the presence of lymphovascular invasion (p=<0.001, 0.001, 0.001, 0.009, <0.001, <0.001 respectively). Ki-67 expression was significantly associated with tumor histological grade, tumor extent, nodal metastasis, pathological stage and the presence of lymphovascular invasion (p=<0.001, 0.001, 0.001, <0.001, <0.001 respectively). Bcl2 expression showed significant relations with histological grading, tumor extent, nodal metastasis, pathological stage and the presence of lymphovascular invasion (p<0.001, 0.003, 0.004 p<0.001, p<0.001 respectively). Cyclin D1 expression was significantly related to the tumor histologic grade, tumor extent, nodal status, distant metastasis, lymphovascular invasion and pathological stage (p=<0.001, <0.001, <0.001, 0.053, <0.001, <0.001 respectively). KRAS expression was positively correlated the histological grade, the tumor extent, the nodal status and the pathological stage (r=0.712, 0.649, 0.646 and 0.865 respectively) and also showed positive correlation with the expression of Bcl2, CyclinD1 and Ki-67 (r=0.81, 0.723 and 0.698 respectively). KRAS expression in oral epithelial dysplasia was significantly lower than KRAS expression in OSCC (P=0.003)

Conclusion: KRAS may be a potential prognostic marker for oral squamous cell carcinoma and may play a role in its progression.