SARS CORONAVIRUS IS FOUND IN TEARS

Severe acute respiratory syndrome (SARS) is a recently described disease that has a significant worldwide impact both in mortality and economic morbidity. Loon and coworkers have demonstrated in a series of 36 consecutive patients that in some cases tear samples can be used to confirm SARS. There are important implications for this research. Firstly, the ability to detect and isolate the virus from tears may turn out to be an important diagnostic tool. Secondly, many healthcare workers are in close proximity to the eyes of patients and this may be a source of spread among them. Further research on SARS and its involvement in and around the eyes is warranted. See p 861

VARIATIONS IN THE USE OF ANTIMETABOLITES IN GLAUCOMA SURGERY

The wound healing response is the single most important determinant of the final intraocular pressure after glaucoma surgery. The increase in the antimetabolites to modulate this response represents one of the major developments in glaucoma surgery over the past 15 years. Siriwardena and coworkers assessed the pattern of use of antimetabolites in trabeculectomy surgery by all consultant ophthalmologists in the United Kingdom. They demonstrated that 18% of consultants never use antimetabolites in first time surgery and only 9% use antimetabolites in more than half of their first time surgery cases. The use of antimetabolites in the United Kingdom appears to be considerably lower than that in America or Japan. Promotion of the use of antimetabolites in glaucoma surgery needs further emphasis. See p 873

DOES OPTICAL COHERENCE TOMOGRAPHY WORK IN NEURO-OPHTHALMIC DISORDERS?

Optical coherence tomography is a non-invasive technique for the acquisition of cross sectional images of retinal structures from which estimates of the thickness of retinal layers can be made. The usefulness of this measurement in the analysis of glaucoma patients has been well demonstrated. Monteiro and colleagues have investigated whether this technique is useful in the analysis of patients with band atrophy of the optic nerve and permanent temporal hemianopia due to chiasmal compression. In their study optical coherence tomography was able to identify axonal loss in all four quadrants. Measurements of the nerve fibre layer were significantly different in the affected and control groups. Although there are a limited number of patients for this technology, as well as high local variability and some interobserver variation, this technique appears to be promising in the evaluation of optic nerve atrophy with diseased chiasm and optic tract. See p 896

IS EARLY CONGENITAL CATARACT SURGERY A RISK FACTOR FOR DEVELOPING GLAUCOMA?

Aphakic glaucoma is the most frequently feared complication of congenital cataract surgery. It appears to be particularly common in patients with microphthalmic eyes and specific types of cataract (PHPV and nuclear cataracts). Vishwanath and coworkers in a retrospective analysis of cases at Great Ormond Street Hospital, London, have concluded that bilateral lensectomy during the first month of life is associated with a higher risk of subsequent glaucoma than the surgery performed later. They suggest that in bilateral cataract cases delaying surgery until the infant is at least 4 weeks old may reduce the risk of glaucoma. This study did not address the question of unilateral cataracts and these same authors are currently conducting a second study looking at this important question. See p 905

EFFECT OF ENUCLEATION ON OUTCOME IN THE TREATMENT OF OCULAR MALIGNANT MELANOMA

Zimmerman, McLean, and Foster published a paper 25 years ago entitled “Does enucleation of the eye containing a malignant melanoma prevent or accelerate the dissemination of tumour cells.” The authors hypothesised that enucleation increased the risk of metastatic spread of the tumour and might not be beneficial in the treatment of this problem. Singh and coworkers review the epidemiology, statistical, and experimental evidence accumulated over the past 25 years regarding this hypothesis. They suggest that the current body of evidence does not attribute excessive mortality immediately after the treatment of melanoma to the procedure of enucleation. They suggest that the pattern of post-therapeutic mortality can be explained on the basis of early metastasis in uveal melanoma. However, questions implied by Zimmerman, McLean, and Foster are still valid. Are eyes enucleated because of uveal melanoma selected because of the aggressive nature of the tumour? Would a subset of uveal melanomas that produce high levels of angiostatin, if enucleated, result in growth of micrometastases? The authors suggest that further investigation of these questions is necessary. See p 962