

Assessment of anti-neutrophil cytoplasmic antibodies and selected serum pro-inflammatory cytokines in systemic lupus erythematosus: prevalence and clinical significance

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This study was designed to elucidate the prevalence and clinical implications of various cytokines such as TNF-alpha, IL-6 and IL-2 in presence or absence of anti-neutrophil cytoplasmic auto-antibodies (ANCA) in children with SLE. The present study was conducted on 29 children with SLE and 20 healthy children of matched age and sex as controls. Patients were selected from the Rheumatology Clinic, Cairo University Pediatric Hospital. Serum levels of ANCA, ANA, anti-ds-DNA were assayed by an indirect immuno-fluorescence technique (IIF). Serum levels of cytokines (TNF-alpha, IL-6 and IL-2) were assayed by ELISA technique. The anti-neutrophil cytoplasmic auto-antibodies were present in 55% of children with SLE. Furthermore, serum levels of TNF-alpha, IL-6 were increased and IL-2 level was decreased in SLE children positive for ANCA. In addition, SLE complications were increased in those children. These results demonstrate that ANCA may be detectable in SLE sera and their presence could be associated with particular clinical manifestations.