25-HYDROXYVITAMIN D STATUS IN ELDERLY PATIENTS WITH HASHIMATO THYROIDITIS

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OBJECTIVES

Low serum levels of 25-hydroxyvitamin D (25(OH)D3) has been reported to be prevalent in several autoimmune diseases. The aims of the study were 1. to evaluate the 25-hydroxyvitamin D levels in patients with hashimoto thyroiditis (HT), and 2. to investigate the relationships between 25-hydroxyvitamin D, TSH, free T4, free T3 and anti-thyroid peroxidase (anti-TPO) levels in elderly patients with HT.

METHODS

Study population included 80 (mean age 58.1±9.3 yrs) (60 female, 20 male) patients with HT. Data such as 25(OH)D3, TSH, fT4, fT3 and anti-TPO tests were retrospectively searched. Vitamin D insufficiency was defined as (25(OH)D3) concentrations lower than 30 ng/ml.

RESULTS

In elderly with HT, mean levels of 25-hydroxyvitamin D were found to be 39.7±6.5 ng/ml. However, mean levels of 25-hydroxyvitamin D were 52.0±12.3 ng/ml in patients with HT (<age 60 yrs) (p=0.05). In patients with HT (<age 60 yrs) means level of 25(OH)D3 concentrations were inversely correlated with the anti-thyroid peroxidase levels (r= -0.700, p= 0.04). And also, in elderly group, mean levels of 25(OH)D3 concentrations were positively correlated with the fT4 levels (r= -0.700, p= 0.04).

CONCLUSIONS

25-hydroxyvitamin D deficiency was significantly higher in elderly. And also, mean levels of 25(OH)D3 were positively correlated with fT4 in elderly with HT, but inversely correlated with anti-TPO levels in patients with HT (<age 60 yrs).