Bevacizumab for Coats’ disease

Ramasubramanian and Shields evaluated the effect of supplemental intravitreal bevacizumab in management of eight patients with Coats’ disease manifesting total or partial exudative retinal detachment. The treatment of eight patients with Coats’ disease was initiated between 2 and 36 months of age, lasted for 3–10 months, with a follow-up period ranging from 6 to 30 months. Regression was observed in all cases (flattening with 24 h, regression on color Doppler ultrasound imaging with an increase in resistance index of blood vessels, or regression seen on MRI). No regrowth was observed after the trial ended. Authors propose beta-blockers as first-line therapy for severe periocular haemangiomas. (see page 356)

A novel procedure for canalicular obstruction

Chen et al evaluated a new procedure for treating canalicular obstruction by re-canaliculisation and bicanalicular intubation (RC-BCI) in 30 adults (32 eyes) with canalicular obstruction. Silicone tubes were left in place for 2–3 months and were removed when patients had relief from epiphora. At a mean follow-up time after tube removal of 21.5 months, 26 eyes (81%) had complete relief from epiphora, two eyes (6%) had partial relief and four eyes (15%) had no improvement. The overall satisfaction rate was 93%. (see page 366)

Systemic propranolol for severe infantile haemangioma of the orbit and eyelid

Thoumazet et al assessed the efficacy of systemic propranolol for severe capillary haemangiomas involving eyelid and orbit (eight children). Three patients with life-threatening haemangiomas spreading to the orbit were first treated with systemic corticosteroids and beta-adrenergic blocking agents. The remaining five patients with functional visual impairment received propranolol only (2 mg/kg body weight per day). The treatment of eight patients with Coats’ disease manifesting total or partial exudative retinal detachment. Retinal telangiectasia were treated with laser photocoagulation and/or cryotherapy plus additional intravitreal bevacizumab (1.25 mg/0.05 ml). After a mean follow-up of 8.5 months, resolution of retinopathy (100%), subretinal fluid (100%) and retinal exudation (75%) was noted. However, vitreous fibrosis developed in four eyes that evolved into traction retinal detachment (three eyes). Such fibrotic reaction is not observed in Coats’ disease treated without bevacizumab. The authors advise caution in the use of bevacizumab for Coats’ disease. (see page 356)

Central hole phakic IOL for myopia

Shimizu et al assessed early clinical outcomes of inserting phakic posterior chamber IOL with a central hole (for improved aqueous circulation) for the correction of moderate to high myopia in 20 eyes (20 patients) with spherical equivalents of \(-7.56 \pm 2.15\) D. At 6 months, 100% eyes were within \(\pm 1.0\) D of the targeted correction. Rise in intraocular pressure (including pupillary block) or a secondary cataract were not observed in any case. The authors conclude that implantation of IOL with central hole is safe and effective, and provides predictable and stable refractive results in the correction of moderate to high myopia. (see page 409)

Cost-effectiveness of ILM peeling

Ternet et al determined whether internal limiting membrane (ILM) peeling is cost-effective compared with no peeling for patients with an idiopathic stage 2 or 3 full-thickness macular hole. A cost-effectiveness analysis was performed alongside a randomised controlled trial (141 participants). Health service resource use, costs and quality of life were calculated for each participant. At 6 months, the total costs were on average higher (£424) in the No Peel arm, primarily owing to the higher reoperation rate in this group. Although a statistically significant difference in either costs or QALYs between macular hole surgery with or without ILM peeling was not observed, the balance of probabilities is that ILM peeling is likely to be a cost-effective option for the treatment of macular holes. (see page 438)

Treatment load of exudative AMD

Geirsdottir et al studied the population-based incidence of exudative AMD and the use of intravitreal ranibizumab in Iceland. In a prospective study of 459 consecutive patients aged 60 years and older with exudative AMD starting intravitreal ranibizumab (initial three consecutive injections with regular follow-up visits and re-treatment as needed) the annual incidence was 0.29%. The incidence increased with advancing age. Approximately 2400 ranibizumab injections per 100 000 persons aged 60 years and older were given each year for exudative AMD in Iceland. Such data provide cost estimates allowing improved planning of resources. (see page 444)

Lymphadenectomy for corneal allograft rejection in rats

Brice et al investigated the site of alloantigen presentation following orthotopic corneal transplantation in adult inbred Fischer 344 rats that received penetrating corneal allografts from inbred Wistar Furth donors (17), without lymphadenectomy. A second group (8) underwent bilateral removal of superficial cervical and facial lymph nodes 7 days before transplantation. A third group (9) underwent bilateral removal of superficial cervical, facial, internal jugular and posterior cervical nodes. All allografts underwent rejection. The median time to rejection was not significantly different between groups suggesting that sensitisation and clonal expansion of corneal alloantigen-reactive cells was widespread. (see page 448)