

## عنوان مقاله:

Serum Levels of Interleukin- $\gamma$  in Type 1 Diabetes Children Infected with Helicobacter Pylori and Its Association with CagA Positivity

## محل انتشار:

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## خلاصه مقاله:

Interleukin- $\gamma$  (IL- $\gamma$ ) is a cytokine that has dual roles in the immune response and contributes to autoimmunity. Type 1 diabetes mellitus is among the foremost important autoimmunity-based diseases. Helicobacter pylori were recently observed that their prevalence in diabetic patients increased with capabilities to stimulate the production of various cytokines. The aim of this study was to measure the IL- $\gamma$  levels in sera of type 1 diabetic children, and therefore the differences regarding presence of Helicobacter pylori, and its association with CagA positivity. (204) samples were collected, including (91) males and (113) females from the age group (1-15) years old, from two hospitals in Baghdad. Moral approval and case history were obtained from the parents. Rapid chromatographic immunoassay was used to detect H. pylori infection. IL- $\gamma$  and H. pylori CagA tests were performed by using ELISA. The current study showed significant differences among the serum IL- $\gamma$  concentrations of T1DM patients group with H. pylori, without H. pylori, and apparently healthy group ( $p=0.050$ ). We found that serum IL- $\gamma$  concentrations were significantly different in Helicobacter pylori+ and Helicobacter pylori- groups ( $p=0.030$ ). In addition, there was significant differences between CagA positive and CagA negative groups ( $p\leq 0.009$ ). Finally, there was a low positive significant correlation between IL- $\gamma$  concentrations with CagA positivity (Spearman Correlation= $0.341$ ,  $p\leq 0.009$ ) and the correlation direction from the CagA positive toward CagA negative groups. The infection with H. pylori leads to decrease IL- $\gamma$  levels in T1DM children. Moreover, infection with CagA positive strain leads to decline IL- $\gamma$  production

## کلمات کلیدی:

IL- $\gamma$ , Type 1 Diabetes, Helicobacter pylori, cagA, ELISA

## لینک ثابت مقاله در پایگاه سیویلیکا:

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