

**Abstract:**

Title: The results of treatment of hyperthyroidism with I131 in endocrinology clinic of Ardebil (2000-2005).

**Introduction:** Radio Iodin is one the treatment methods of hyperthyroidism, it's completely safe, and effective. It's also cheap. It's not the first step of treatment always, but it's more effective rather than other treatments.

**Aim:** In this study, the results of treatment with radioIodine were studied and the prevalence of different causes of thyrotoxicosis include of Grave's disease, toxic Adenoma and multi nodular toxic goiter, were studied in our area and the rate of remission and relaps were studied.

**Methods and materials:** In this retrospective study, the patients that had thyrotoxicosis and referred to endocrinology clinic and Nuclear medicine center had chosen (March 2000- February 2005) and 252 patients entered to study.

The diagnosis of disease was based on clinical and laboratory findings especially isotope scan.

The size of goiter was determined by endocrinologist and the concentration of thyroid hormones was measured with radio immunoassay (RIA) methods and the amount of I 131 was documented (in mci) and the period between treatment and control of disease was shown and also the rate of relaps and its association with T3 and T3 serum level were studied and the amount of radioIodin that was given for the second time were studied.

**Results:** From 252 patient, 86 (24.1%) was male and 166 (65.9%) was female. The mean age was  $41.9 \pm 14.5$ .

182(72%) patients had Grave's disease, 43 (17.1%) patients had toxic Adenoma and 27 (10.7%) patient had multinodular toxic Goitre. At the end of the treatment 116 (46%) was euthyroid, 124 (49.2%) was hypothyroid and 12 (4.7%) was hyperthyroid.

Relaps was seen in 21 (8.3%) people that 11 (4.4%) from them was taken radiiodin for second time and 10 (47.6%) people who had relaps had Grave's disease, 5(23.8%) people had toxic adenom and 6 (28.5%) had multi nodular Goitre.

Also, the likeood of relaps of hyperthyroidism is shown to be directly related to T3 serum concentration.

**Discussion and conclusion:** study results shows that the Grave's disease is the most common cause of hyperthyrodism in our area like other countries. And the radio iodine therapy is effective, safe and cheap.

**Keywords:** Thyrotoxicosis- RadioIodin, Results, Relaps, Ardebil