

Serum Vitamin D levels in Rheumatoid arthritis and Relationship with disease activity

Abstract

Aim: This study was designed to measure the serum level of vitamin D in patients with rheumatoid arthritis, and to correlate it with disease activity.

Method: 41 patients of Rheumatoid arthritis fulfilling the ACR/EULAR classification criteria for RA and 20 healthy controls were included in the study. Disease activity was evaluated by DAS-28 score. 25 (OH) vitamin D and CRP levels were measured using ELISA Kit.

Results: 9 patients had high disease activity (DAS-28 score >5.1), 25 patients had moderate disease activity (DAS 28 score 3.2-5.1, group B) and 7 patients had low disease activity (DAS-28 score \leq 3.2). Mean serum level of vitamin D of RA patients was significantly low compared to healthy controls ($P < 0.0001$).

There was statistically significant negative correlation between vitamin D and DAS-28 ($r = -0.388$, $P = 0.031$).

Conclusion: Serum level of vitamin D of RA patients was significantly low compared to healthy controls and vitamin D had statistically significant negative correlation with disease activity in RA..