

Radioimmunoassay of Serum Thyrotropin in Thyroid Diseases

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Serum thyrotropin (TSH) levels in normal subjects and patients with thyroid diseases were estimated by radioimmunoassay with double antibody technique using "Daiichi HTSH Radioimmunoassay Kit". The standards for the assay were incubated in serum from patients with untreated hyperthyroidism in order to equalize the serum concentration of the unknown and standard tubes.

The TSH levels in 24 normal adults ranged from undetectable ($<2 \mu\text{U/ml}$) to $6 \mu\text{U/ml}$.

The values were undetectable in all cases of 40 patients with untreated hyperthyroidism and 2 cases of secondary hypothyroidism. Values in 23 patients with primary hypothyroidism ranged from $42 \mu\text{U/ml}$ to over $500 \mu\text{U/ml}$. 40 cases of chronic thyroiditis had values ranging from undetectable to $32 \mu\text{U/ml}$. Serum concentrations in 71 euthyroid patients with simple goiter, subacute thyroiditis and nodular goiter were in the same range as in normal subjects.

Clinical Evaluation of Serum T₃ Concentration in the Thyroid Disease and a Rapid Increase of T₃ after TRH Injection

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Recently, the concentration of serum T₃ became to be measured by a method of radioimmunoassay and it was applied to the diagnosis of thyroid disorders as well as the serum T₄ concentration and resin sponge T₃ uptake *etc.* One had expected that there might be in presence of "so-called" T₃ hyperthyroidism as several investigators had reported. If it was true, the precise measurement of serum T₃ concentration

gave us an advance to make easy to find the T₃ hyperthyroidism. In order to know how many patients of T₃ hyperthyroidism could be found by the measurement of serum T₃, in the present study, the T₃ concentration in the serum of 27 euthyroid subjects, 25 hyperthyroidism and 6 primary hypothyroidism was measured by the method of radioimmunoassay and the value was compared with T₄ and resin sponge T₃