BJO at a glance

Creig Hoyt, Editor

CATARACT SURGERY STRATEGIES IN RURAL AFRICA

Extracapsular cataract extraction with a posterior chamber intraocular lens is the preferred method of cataract surgery in developed countries. However, intracapsular cataract extraction with an anterior chamber lens may be appropriate in some underdeveloped parts of the world. Waddell and coworkers report results from a randomised trial in rural Africa in the treatment of cataracts in patients over 50 years of age. All patients required bilateral cataract surgery. One eye was randomly allocated to the anterior chamber intraocular lens or posterior chamber intraocular lens, the other eye being allocated to the second strategy. The results suggest that where most strategies of cataract surgery are available, extracapsular cataract extraction with posterior chamber intraocular lens should be the first choice because of fewer complications. However, when extracapsular cataract extraction with posterior intraocular lens is not immediately feasible intracapsular cataract extraction with an anterior chamber intraocular lens is an acceptable interim technique.

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ACRYLIC FOLDABLE INTRAOCULAR LENS DESIGNS

At the present time hydrophobic acrylic intraocular lenses have become the most popular foldable intraocular lens worldwide. Nejima and coworkers report the results of a prospective randomised comparison of single and three piece acrylic foldable intraocular lenses. In this study 20 patients underwent bilateral cataract surgery with a single piece acrylic lens in one eye and a three piece acrylic lens in the other eye. There were no significant differences between the two groups in the amount of intraocular lens decentration, intraocular lens tilt, area of anterior capsule openings, degree of posterior capsule opacification, best corrected visual acuity, and contrast sensitivity through an 18 month follow up. Single and three piece foldable intraocular lenses appear to be equally stable in the eye after surgery.

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TRACHOMA—EYE TO EYE—BY FLY

Although trachoma has been known to cause blindness for over 3500 years, until now it was not certain how it was transmitted from eye to eye. Miller and coworkers describe the results of a study of flies in the Gurage Zone of Ethiopia. Flies were collected from the faces of 103 children aged 1–10 years. In this study, 15 of the 103 flies showed evidence of *Chlamydia trachomatis* by polymerase chain reaction. These results meet the final criterion needed to incriminate flies as a vector for trachoma transfer. However, the authors caution that interventional studies will be needed to show the importance of fly control in trachoma management strategies.

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ABNORMAL CHOROIDAL VASCULAR REACTIONS IN CHRONIC SMOKERS

Chronic smoking is known to be a risk factor for a variety of ocular vascular diseases like hypertensive, retinopathy, age related macular degeneration, and anterior ischaemic optic neuropathy. The exact pathomechanisms linking smoking to ocular vascular disease are not fully understood. Wimpissinger and coworkers report the results of choroidal blood flow studies following carbogen breathing in smokers and non-smokers. Twenty five healthy male volunteers participated in this observer masked, two cohort study. This study indicated that abnormal choroidal vascular reactivity occurred in chronic smokers. These early haemodynamic changes may be related to increased risk to smokers of developing ocular vascular disease. However, specific mechanisms underlying abnormal choroidal vascular reactivity in chronic smokers have yet to be defined.

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SERVICES FOR THE CHILD WITH VISUAL IMPAIRMENT

Broadening and improving the nature and scope of services for children with disability in their families is a national priority. Rahi and coworkers report the results of a study of children newly diagnosed with ophthalmic disorders at Great Ormond Street Hospital, London, who participated in a study to elicit their health service experiences and needs through a postal questionnaire survey. In this study, families from socioeconomically deprived and ethnic minority groups are likely to be less visible than others in health services research on childhood visual impairment. Geographical mobility and families of young children with visual disability pose a potentially important obstacle in gauging them in research on their experiences of health services. The findings suggest the importance of addressing potential bias and the design interpretation of future studies to ensure equity in the recommendations for policy and practice and its implementation of services.

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HYPOGLYCAEMIA IN ISCHAEMIC RETINAL INJURY

The effect of hypoglycaemia on cerebral ischaemia has been well studied but information concerning the effect of hypoglycaemia on retinal ischaemia is lacking. In a study by Casson and coworkers retinal cultures were incubated in varying concentrations of glucose while placed under standardised anoxic conditions. In this study hypoglycaemia caused a significant reduction in vitreous glucose levels and exacerbated ischaemic retinal injury. The clinical relevance of this study principally pertains to the relation between diabetes and ischaemic retinopathy. The findings are consistent with the notion that glucose is an important energy substrate for the ischaemic retina and indicate that low blood glucose levels, although beneficial in terms of retarding the progression of retinopathy, can compromise the ability of the retina to metabolically compensate during periods of low oxygen availability.

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