Thyroid eye disease

More treatment options

EDITOR,—Donald Munro clearly reviews the pathogenesis and treatment of dysthyroid eye disease.¹ There are, however, alternative treatments which merit consideration.

Lid retraction may be asymptomatic but a considerable proportion of patients benefit from upper or lower eyelid lengthening procedures.² These can be very effective in improving the cosmetic appearance and protecting the cornea. These procedures are preferable to lateral tarsorrhaphy because the cosmetic results are better and anterior displacement of the globe is not restricted (thus lessening the risk of optic nerve compression).

High dose steroid treatment is effective in relieving compressive optic neuropathy, but the disease often progresses when the dose is gradually reduced to a more modest level. So, in many cases, long term maintenance treatment is required. Local treatment is therefore preferable and avoids the well known side effects of steroids.

Surgical decompression of the orbit into the maxillary and ethmoid sinuses is a successful procedure for many patients, including those for whom the "eye signs are disfiguring or disabling." Complications include double vision due to strabismus and infraorbital hypoesthesia.

Radiotherapy is dismissed by Munro: "Britain has few enthusiasts for local irradiation of the orbit." Carefully planned low dose external beam radiotherapy is very effective in patients with progressive disease,^{3,4} particularly disease of less than two years' duration. The long term risk of neoplasia is low. It is negligible in elderly patients, for whom this treatment is particularly indicated because of the problems associated with taking steroids long term.

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Patients need joint care

EDITOR,—All of us involved in the care of patients with thyroid eye disease anticipate a fuller understanding of its autoimmune basis but meanwhile have to manage patients in the light of current practice. Donald Munro's summary of current clinical practice failed to emphasise several important management issues and advances in surgical technique.¹

We recommend that all patients with moderate to severe thyroid eye disease be under the joint care of an interested ophthalmologist and an endocrinologist. Typical signs of the condition can present months if not years before any endocrine abnormality is detected. The difficulty in making the

Advice to authors

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diagnosis should not be dismissed, and the importance of endocrine review is emphasised.

Patients frequently show signs of thyroid eye disease when the thyroid is overactive. Some may develop "malignant" thyroid eye disease during this phase, and these patients present a particular challenge in clinical management. All types of treatment, be they medical or surgical or depend on the use of radioactive iodine, may cause either improvement or deterioration of patient's orbitopathy. The outcome is unpredictable, and patients require careful counselling.

Munro ignores the many patients euthyroid for 10-30 years, who inexplicably develop severe orbitopathy, and also that, although eye disease is more common in women, its occurrence in older men is often severe.

"Malignant" thyroid eye disease implies orbital apex nerve compression by enlarged extraocular muscles: severe corneal exposure is rare. Patients with active infiltrative orbitopathy without severe proptosis may be most at risk of optic nerve compression, since a tight orbital septum prevents spontaneous decompression in those with significant proptosis. Lateral tarsorrhaphy is often ineffective and has been superseded by many other surgical procedures. If surgical orbital decompression is indicated, the technique used is important, and the usefulness of lateral and superior wall decompression is questionable.

Finally, the cosmetic and ocular motility problems endured by these patients, often for many years, must be appreciated by caring clinicians. The morale of such sadly affected patients may be raised by recourse to self help groups.

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Disfiguring and capricious condition

EDITOR,—We wish to add a few points to Donald Munro's editorial on thyroid eye disease regarding the contemporary investigation and management of this condition. It is surprising to read that "most patients regard the end result of thyroid eye disease as reasonably satisfactory." While severe sight threatening disease is undoubtedly rare, the disfiguring proptosis and periorbital changes that often accompany Graves' ophthalmopathy are an important, if not the most important, consideration to a substantial proportion of patients when they are told that they have thyroid disease. The importance of thyroid eye disease to the patient should not be underestimated.

The statement that "clinical experience suggests that controlling hyperthyroidism usually impedes the development of thyroid eye disease" may have

some substance in practice. But the continuing controversy to which Munro alludes over which type or types of treatment may cause deterioration in eye disease, and the not infrequent patients whose eye disease is most active long before or long after their period of greatest thyroid dysfunction, should remind clinicians of the dangers of any generalisations about this capricious condition.

Investigative techniques such as ultrasound scanning and magnetic resonance imaging, which can quantify retro-orbital changes, are potentially important in assessing the occurrence and distribution of structural pathology. Ultrasound scanning, for example, has shown that measurable ophthalmopathy is far more prevalent in patients with Graves' disease than is clinically apparent.²

Lateral tarsorrhaphy is no longer considered to be the most appropriate surgical procedure for protecting the cornea unless severe ulcerative keratitis is present. In persistent, less severe disease of the ocular surface lowering the upper lid by recessing the levator palpebrae superioris and raising the lower lid by inserting a scleral spacer graft will produce a better functional and cosmetic result.³

Finally, use of Fresnel prisms—easily applied as adhesive plastic sheets to spectacle lenses—is an ideal temporary measure for patients with disabling diplopia who are awaiting stabilisation of extraocular muscle disease before having corrective squint surgery.

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Bad teeth and myocardial infarction

Smokers neglect their teeth

EDITOR,—Frank DeStefano and colleagues point out that the value of their study on dental disease and risk of coronary heart disease and mortality is limited because of shortage of data about smoking habits.¹ According to an extensive literature review by Christen *et al*, there is a strong correlation between smoking habits and oral hygiene or periodontal disease.² To quote from their conclusions: "Smokers have more severe periodontal disease (periodontitis) than do non-smokers" and "Adult male smokers have more dental plaque than adult male non-smokers because they tend to have lower dental hygiene standards—that is, they are less efficient brushers, spend less time in oral hygiene care, and tend to be more neglectful in practising general dental health habits." DeStefano and colleagues' paper should be read with this in mind.

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- 1 DeStefano F, Anda RF, Kahn HS, Williamson DF, Russell CM.