信号传导子及转录激活子3、Nanog基因在食管癌组织中的表达及其临床意义

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Title: Expression and clinical significance of STAT3 and Nanog genes in esophageal cancer tissues

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摘要: 目的：探讨信号传导子及转录激活子3（STAT3）、Nanog基因在食管癌组织中的表达及其临床意义。方法：收集本院收治的100例行手术切除的食管癌患者为研究对象。采用免疫组织化学法、Western blot法检测癌组织、癌旁组织中STAT3、Nanog的表达，记录患者临床病理参数并随访。统计分析STAT3、Nanog表达与患者临床病理参数的关系及对患者预后的影响。结果：免疫组化结果显示，STAT3、Nanog蛋白均主要表达于食管癌细胞的胞核及胞质，在癌旁组织中也有少量表达。STAT3在癌组织中的阳性率（56.0%，56/100）显著高于癌旁组织（30.0%，30/100）；Nanog在癌组织中的阳性率（74.0%，74/100）也明显高于癌旁组织（18.0%，18/100）。肿瘤分化程度、浸润深度、淋巴结转移、远处转移是影响患者STAT3阳性表达的独立性危险因素，且分化程度越低、TNM分期越晚，STAT3阳性率越高。肿瘤分化程度、淋巴结转移、远处转移是影响患者Nanog阳性表达的独立性危险因素，且分化程度越低、N分期、M分期越晚，Nanog阳性率越高。Western blot检测结果显示，STAT3、Nanog的分子量分别为88 kDa、66 kDa，且在癌组织内的表达强度显著高于癌旁组织。随访时间截止至2017年11月30日，全组患者随访3～46个月，中位随访时间12.5个月。STAT3（+）与STAT3（-）患者的中位生存时间分别为9.5个月、17.8个月，差异具有统计学意义（x2=16.33，P=0.000）；Nanog（+）与Nanog（-）患者的中位生存时间分别为7.8个月、16.6个月，差异具有统计学意义（x2=17.93，P=0.000）。结论：STAT3、Nanog在食管癌患者中阳性率较高，与肿瘤分化程度、TNM分期有一定的关系。与阴性患者相比，STAT3、Nanog阳性表达患者的中位生存时间明显较短，可作为判断患者预后的潜在因子。

Abstract: Objective:To investigate the expression and clinical significance of STAT3 and Nanog genes in esophageal carcinoma.Methods:100 patients with esophageal cancer were selected as the research subjects.The expression of STAT3 and Nanog in cancer tissues and adjacent tissues were detected,and clinical and pathological parameters were recorded and followed up.Results:STAT3 and Nanog proteins were mainly expressed in the nucleus and expressed in a small number of adjacent tissues.The positive rate of STAT3 (56.0%,56/100) in cancer tissues was significantly higher than that in paracancerous tissue (30.0%,30/100),and the positive rate of Nanog (74.0%,74/100) was significantly higher than that of paracancerous tissue (18.0%,18/100).The degree of differentiation,lymph node metastasis and distant metastasis were the independent risk factors affecting the positive expression of STAT3 and Nanog,and the lower the degree of differentiation,the more late the N staging,the M staging,the higher the positive rate of STAT3 and Nanog.The molecular weights of STAT3 and Nanog were 88 kDa and 66 kDa,respectively,and the expression intensity in cancer tissues was significantly higher than that in adjacent tissues.The median survival time of the STAT3 (+) group and the STAT3 (-) group was 9.5 months and 17.8 months respectively.The median survival time of the Nanog (+) group and the Nanog (-) group was 7.8 months and 16.6 months respectively,and the difference was statistically significant.Conclusion:The positive rate of STAT3 and Nanog in esophageal cancer patients is high,which is

related to tumor differentiation and TNM staging.Compared with negative patients,the median survival time of patients with positive expression of STAT3 and Nanog is significantly shorter than that of negative ones,which can be used as a potential prognostic factor for patients.

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