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Editorial

From the outside in, or the inside out. Resecting uveal melanomas

Once upon a time life was simple; eyes harbouring melanomas were enucleated, a prosthesis provided, and the patient was discharged with the knowledge that some would survive, while others would be less fortunate. How life has changed. In the past few decades there has been a proliferation of techniques aimed at destroying the primary uveal tumour while retaining the eye and useful vision. In some instances the new modality is merely an improvement on an existing technique—for example, the replacement of cobalt plaques with other, less destructive isotopes such as iodine or ruthenium. However, occasionally, techniques are reported which represent a significant departure from conventional thinking.

In this issue (p 213) Damato and his co-workers present the preliminary results of the treatment of choroidal melanomas by internal or endoresection. This technique, which has also been developed independently by Peyman and Charles,¹ where the tumour is removed from beneath the retina via a retinotomy after a standard three port vitrectomy, represents a significant departure from the conventional. The proponents of this technique suggest that it may be of value in treating tumours, particularly small ones, close to the optic disc. Such tumours are notoriously difficult to treat by conventional therapy. Radioactive isotope plaques may be employed, but it is frequently difficult technically to place them with accuracy and, as a consequence, there is a significant local recurrence rate.² External beam irradiation, using proton beam or helium ion, may also be used and, while it may be more effective in controlling the primary tumour, with a lower incidence of local recurrence,³ in common with plaque brachytherapy, there is a high incidence of radiation induced optic neuropathy.²⁻⁴ Argon laser photocoagulation has been used in the management of small choroidal tumours at the posterior pole and close to the optic disc.⁵ This technique has fallen from favour because of the high incidence of local recurrence which may not occur for some time after the initial treatment.⁶

Clearly, there is a need for an alternative form of therapy, which will adequately control the primary tumour without producing an significant complication rate. To the surgeon, the prospect of cutting the primary tumour out of the eye is an appealing one, but is endoresection really a viable alternative? There are some ocular oncologists who believe this technique is highly controversial and have expressed concern about the possible intraocular dissemination of

tumour cells at the time of surgery, the lack of prior evaluation in an animal model, and short period of follow up. Certainly, by the authors' own admission, a median length of follow up of 20 months is not adequate to evaluate the incidence of local recurrence or the impact on long term survival. Although the authors found no evidence of definite local tumour reoccurrence it was suspected in eight cases, and in seven of these adjuvant laser therapy was used. Six eyes were subsequently enucleated and, histologically, microscopic tumour deposits were noted in three of these. This suggests that, as with other forms of conservative therapy, there will be local recurrence in some cases.

One of the aims of this technique is to offer an alternative to radiotherapy which has a relatively high local complication rate. Unfortunately, endoresection is not without its complications with cataract and/or retinal detachment occurring in a significant number of cases. The authors, quite correctly, point to the fact that such complications may be amenable to surgery, in contrast with radiation induced optic neuropathy which is not amenable to any form of therapy. Moreover, comparisons of complication rates and, indeed, visual function with other forms of therapy are difficult because of selection induced bias.

While the results of this study are interesting, they must be considered as no more than a preliminary report which awaits substantiation. Although this technique may well be within the compass of many vitreoretinal surgeons, its use should be confined to established ocular oncology centres where it can be properly evaluated and its role adequately defined.

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