PubMed

Search

Display Settings: Abstract

Expert Opin Investig Drugs. 2008 Dec;17(12):1781-6.

Thiamazole as an adjuvant to radioiodine for volume reduction of multinodular goiter.

Albino CC, Graf H, Sampaio AP, Vigário A, Paz-Filho GJ.

Núcleo Diagnóstico Maringá, Rua Silva Jardim 160, CEP 87013-010, Maringá, PR, Brazil.
ccalbino@uol.com.br

Abstract

BACKGROUND: Radioiodine ((¹³¹I)) is an alternative to surgery for the treatment of multinodular goiter (MNG). Frequently, high activities of (¹³¹I) are required for effective thyroid volume reduction (TV), due to the low and heterogeneous radioactive iodine uptake (RAIU). Thiamazole (MTZ) may be used as an adjuvant to (¹³¹I), by increasing RAIU.

OBJECTIVE: To evaluate the effects of MTZ in the treatment of MNG with (¹³¹I), in terms of TV reduction.

DESIGN/METHODS: Nine female patients (aged 73.8 +/- 7.4 years) with MNG (eight with subclinical hyperthyroidism) were treated with MTZ. Doses started at 10 - 20 mg, and were adjusted monthly based on thyroid hormone levels. RAIU and TV were measured at baseline, and repeated when TSH levels > 6 mU/l were achieved. At that time, 1.11 GBq of (¹³¹I) were administered.

RESULTS: Patients were treated with MTZ for 2.8 +/- 0.8 months. When a tracer activity of (¹³¹I) was administered, the mean serum TSH was elevated to 11.7 +/- 5.4 mU/l. MTZ led to significant increases in 24-h RAIU, from 21.3 +/- 8.1% to 78.3 +/- 15.3% (p < 0.001). One year after (¹³¹I), median TV decreased from 97 ml (range 47 - 555 ml) to 56 ml (range 13 - 350 ml), a mean reduction of 46.2 +/- 17.8% (p = 0.012). Eight patients (89%) had subclinical hyperthyroidism, which was reversed in all patients after 1 year. Five patients (56%) developed overt hypothyroidism, and no clinical adverse events were observed.

CONCLUSION: Pretreatment with MTZ targeting against an increased serum TSH did not impair the effects of (¹³¹I). In our patients with MNG, MTZ increased RAIU and possibly enhanced (¹³¹I) efficacy, leading to significant TV reduction and reversion of hyperthyroidism in all patients.

PMID: 19012495 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances

LinkOut - more resources