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THYROID TREATMENT AND GRAVES' ORBITOPATHY

Treatment of hyperthyroidism in patients with Graves' orbitopathy (GO) is a dilemma and an unsolved problem. Antithyroid drugs (ATDs) *per se* are neutral and do neither exacerbate nor ameliorate GO. However, correction of hyperthyroidism and stable maintenance of euthyroidism has been associated with an improvement of preexisting GO. Radioiodine (RAI) treatment may be associated with *de novo* occurrence or progression of GO, especially in smokers. This untoward effect, affecting about 15% of RAI-treated patients, is usually prevented by a short course of low-dose oral prednisone (steroid prophylaxis). Thyroidectomy does not seem to modify the natural course of GO, uut is less frequently used than ATDs or RAI. If patients have **mild and active GO**, treatment of hyperthyroidism is largely independent of GO and based on established criteria (age, goiter size, first episode *vs*. recurrence of hyperthyroidism, patient preference, etc.). If RAI treatment is chosen, steroid prophylaxis is indicated under most circumstances. If **mild GO** is **inactive**, steroid prophylaxis can be avoided, provided that risk factors for RAI-associated progression of GO (particularly smoking) are absent. Patients with **moderate-to-severe and active GO** should be promptly treated, generally by i.v. glucocorticoids, because treatment outcome is better in short-lasting GO. In these patients, selection of optimal thyroid treatment is controversial. According to one line of thinking, patients should be treated long-term with ATDs, and definitive treatment (if required) be postponed after inactivation and cure of GO. Other experts support the view that, after restoration of euthyroidism by ATDs, thyroid should be ablated (RAI, thyroidectomy, or total thyroid ablation) while GO is concomitantly treated with immunosuppression. For the time being, no conclusive evidence is available on whether either approach (conservative *vs*. ablative) is superior. In patients with **moderate-to-severe and inactive GO**, choice of treatment of hyperthyroidism is independent of GO. **Sight-threatening GO** (dysthyroid optic neuropathy and/or corneal breakdown) is an emergency which requires immediate medical and/or surgical treatment. These patients should be conservatively treated for associated hyperthyroidism with ATDs, and definitive treatment (if needed) be postponed until dysthyroid optic neuropathy and/or corneal breakdown have been cured and GO is inactive.

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Reference:

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