

# Prevalence of Vitamin D Deficiency in Adult Patients with Systemic Lupus Erythematosus in Kingdom of Bahrain

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Vitamin D deficiency (VDD) has been implicated as an important factor in the development or aggravation of systemic lupus erythematosus (SLE). Patients with SLE are especially prone to the development of VDD due to the nature of their illness and avoidance of sun exposure. The prevalence of VD status in Bahraini patients with SLE has not been studied. Our aim is to study the prevalence of VDD in Bahraini cohort with SLE. Fifty-eight Bahraini patients with SLE were included retrospectively in this study. Most of the patients were females 50/58. The patients were followed at the rheumatology department at "Salmaniya medical complex". Controls were fifty-eight age-matched healthy Bahraini subjects. Serum levels of 25 (OH) vitamin D were estimated using chemiluminescence immunoassay. Chi Square and T-Test were used for analysis a p value of  $\leq 0.05$  was considered significant. There was statistically significant difference ( $P \leq 0.05$ ) in the mean serum levels of vitamin D between patients (30.67 nmol/l) and controls (39.95 nmom/L). In the SLE patients there were 49.1% deficient, 47.1% insufficient and 3.8% were Optimal. In the controls; 27% was deficient, 52% insufficient and 21% optimal. In conclusion, There was high prevalence of VDD in Bahraini patients with SLE. Both patients and controls had low vitamin D serum levels, however the patients had statistically significant lower levels. Our study also highlights the need for studying the effects of correcting hypovitaminosis on the disease activity in SLE patients.