

## EDITORIAL

### WHO SHOULD TREAT DIABETIC RETINOPATHY?

Two revolutionary changes have occurred in the management of diabetic retinopathy over the last two decades. First, the result of several multi-centre treatment trials showed beyond doubt that Xenon and later laser photocoagulation were effective in the treatment of diabetic eye disease. The proliferative neovascular activity can be controlled in 60-70% of cases, preventing almost inevitable blindness. The results of photocoagulation for diabetic maculopathy are perhaps less convincing, but are nevertheless encouraging. The second major change was the introduction of pars plana vitrectomy in the management of the most severe forms of diabetic retinopathy, tractional retinal detachment in particular. In spite of these advances, diabetic retinopathy remains a major cause of blindness in Britain.

Aclimandos and Galloway in this issue review the causes of blindness in the City of Nottingham over a period of five years and compare them to the equivalent figures for England in 1970. With the exception of diabetics over the age of 75 years, they found that there was no difference in the rate of registration as Partially Sighted or Blind over the past 15 years. The exact number of visually disabled diabetics is difficult to assess, and the calculated figure of 2% of all diabetics being blind is undoubtedly an under-estimate. McLeod, Thompson and Rosenthal in their population-based study, found an overall figure of 8.3% for visual disability among their Insulin-dependent patients.

McLeod, Thompson and Rosenthal discuss the results of their population-based survey of Insulin-requiring diabetics in a population demographically representative of that of England and Wales. They found only 7.6% of patients with undetected treatable disease, almost all of whom had maculopathy. In an earlier study, Grey and Morris (*Br. J. Ophthalmol* 1986: 70, 804-7) in a Diabetic Clinic-based survey, arrived at similar results, identifying 10% of patients with potentially treatable diabetic retinopathy.

Sigurdsson, Beines and Roxburgh analyse their results of vitrectomy for advanced diabetic eye disease. They confirm the excellent results which can be achieved by removing longstanding vitreous haemorrhage in the presence of an attached retina, but point out the often disappointing outcome of vitreous surgery when the retina is extensively damaged. It can be argued that progress is being made in the management of even such severe cases, although the improving results are being achieved at considerable cost, both in terms of increasingly sophisticated equipment, and of operating time and man-power.

It would appear that, in spite of an increase in interest in the screening of diabetics for treatable eye disease, both in the community and in specialist diabetic clinics, there is a proportion of patients whose treatable disease goes undetected. Nevertheless, a large number of patients is being referred, and with the continuing education of our physician colleagues, general practitioners and optometrists their number is likely to increase in the future.

Is the ophthalmic community coping with this work-load? Given that there are 412 Consultant Ophthalmologists serving 56 million citizens, and given that it has been estimated (Grey and Morris) that laser treatment of maculopathy requires a 30 minute session, and that of proliferative retinopathy up to two hours, each Consultant in Britain should devote 100 sessions per year to laser photocoagulation of diabetic patients alone. It has also been estimated that, in order to treat patients with advanced disease requiring vitrectomy, 20 Sub-Specialists would need to devote two years exclusively to deal with the cases already operable by this technique. In 1970 Blach and Bloom (*Health Trends* 1978: 10, 88-90) pointed out that the major limiting factor in the proper management of diabetic retinopathy is no longer the availability of equipment, but the lack of trained staff. Sadly, ten years later the same problem remains.

Training in laser photocoagulation is time-consuming and the teaching of vitreous surgery requires even more time and motivation. However, with the promised Consultant expansion of only 2% per year, and with a system which has so far not encouraged subspecialisation, – who will treat the diabetics?