

## Graves' ophthalmopathy

Dear Sir – We read the contribution of Noth et al. [1] with interest. In their study endocrine ophthalmopathy (EO) in patients with Graves' disease improved in 47% of patients without specific treatment (antithyroid drugs?) and in 63% with corticosteroids, orbital radiotherapy or surgical orbital decompression or with combinations of these modalities. The authors mention only these three modalities for the treatment of severe EO. We believe that the option of rapid tissue ablation by thyroidectomy should also be discussed. Noth and co-workers mentioned that prospective controlled trials are lacking. However in a Swedish prospective randomised trial in 179 patients with Graves' disease thyroidectomy was clearly superior to antithyroid drugs and radioiodine in terms of risk of relapse and effective improvement of EO [2].

We believe that surgery is generally underused in the treatment of patients with

Graves' disease and EO. [3] Thyroidectomy avoids the possible long-term risks of radioactive iodine and it provides tissue for histological examination [4]. It cures the underlying pathology while leaving residual thyroid tissue in order to maintain postoperative euthyroidism. EO improves after subtotal or total thyroidectomy in more than 70% of cases [5–7]. Although thyroidectomy in patients with Graves' disease is technically more demanding than in those with non-toxic goitre or with thyroid neoplasms because of the higher vascularity of the thyroid tissue, complication rates are very low in experienced hands [4, 5].

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## Author's reply

Dear Sir – Whether total or subtotal thyroidectomy improves the course of endocrine ophthalmopathy (EO) is an issue that remains to be solved. The available literature is summarised in an outstanding recently published review [1]. In the study by Topping et al. [2] thyroidectomy per se was not superior to antithyroid drugs with respect to the risk of relapse or worsening of EO. Topping and colleagues found that treatment with radioiodine is associated with increased risk of developing or worsening of EO, but there was no significant difference between medically and surgically treated patients. In another study by Tallstedt et al., treatment with antithyroid drugs tended to be superior to thyroidectomy [3], and Marcocci et al. found no difference in the outcome of EO between near-total thyroidectomy and medically treated patients respectively [4]. Reports of the development and worsening of EO after radioiodine treatment without glucocorticoid coverage [3, 5] and their prevention by glucocorticoids [6] are well known.

The fact that EO improves after subtotal or total thyroidectomy in about 70% of patients [7, 8] is not very surprising, since Perros et al. [9] found a spontaneous improvement of EO in about 64%. In addition, we have important reservations concerning the study from Linos et al. [7], as assessment of

EO was based only on the patients' subjective estimation and was not quantified in a more objective way by an ophthalmologist or a board-approved endocrinologist.

To summarise the available data thyroidectomy per se seems to carry a very low risk, if any, of causing EO progression. The data do not show any substantial difference between the effects of subtotal or total thyroidectomy on the outcome of EO. However, thyroidectomy is currently not the first choice in the treatment of Graves' ophthalmopathy. Future studies addressing this problem will help to clarify the role of thyroidectomy and thyroid ablation (combination of thyroidectomy and radioiodine therapy) in EO management.

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