# LKB1在急性白血病中的表达及临床意义

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**Title:** The expression of LKB1 gene in acute leukemia and its clinical significance

**作者:** 张 鸣; 李梦琪; 蒋卉男; 李 佳; 刘卓刚
中国医科大学附属盛京医院第一血液内科，辽宁 沈阳 110000

**Author(s):** Zhang Ming; Li Mengqi; Jiang Huinan; Li Jia; Liu Zhuogang
Department of Hematology,Shengjing Hospital of China Medical University，Liaoning Shenyang 110000,China.

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**摘要:** 目的：研究LKB1(liver kinase B1)基因在不同类型急性白血病中的表达情况，探讨LKB1基因与急性白血病发生的相关性。方法：回顾性选取2016年6月至2017年6月初次诊断的急性白血病患者骨髓标本32例，同时选取非恶性血液系统疾病患者骨髓标本12例作为对照组。提取骨髓标本中单个核细胞，应用蛋白质免疫印迹法（Western blot）检测两组间患者LKB1基因表达情况，并分析其与患者年龄、性别及不同类型急性白血病的关系。结果：LKB1基因表达与年龄、性别无显著相关性。对照组12例中，有12例LKB1为阳性。根据疾病类型将白血病组分为3组：急性非淋巴细胞白血病组19例，其中LKB1阳性为9例，与对照组比较差异有统计学意义（P < 0.05）；急性B淋巴细胞白血病组8例，其中LKB1阳性为3例，与对照组比较差异有统计学意义（P < 0.05）；急性T淋巴细胞白血病组5例，其中LKB1阳性为5例，与对照组比较差异无统计学意义（P > 0.05）。追踪患者治疗效果，提示LKB1+组的1疗程CR率及2疗程CR率均较LKB1-组高，且复发难治的患者比例较LKB1-组低。结论：LKB1基因在急性非淋巴细胞白血病及急性B淋巴细胞白血病的发生发展中起到了一定的作用，而急性T淋巴细胞白血病的发病机制可能与前两者不同。LKB1阴性可能提示预后不良。

**Abstract:** Objective:To observe the protein expression of LKB1 in different kinds of acute leukemia,and study the relationship between LKB1 gene and the occurrence and development of acute leukemia.Methods:32 samples of leukemia patients were retrospectively selected into the present study.All these patients came from the cytology department of our hospital from June 2016 to June 2017.As the control group,at the same time,we selected the patients without malignancy of hematological.Western blot was used to test the expression of LKB1 in the two groups.Results:There was no significant correlation between LKB1 gene expression and age or gender.Of the 12 cases in the control group,12 cases of LKB1 were positive.The leukemia group was divided into three groups according to the disease type.There were 19 cases of acute nonlymphocytic leukemia(ANLL),of which LKB1 was positive in 9 cases.Compared with the control group,the difference was statistically significant（P < 0.05）.Among 8 cases of acute B-lymphocytic leukemia（B-ALL）,LKB1 was positive for 3 cases.Compared with the control group,the difference was statistically significant（P < 0.05）.Among 5 cases of acute T-lymphocytic leukemia（T-ALL）,LKB1 was positive for 5 cases.Compared with the control group,the difference was not statistically significant（P > 0.05）.The results showed that the CR1 rate and CR2 rate were both higher in LKB1+ group than LKB1- group,and the proportion of patients with recurrent refractory was lower than LKB1- group.Conclusion:There was a significant correlation between LKB1 gene and the occurrence of acute nonlymphocytic leukemia and acute B-lymphocytic leukemia.The pathogenesis of acute T lymphocytic leukemia may be different from the previous two.LKB1 negative may indicate worse prognosis.

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**备注/Memo:** -

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