INTERLEUKIN-10 EXPRESSION AND PROMOTER POLYMORPHISMS IN PEDIATRIC PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background and aims: Interleukin (IL)-10 involves in the pathogenesis of lupus (SLE). IL-10 expression is regulated at the transcription level by the promoter. The association between IL-10 expression and promoter polymorphisms in children with SLE was studied.

Methods: SLE disease activity index (SLEDAI) was determined in 71 children (7-18 years old). Serum IL-10 levels were measured by enzyme linked immunosorbent assay. Genotyping at position -1082A/G, -819T/C, and -592A/C was performed by polymerase chain reaction-based restriction analysis and haplotypes were reconstructed.

Results: Serum IL-10 levels (pg/mL) were significantly higher in 20 active SLE patients (24.11) than in 51 inactive SLE patients (8.30) or in healthy children (6.12) ($P < 0.005$). The percentages of haplotypes and alleles -1082G, -819C and -592C in SLE patients and controls were shown in Table 1.

	SLE	Control
GCC	10	6.6
ACC	24.3	20.9
ATA	62.1	71.3
ACA	2.1	0.6
ATC	1.4	0.6
-1082G	10	6.6
-819C	36.4	28.1
-592C	35.7	28.1

[Table 1]

Conclusions: IL-10 expression was upregulated in active SLE but was not associated with promoter polymorphisms at positions -1082,-819 and -592. The regulation of IL-10 expression in juvenile SLE required further elucidation.