## **Summary**

## Radioiodine Treatment in Patients with Graves' Disease at Outpatient Clinic: Special Reference to Safety and Short-Term Outcome

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[Purpose] This retrospective study was aimed at revealing the safety and short-term outcome of radioiodine treatment in patients with Graves' disease at outpatient clinic. [Methods] From July 1999 to April 2002, 511 patients with Graves' disease were treated with radioiodine at the outpatient clinic of Tajiri Thyroid Clinic, Kumamoto. Of them, 73 patients dropped out or were referred to another medical institution. In the remaining 438 patients [100 men and 338 women;  $44.6 \pm 15.4$  (mean  $\pm$  SD) (14–82) years old], the safety of radioiodine treatment at the outpatient clinic and the treatment outcome until April 2003 was examined. The dosage was determined based on radioactive iodine uptake (3 hours) and thyroid volume measured by ultrasound. The initial dosage was  $6.7 \pm 3.3 (1.2-13.5)$ mCi. Five months later, it was evaluated whether or not radioiodine should be administered a second time. All patients were treated at the outpatient clinic. **[Results]** There was no particular problem associated with treatment. Patients with a large goiter could be successfully treated with divided doses. After  $12-45(30.1\pm9.3)$  months of radioiodine, thyroid function status was as follows; hyperthyroidism: 7 patients (1.6%), subclinical hyperthyroidism: 78 patients (17.8%), euthyroidism: 108 patients (24.7%), subclinical hypothyroidism: 116 patients (26.5%), hypothyroidism: 129 patients (29.4%). **[Conclusion]** It was concluded that radioiodine treatment in patients with Graves' disease at outpatient clinic was safe and showed a satisfactory short-term outcome.

**Key words:** Graves' disease, Hyperthyroidism, Radioiodine, Outpatient clinic.