

## Thyrotoxic graves' disease with normal thyroidal technetium-99m pertechnetate uptake

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We saw 24 thyrotoxic Graves' patients with normal thyroidal uptake of technetium-99m pertechnetate ( $^{99m}\text{Tc}$ ) out of 201 untreated thyrotoxic Graves' patients seen over 4 years. The clinical and laboratory findings for these patients were studied and analysed.

Thyroid uptake and scintigraphic examinations by means of  $^{99m}\text{Tc}$ , TBII and TSab activity measurement clearly distinguished these patients from other thyrotoxic disorders (destruction-induced thyrotoxicosis and autonomously functioning thyroid lesions). Different from other disorders, these patients had not lower but normal thyroid uptake and also showed diffuse and discrete trapping into the enlarged glands.

These patients had significantly smaller goiters, a lower serum thyroid hormone level, and lower TBII and TSab activity, when compared with other high  $^{99m}\text{Tc}$  uptake groups with Graves' disease, and their condition could be easily controlled with small amounts of antithyroid drugs.

Our study indicates that thyrotoxic Graves' disease with normal  $^{99m}\text{Tc}$  uptake exists and  $^{99m}\text{Tc}$  uptake study and TBII activity measurement is very useful for the diagnosis. The normal  $^{99m}\text{Tc}$  uptake thyrotoxic Graves' patient might be early stage patients with general Graves' disease and their early discrimination from general Graves' patients is very advantageous for treatment and prognosis.

**Key words:** thyrotoxic graves' disease, normal thyroidal Technetium-99m pertechnetate uptake, TSab, TBII