

## APOPTOSIS OF IMMUNE CELLS IN TYPE 1 DIABETES MELLITUS

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**T**ype 1 diabetic mellitus (T1DM) is known to be associated with progressive destruction of  $\beta$ -cells of the pancreas. Dysregulated immunity and programmed cell death are an important link in pathogenesis of diabetes. In this study, we examined expression levels of *interleukin-2*, *BCL1*, *ANXA-11* genes in patients with T1DM. The study was done with blood leukocytes of 30 T1DM patients and 70 healthy controls. Reverse-transcription PCR was done with Transcriptor first strand cDNA synthesis kit from Roche Life Science. The study of IL-2 and BCL1

gene expression level in peripheral blood leukocytes indicated that the median gene expression levels of *IL-2* and *BCL1* are increased in patients with T1DM patients compared with control group of healthy persons. The study of apoptosis by annexin test has revealed an increased level of *ANXA-11* expression in T1DM patients. The obtained data can serve as an additional source for understanding the pathogenesis of T1DM mechanisms.

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