

Expression association of miRNA-103 with acute myeloid leukemia

Yazarlar: Öğrenci Rozhgar A. KHAILANY - Araştırma Görevlisi Amer A. HASAN - Öğrenci Naser GILANI - Yrd.Doç.Dr Khandakar A. S. M. SAADAT - Öğrenci Belan KANABE - Prof. Ahmet ARSLAN

Kurum: 1Department of Medical Biology and Genetics, Faculty of Medicine, Gaziantep University, Gaziantep, Turkey; 2Department of Biology, College of Science, Salahaddin University, Erbil, Iraq; 3Department of Medical Laboratory, College of Technical Health, Sulaymani Polytechnique University, Sulaymani, Iraq; 4Farabi Medical Laboratory, Erbil, Iraq; 5Department of Biology, Gaziantep University, Gaziantep, Turkey; 6Department of Medical Biology, Faculty of Medicine, Namık Kemal University, Tekirdag, Turkey

GİRİŞ - AMAÇ

Acute myeloid leukemia (AML) is the most common acute leukemia in adults. its incidence increases with ageing. Although it's etiology unknown, it can develop following exposure to genotoxic agents or following an antecedent hematologic disorder. As a highly heterogeneous disease, AML needs fine risk stratification to get an optimal outcome for patients. The classification systems for AML already incorporate cytogenetic and molecular genetic aberrations in an attempt to better reflect disease biology. miRNA-103, is a small non-coding RNA, located on 5q34, which is up-regulated in different cancers. The aim of this work was to measure the expression level of miRNA-103 in AML.

METOD

The study included 18 cytogenetically normal AML cases and 15 controls, samples were grouped according to the clinical characteristics of patients which include gender and the mean age. Its level was evaluated using quantitative real time polymerase chain reaction (qRT-PCR) technique.

BULGULAR

It was revealed that expression level of miRNA-103 significantly up-regulated in AML patients compared to normal controls.

SONUC

To conclude, increased expression level of the miRNAs might be a risk factor to AML; further studies are mandatory to a better understanding and confirmation our preliminary findings.

ANAHTAR KELİMELER

Acute myeloid leukemia, miR-103, qRT-PCR, expression analysis.