

miRNA-150在不同类型急性白血病不同疾病状态患者血浆中的表达及临床意义

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Title: Expression and clinical significance of plasma miRNA-150 in different types and stages of acute leukemia

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关键词: miRNA-150; 急性髓性白血病; 急性淋巴细胞白血病; 不同类型急性白血病不同疾病状态

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摘要: 目的: 探讨miRNA-150在不同类型急性白血病不同疾病状态患者血浆中的表达情况及意义。方法: 选取急性白血病患者64例和正常对照组20例, 抽取空腹静脉血, 离心后取血浆, 直接扩增目的miRNA, 并反转录为cDNA, qRT-PCR方法检测血浆miRNA-150的表达。结果: 急性白血病患者初诊组血浆miRNA-150的表达显著低于正常对照组和缓解组, 初诊组与复发组之间无统计学差异, 缓解组与正常对照组之间无统计学差异。同时miRNA-150在初诊组急性髓性白血病与急性淋巴细胞性白血病之间的表达无统计学差异。结论: 血浆miRNA-150在急性髓性白血病与急性淋巴细胞性白血病患者中表达降低, 并且两种类型间比较无显著性差异, 而在疾病不同阶段状态中的表达不同, 有一定的诊断、治疗及预后评估意义。

Abstract: Objective: To analyze plasmic levels of miRNA-150 in different types and stages of acute leukemia and its clinical significance. Methods: 64 patients with acute leukemia were enrolled and 20 healthy persons were chosen as control. The plasma samples extracted from fasting venous blood of the patients and healthy controls were taken directly to reversely transcribe into cDNA. Subsequently, the cDNA was amplified and determined by qRT-PCR. Results: The miRNA-150 expression in de novo acute leukemia was significantly lower than that in healthy controls and complete remission group. However, there was no statistical difference between newly diagnosed group and relapsed group, and between remission group and healthy controls. Meanwhile, we also found no expression difference between newly diagnosed AML and ALL. Conclusion: The plasmic miRNA-150 level was downregulated in both AML and ALL, and there is no significant difference between different types of acute leukemia. However, its expression differs in different stages of acute leukemia, which indicates that miRNA-150 may potentially serve as a biomarker to guide diagnosis, therapy and prognostic evaluation.

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