COST EFFECTIVENESS OF PHOTODYNAMIC THERAPY

Considerable controversy surrounds the question of whether or not photodynamic therapy (PDT) for age related macular degeneration is cost effective. Smith and coworkers used data from a variety of sources in the United Kingdom to try to evaluate the cost effectiveness of this therapy. They conclude that early treatment with PDT leads to increased efficiency. When considering only the cost of therapy treating patients with lower levels of visual acuity is not considered to be cost effective. However, they do suggest a broad perspective, which incorporates NHS treatment costs and social care costs over a long period of time, may show that PDT yields reasonable value for money.

See p 1107

CATARACT SURGERY IN THE EYE WITH UVEITIS

Cataracts occur in up to 50% of patients with uveitis. It is generally considered that ocular information should be minimised for at least 2 months before surgery. Meacock and coworkers in a randomised prospective study have demonstrated that a 2 week course of oral prednisone tapered postoperatively produced a better recovery of the blood-aqueous barrier in uveitis patients undergoing cataract surgery than a single dose of intravenous methylprednisolone.

See p 1122

HOW SHOULD WE TREAT DIABETIC MACULAR OEDEMA?

Diabetic retinopathy is the leading cause of blindness in patients aged 20–74 in the United States. Macular oedema affects almost 30% of diabetic patients with a disease duration of 20 years or more. Ciardella and coworkers performed a retrospective interventional non-comparative case series analysis. In their study of intravitreal triamcinolone for the treatment of diabetic macular oedema they suggested that this treatment is effective in improving vision, reducing macular thickness, and increasing absorption of hard exudate. In another paper Laursen and coworkers studied 23 eyes of 16 patients who were randomised to either subthreshold micropulse diode laser or conventional argon laser photocoagulation for the treatment of clinically significant macular oedema. In this study subthreshold micropulse diode laser and conventional argon laser treatment showed an equally good effect on visual acuity. Subthreshold micropulse diode laser showed a stabilising or even an improving effect on macular oedema. The authors suggest the combination of primary diode laser and supplemental argon laser might be particularly favourable in reducing diabetic macular oedema.

See pp 1224 and 1173

CAN WE PREVENT POST-TRAUMATIC PROLIFERATIVE VITREORETINOPATHY?

Penetrating ocular trauma is a cause of significant visual loss and disability. Visual loss may occur as a result of the initial damage or secondary complications. Excessive scar tissue development in an eye may lead to the development of tractional retinal detachments. Cardillo and coworkers studied the effect of release pellets prepared by covalently linking naproxen to 5-fluorouracil to be used as intravitreal therapy to prevent experimental proliferative vitreoretinopathy. In these studies this co-drug device effectively inhibited the progression of proliferative vitreoretinopathy in a rabbit trauma model considered to closely resemble proliferative vitreoretinopathy in humans. The authors suggest that further investigation of this device for the treatment of human post-traumatic proliferative vitreoretinopathy is warranted.

See p 1201

DEVELOPING BETTER THERAPIES FOR OPTIC NEURITIS

Recent studies suggest that the treatment of patients with optic neuritis and abnormal MRI with interferon beta is efficacious. However, even though interferon beta is effective in limiting the number and relapses and reducing disease progression more effective drugs are needed for the treatment of optic neuritis and multiple sclerosis. Sørensen and coworkers studied 30 patients with optic neuritis and 10 non-inflammatory neurological disease controls. CXCR3 expression was studied in blood and cerebrospinal fluid (CSF), and CXCL9, CXCL10, CXCL11 were measured in plasma and CSF. The study suggests that the CSF concentration of CXCR3 ligand CXCL10 is selectively increased in patients with optic neuritis and CXCR3 positive cells are recruited to the subarachnoid space. This study provides data supporting the rationale for clinical trials of substances that interfere with the activity of CXCL10 and CXCR3 for the treatment of chronic T cell inflammation in patients with optic neuritis.

See p 1146