

## عنوان مقاله:

Vitamin D Levels and its Relation to Peripheral Blood Inflammatory Markers in Patients with Urinary Tract Infection

## محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

**Introduction and Objectives:** The vitamin D status affects inflammatory responses. Vitamin D deficiency and its relationship with infections or autoimmune diseases have been found in many studies. We aimed to examine the association of 25(OH)D levels with inflammation markers in patients with urinary tract infection (UTI): neutrophil-to-lymphocyte ratio (NLR), monocyte-to-lymphocyte ratio (MLR), platelet-to-lymphocyte ratio (PLR), lymphocyte ratio-to-monocyte ratio (LMR), and the systemic immune-inflammation index (SII). **Materials and Methods:** In this study, women (65 in the patient group and 35 in the control group), who were between 18-60 years old, were studied. Serum 25(OH)D levels was measured by ELISA. The value of inflammation markers were all derived from complete blood counts. The correlation between these variables was also assessed by Pearson analysis. **Results:** Serum 25(OH)D levels significantly decreased in patients compared to the control group. Patients had significantly higher white blood cell, neutrophil counts and NLR than the control group; it was found a lower count of lymphocyte and no significant difference for the monocyte count in patients group. When both MLR and LMR were compared between the two groups, there was no statistically significant difference in their values. However, the two parameters had a significant correlation with 25(OH)D levels in patients. The mean platelet count did not significantly differed between the two groups; the PLR significantly increased in patients group. The PLR was also inversely correlated with 25(OH)D levels. The SII (NP/L) of patients was significantly different from those of the control group and had an inverse correlation with 25(OH)D levels in patients group. **Conclusion:** The vitamin D might independently modulate response to infection and provide easily available new predictors of infection as compared to the commonly used parameters such as .WBC, neutrophil count, and CRP requiring to be evaluated further

## کلمات کلیدی:

Vitamin D; Inflammation; Urinary Tract Infection; Inflammatory markers

## لینک ثابت مقاله در پایگاه سیویلیکا:

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