

microRNA-29a在结核性与恶性胸腔积液鉴别诊断和疗效预测中的价值

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Title: The value of microRNA-29a in identifying of tuberculous and malignant pleural effusion and predicting the therapeutic efficacy of tuberculous pleural effusion

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关键词: microRNA-29a; 结核性胸腔积液; 恶性胸腔积液; 鉴别诊断; 疗效预测

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摘要: 目的: 研究microRNA-29a在鉴别结核性胸腔积液和恶性胸腔积液中的作用, 探索microRNA-29a在预测结核性胸腔积液疗效中的价值。方法: 2015年3月至2016年3月就诊于我院的48例结核性胸腔积液患者和40例恶性胸腔积液患者, 用Trizol试剂提取胸水、血及痰中RNA, 利用RT-PCR技术检测microRNA-29a的相对表达量, 分析在结核性胸腔积液和恶性胸腔积液中表达的差异, 对结核性胸腔积液患者进行胸腔穿刺抽液及2HRZE / 10HRE方案抗结核治疗, 动态检测microRNA-29a在血中表达的变化, 分析其与患者疗效之间的关系。结果: microRNA-29a在结核性胸腔积液患者外周血清和胸腔积液中的表达量显著高于恶性胸腔积液患者, 差异有统计学意义($P < 0.05$); 但在痰中的表达无明显差异, 结核性胸腔积液患者给予穿刺抽液及抗结核治疗后, 外周血中microRNA-29a的表达下调。结论: 血及胸水中microRNA-29a的表达量有助于鉴别结核性胸腔积液和恶性胸腔积液, 血中microRNA-29a的表达变化有助于预测结核性胸腔积液疗效。

Abstract: Objective: To investigate the value of microRNA-29a in identifying of tuberculous pleural effusion and malignant pleural effusion. To explore the predictive effect of microRNA-29a on the treatment results of tuberculous pleural effusion. Methods: A total of 48 cases of patients with tuberculous pleural effusion and 40 cases of patients with malignant pleural effusion treated in our hospital from March 2015 to March 2016 were included in the study. The mRNA of the blood, sputum and pleural effusion was extracted using Trizol. The expression of microRNA-29a was assessed by RT-PCR. Patients with tuberculous pleural effusion were treated with routine treatment (thoracentesis and 2HRZE/10HRE chemotherapy). The clinical curative effect reaction of the two groups were observed. The expression of microRNA-29a of serum was dynamic monitoring before and after the treatment. The relation between the expression of microRNA-29a and the clinical therapeutic efficacy was analyzed. Results: The blood and pleural effusion microRNA-29a of patients with tuberculous pleural effusion was significantly higher than patients with malignant pleural effusion ($P < 0.05$). But the sputum microRNA-29a had no significantly different between the two groups. The blood microRNA-29a was downregulated after the effective treatment of tuberculous pleural effusion. Conclusion: The expression of microRNA-29a in blood and pleural effusion could be used to identify of tuberculous and malignant pleural effusion. Dynamic monitoring the changes of serum microRNA-29a could predict the clinical efficacy of tuberculous pleural effusion.

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