

Plummer's disease with spontaneous progression to hypothyroidism

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A case of Plummer's disease that spontaneously progressed to hypothyroidism is presented. A 49-year-old female visited our hospital because of a 3 kg decrease in body weight during the previous month and a painless nodule in the right anterior area of her neck. A diagnosis of Plummer's disease was made based on the results of thyroid function tests, thyroid scintigrams, and an ultrasonogram, but the patient's disease followed an usual clinical course. About two months later, she gradually developed manifestations of permanent hypothyroidism, and anti-thyroid autoantibodies became positive. In spite of continuous administration of levothyroxine sodium, uptake of $^{99m}\text{TcO}_4^-$ to the nodule was unchanged or rather increased according to the consecutive thyroid scintigraphies. These results suggested that this case represented an autonomously functioning nodule with underlying silent thyroiditis and Hashimoto's disease.

Key words: Plummer's disease, hypothyroidism, Hashimoto's disease, silent thyroiditis, autonomously hyperfunctioning nodule