

Relevance of 25 (OH) Vitamin D deficiency on Hashimoto's Thyroiditis

Hoda G. Bakr¹ and Takwa E. Meawed²

Departments of ¹Internal Medicine and ²Medical Microbiology & Immunology, Faculty of Medicine, Zagazig University, Zagazig, Egypt.

An association between low levels of vitamin D and Hashimoto's thyroiditis was suggested. This study aimed to determine the status of 25 (OH) vitamin D in Hashimoto's thyroiditis. A case-control study was designed, a Hashimoto's thyroiditis patient group (n=30) and two control groups including Graves' disease (30) and a healthy control group (20). TSH, Free T3, Free T4, antithyroid antibodies (antithyroglobulin and antithyroid peroxidase), calcium and serum 25 (OH) vitamin D were assessed. Vitamin D and calcium levels were significantly lower in Hashimoto thyroiditis and Graves' disease versus healthy controls. Vitamin D was deficient in 76.7% of Hashimoto thyroiditis and 70% of Graves' disease compared to 20.0% of healthy control, and negatively correlated with antithyroglobulin and antithyroid peroxidase in Hashimoto's thyroiditis group. Vitamin D is recommended for patients with vitamin D deficiency. Further investigations are needed to evaluate the preventive and therapeutic effects of vitamin D in autoimmune thyroid disease.