

## I. Thyroid and Accessory Thyroid

### THE COMPATATIVE STUDY OF THE THYROID SCINTIGRAM OF $^{201}\text{Tl}$ -CHLORIDE AND $^{131}\text{I}$ IN HASHIMOTO'S DISEASE

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We have made an attempt to perform thyroid scintigraphy with  $^{131}\text{I}$  and  $^{201}\text{Tl}$ -Chloride in 56 patients with Hashimoto's disease.  $^{201}\text{Tl}$ -Chloride scintigraphy was carried out at 20 minutes after the interavenous injection of 2 mci of  $^{201}\text{Tl}$ -Chloride. On the other hand  $^{131}\text{I}$  scintigraphy was recorded at 24 hours after oral administration of 100  $\mu\text{ci}$  of  $^{131}\text{I}$ .

Both scintiphotos were obtained from a scintillation camera connected to a pin hole collimator.  
Result:

- 1) In 29 of 56 patients with Hashimoto's disease, thyroid scintigram of  $^{131}\text{I}$  showed various imagings, defect, deformity and obscurity.  
In 12 patients  $^{131}\text{I}$  scintigram were not showed thyroid imaging.
- 2) On the other hand,  $^{201}\text{Tl}$ -Chloride scintigrams were obtained clear thyroide imagings 41 of 54 patients.
- 3) For the thyroide scintigram in Hashimoto's disease (especially in hypothyroidism),  $^{201}\text{Tl}$ -Chloride were better than the images from  $^{131}\text{I}$ .

There result suggested that  $^{201}\text{Tl}$ -Chloride is useful in thyroid scintigraphies with Hashimoto's disease.

### $^{201}\text{Tl}$ SCINTIGRAPHY OF THE CHRONIC THYROIDITIS.

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Seven patients with biopsy-provened chronic thyroiditis were investigated by  $^{201}\text{Tl}$  thyroid Scintigraphy.

$^{201}\text{Tl}$  thyroid scintigraphy were taken 10 minutes later after intravenous injection of  $^{201}\text{Tl}$  chrolide 2mCi.

In all the 7 cases, the decreased uptake area in the  $^{131}\text{I}$  or  $^{123}\text{I}$  thyroid scintigraphy, were presented with the same activity compared as the other normal areas by  $^{201}\text{Tl}$  scintigraphy.

Thyroglobulin antibody was negative in 2 out of 7 patients, microsome antibody negative in 1, and, both antibodies negative in 1.

The  $^{201}\text{Tl}$  thyroid scintigraphy is thought to be a valuable method for the diagnosis of the chronic thyroiditis.