BJO at a glance

Creig Hoyt, Editor

SAFETY ISSUES IN THE CHRONIC USE OF AZITHROMYCIN FOR TRACHOMA

There is no doubt that the mass, community-wide distribution of azithromycin has been shown to be effective in reducing the prevalence of ocular chlamydial infection in various populations. It is likely that mass treatments will continue and that there will be requirement for repeated treatments. Potential disadvantages of this therapy include allergic or other reactions and the selection and propagation of macrolide resistant bacteria in treated populations. Gaynor and colleagues report a study of children in western Nepal who were treated with azithromycin. In their study the authors did not find that azithromycin therapy induced antibiotic resistance to *Streptococcus pneumoniae*.

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IMPROVING VISUAL FIELD TEST RELIABILITY WITH A PATIENT TRAINING VIDEO

Visual field testing is an essential part of the ophthalmic examination. The validity of the information obtained from this test depends on the ability of the patient to reliably perform it. Some studies have suggested that a significant number of patients are unable to perform this test reliably, at least initially. Sherafat and coworkers performed a prospective randomised controlled trial of an educational video on visual field testing reliability. In this study of 244 patients they found that the use of this brief audiovisual patient information guide on taking visual field testing produced an improvement in patient reliability for individuals tested for the first time.

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WHAT CONCENTRATION OF POVIDONE-IODINE SOLUTION SHOULD BE USED FOR PREOPERATIVE ANTISEPSIS?

Povidone-iodine has been shown to be effective against a wide range of bacteria, fungi, protozoa, and viruses. The ideal concentration of povidone-iodine necessary for maximum efficacy has not been clarified. Most routine use is with a 5% povidone-iodine solution. However, recently, more dilute concentrations have been studied in vitro in dogs' eyes and were shown to have equal bactericidal efficacy. A small study in human eyes showed a similar effectiveness of decreased concentrations of povidone-iodine. Ferguson and coworkers have performed a prospective randomised double blind study of patients undergoing cataract surgery. In this study patients received preoperative treatment with either a 5% or 1% povidone-iodine solution. The 5% povidone-iodine solution was clearly more effective than the 1% solution in decreasing human conjunctival bacterial flora.

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REGIONAL BLOOD FLOW TO RETINAL NERVE FIBRE TISSUE

In glaucoma visual field defects are more commonly found initially in the superior visual field. Moreover, glaucomatous pathological findings such as notching of the optic rim, disc haemorrhage, and peripapillary choroidal atrophy are more commonly found in the inferior portion of the eye. Harris and coworkers have studied retinal blood flow in 19 normal subjects. Retinal nerve fibre layer thickness in the inferior retina was significantly higher than in the superior retina; however, there were no differences in retinal blood flow between the superior and inferior retinal sectors. But the perfusion/nerve fibre ratio was lower in the inferior retina.

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TRYPAN BLUE USE DURING VITRECTOMY

Peeling of the internal limiting membrane and epiretinal membranes can be a challenging manoeuvre in vitreoretinal surgery. Recently, indocyanine green has been used to stain the internal limiting membrane especially during macular hole surgery. There has been some concern that indocyanine green may not be as safe as originally thought. Therefore, the use of trypan blue has been considered in this circumstance. Li and coworkers report the use of trypan blue in staining the internal limiting membrane and epiretinal membrane during vitrectomy. In 14 consecutive patients trypan blue was shown to facilitate the identification and delineation of the internal limiting membrane and epiretinal membrane during surgical management of macular holes and pucker. Visual acuity outcomes in this series were comparable to those in which no trypan blue was utilised. The authors suggest that trypan blue use in the posterior segment appears to be safe.

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