

lnc-KCNQ1OT1在胃癌组织和细胞中的表达及其临床意义

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Title: Expression of lnc-KCNQ1OT1 in gastric cancer tissues and cells and its clinical significance

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摘要: 目的: 探讨长链非编码RNA-KCNQ1OT1(lnc-KCNQ1OT1)在胃癌组织和细胞中的表达及临床意义。方法: 收集 2010 年1月1日至2011年12月31日期间在哈尔滨医科大学附属肿瘤医院行手术治疗的163 例胃癌患者的临床资料, 选取组织和细胞通过RT-PCR法检测lnc-KCNQ1OT1的表达情况, 根据其表达情况及临床病例数据分析lnc-KCNQ1OT1在胃癌组织和细胞中的临床意义。结果: 与癌旁组织比较, lnc-KCNQ1OT1在胃癌组织中的表达水平明显增高 ($P<0.05$)。在胃癌细胞株HGC-27、MGC-803中, lnc-KCNQ1OT1表达水平较胃永生生化上皮细胞株GES-1明显升高 ($P<0.05$)。单因素分析显示lnc-KCNQ1OT1的表达与患者年龄、性别、肿瘤大小无关 ($P>0.05$), 与淋巴结转移 ($P<0.001$) 明显相关。K-M生存分析显示胃癌患者中lnc-KCNQ1OT1高表达者预后不良 ($P<0.05$)。结论: 在胃癌组织和细胞中lnc-KCNQ1OT1的表达量高, 其高表达与胃癌患者淋巴结转移相关, 并可导致胃癌患者预后不良。lnc-KCNQ1OT1可作为潜在的胃癌预后预测的分子标志物。

Abstract: Objective: To investigate the expression and clinical significance of long-non-coding RNA-KCNQ1OT1 in gastric cancer. Methods: The clinical data of 163 patients with gastric cancer who underwent surgical treatment in the Affiliated Tumor Hospital of Harbin Medical University from January 1, 2010 to December 31, 2011 were collected. The expression of lnc-KCNQ1OT1 in tissues and cells detected by RT-PCR, and its clinical significance was analyzed. Results: Compared with the adjacent tissues, the expression of lnc-KCNQ1OT1 in gastric cancer tissues increased significantly ($P<0.05$). In gastric cancer cell lines HGC-27 and MGC-803, the expression of lnc-KCNQ1OT1 was significantly higher than that of normal gastric mucosa cell line GES-1 ($P<0.05$). Univariate analysis showed that the expression of lnc-KCNQ1OT1 was not correlated with age, gender and tumor size ($P>0.05$), but was significantly correlated with lymph node metastasis ($P<0.001$). K-M survival analysis showed that patients with high expression of lnc-KCNQ1OT1 had poor prognosis ($P<0.05$). Conclusion: The high expression of lnc-KCNQ1OT1 in gastric cancer is associated with lymph node metastasis and may lead to poor prognosis in gastric cancer patients. lnc-KCNQ1OT1 may be a potential molecular marker for predicting the prognosis of gastric cancer.

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