

عنوان مقاله:

Altered expression of TGF-beta signaling pathway components contributes to acute myeloid leukemia

محل انتشار:

نوزدهمین همایش سالانه و دومین همایش بین المللی آسیب شناسی و طب آزمایشگاه (سال: 1396)

تعداد صفحات اصل مقاله: 3

نویسندگان:

naser shagerdi esmaeli - *Department of Hematology, Shahid Beheshti University, Tehran, Iran*

mohammadhossein mohammadi - *Department of Hematology, Shahid Beheshti University, Tehran, Iran*

Mohieddin Barzegar - *Department of Hematology, Shahid Beheshti University, Tehran, Iran*

mehdi allahbakhshian - *Department of Hematology, Shahid Beheshti University, Tehran, Iran*

خلاصه مقاله:

TGF-beta signaling pathway is a crucial element with tumor suppressive effects, which its malfunction may lead to tumor formation. AML is a heterogeneous disorder caused by defective differentiation and enhanced proliferation in white blood cells and their precursors in the blood and bone marrow. In this study we measured gene expression levels of TGF-beta , TGF-beta RII, smad3 and smad7 in peripheral blood and bone marrow samples of acute myeloid leukemia patients. Methods & materials: Peripheral blood & bone marrow samples of 93 newly diagnosed AML patients & 13 healthy subjects as control group were examined. The gene expression of TGF-beta , TGF-beta RII, smad3 and smad7 were examined by Real time PCR (polymerase chain reaction). We used SPSS statistical software release 16.0 for analysis between different groups. Results: Expression levels of TGF-beta RII & smad3 were significantly increased in AML group versus control group. Also a significant decrease was observed in smad7 expression in AML patients compared with control group. There was no significant change in TGF-beta expression between the two groups. Conclusion: According to upregulation of TGF-beta RII and smad3 and downregulation of smad7, it seems TGF-beta signaling pathway is over-activated in AML patients, which suggests in despite of conventional role of TGF-b in normal cell cycle, it could be controversial role in the leukomogenesis of these patients.

کلمات کلیدی:

Acute myeloid leukemia, TGF-beta , signaling pathway

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/797164>

