

## عنوان مقاله:

Evaluation of Serum Interleukin-17, Transforming Growth Factor-beta Levels in Brucellosis Patients Before and After Treatment

## محل انتشار:

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## خلاصه مقاله:

**Introduction:** Brucellosis is a zoonotic disease in humans and animals and is a worldwide public health problem. Changes in inflammatory cytokines levels might be deployed as markers for diagnosing infectious diseases from non-infectious medical conditions. This study aimed to evaluate the relationship between serum levels of interleukin-17 (IL-17) and transforming growth factor-beta (TGF- $\beta$ ) in pediatric brucellosis. **Methods:** The present case-control study included 40 brucellosis patients and 40 matched healthy controls. Serum levels of inflammatory cytokines were measured by ELISA, and the independent student t-test was used to compare the levels in the brucellosis and healthy group. Serum cytokine levels before and after treatment were compared by the paired samples t-test. **Results:** The serum TGF- $\beta$  level was significantly lower in the patients compared to the control group ( $90.21 \pm 24.44$  vs.  $125.63 \pm 23.28$  pg/mL,  $P < 0.0001$ ), and the serum interleukin-17 level was significantly higher in the case group ( $83.74 \pm 23.57$  vs.  $25.95 \pm 17.80$  pg/mL,  $P < 0.0001$ ). After treatment, serum IL-17 levels significantly decreased in the case group. **Conclusion:** In brucellosis patients, the serum IL-17 levels decreased significantly, whereas TGF- $\beta$  increased significantly in these patients. Hence, the serum levels of these inflammatory cytokines can be indicators for diagnosing pediatric brucellosis.

## کلمات کلیدی:

Brucellosis, Interleukin-17, Transforming growth factor-beta

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