

癌蛋白iASPP在喉鳞癌中的表达及临床意义

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Title: Expression of iASPP in laryngeal squamous cell carcinoma and its clinical significance

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摘要: 目的: 从蛋白及mRNA水平检测iASPP在喉鳞癌组织中的表达, 并研究其表达与喉鳞癌患者临床病理特征及预后的关系。方法: 采用免疫组化方法检测99例喉鳞癌和15例癌旁黏膜组织中癌蛋白iASPP的表达, 统计分析iASPP的表达与喉鳞癌患者临床病理特征和预后的关系; 采用荧光定量RT-PCR检测13例配对喉鳞癌及癌旁组织中iASPP mRNA的表达情况。结果: 癌蛋白iASPP在喉鳞癌细胞的胞浆及胞核中均有表达, 且iASPP蛋白及mRNA在喉鳞癌组织和癌旁黏膜组织中的表达有显著性差异($P < 0.01$)。胞浆iASPP蛋白和胞核iASPP蛋白的表达与喉鳞癌患者的T分期($P=0.001, P=0.021$)、临床分期($P=0.001, P=0.010$)、淋巴结转移($P=0.001, P=0.003$)和复发($P < 0.001, P=0.001$)具有显著的相关性。Kaplan-Meier生存分析结果表明, 胞浆iASPP蛋白高表达组和低表达组、胞核iASPP蛋白高表达组和低表达组的5年无病生存率和5年总生存率间具有显著性差异(P 均 < 0.01)。进一步用多因素Cox比例风险回归模型分析显示, 胞浆iASPP表达水平是喉鳞癌患者预后的独立影响因素($P < 0.01$)。结论: 癌蛋白iASPP在喉鳞癌组织中的表达显著上调, 且与喉鳞癌患者的T分期、临床分期、淋巴结转移和复发密切相关。iASPP可能在喉鳞癌的发生发展中起着重要作用, 并有望成为预测和评估喉鳞癌患者预后的重要分子标志物和潜在的治疗靶点。

Abstract: Objective: To investigate the expression of iASPP protein and mRNA in laryngeal squamous cell carcinoma (LSCC) tissue, and further to explore its clinical significance in LSCC. Methods: Immunohistochemistry was used to examine the expression of iASPP protein in 99 primary LSCC specimens and 15 cases of adjacent tissues and further to analyze its association with clinicopathological parameters and prognosis. Additionally, quantitative real-time PCR (RT-PCR) was performed to evaluate the expression status of iASPP in 13 paired LSCC tissues. Results: Immunohistochemical staining demonstrated iASPP expressed in both cytoplasm and nucleus. In LSCC tissues, both protein and mRNA expression of iASPP were elevated ($P < 0.01$). More importantly, cytoplasmic and nuclear iASPP overexpression were significantly correlated with T classification ($P=0.001$ and $P=0.021$), clinical stage ($P=0.001$ and $P=0.010$), lymph node metastasis ($P=0.001$ and $P=0.003$) and recurrence ($P < 0.001$ and $P=0.001$). Survival analysis indicated that high iASPP expression was closely associated with shorter disease-free survival (DFS) (both $P < 0.01$ for cytoplasmic and nuclear iASPP expression) and overall survival (OS) (both $P < 0.01$ for cytoplasmic and nuclear iASPP expression). Multivariate Cox regression analysis demonstrated that cytoplasmic iASPP expression was the only independent prognostic factor for LSCC patients. Conclusion: iASPP expression is increased in LSCC tissues, suggesting iASPP may promote the malignant progression of LSCC, and serving as a novel valuable prognostic marker and a potential therapeutic target in LSCC.

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