
Can routine steroid cover during radiiodine therapy of patients with Graves' disease (GD) prevent the onset of de novo Graves' orbitopathy (GO)?

INTRODUCTION

Radiiodine therapy is considered as a risk factor for the development of GO de novo or worsening of pre-existing orbitopathy. This risk is estimated in the available literature as up to 15-20%. Steroid cover is considered to eliminate this risk.

OBJECTIVE

The aim of our study was to establish the relationship between the occurrence of GO and treatment with radiiodine. And the analysis of the time of appearance (onset) of GO after radiiodine treatment.

MATERIAL AND METHODS

Group: 152 patients - all which were treated with moderate or severe GO between the years: 2010 - 2015

Analyzed: the coexistence of radiiodine therapy with the onset of GO (yes/no); and the time (in months) of the onset of GO after I-131 therapy.

The radiiodine therapy in all the patients (with or without prior GO) was carried out under steroid cover with a fixed dose of 30 mg prednisone for a month, with gradual weekly reduction's of 5 mg every week for 10 weeks after treatment with I-131.

RESULTS

The coexistence of radiiodine therapy with the onset of GO

- 34% (52 patients): Previous I-131 therapy (+)
- 66% (100 patients): Previous I-131 therapy (-)
- 49 patients: De novo GO
- 2 patients: Worsening of pre-existing GO

The time (in months) of the onset of GO after I-131 therapy

- 2 - 6 months: 10% (10 patients)
- 7 - 12 months: 25.5% (25.5 patients)
- 13 - 24 months: 25% (25 patients)
- 27 - 48 months: 11.5% (11.5 patients)
- 72 - 336 months: 19% (19 patients)

CONCLUSIONS

1. The routine use of steroid cover does not prevent the development of GO.

2. This risk should be considered when planning treatment with radiiodine for patients with GD and the patient should be informed about this risk.

3. OG can occur even several years after treatment with I-131.