Proceedings of the Society of British Neurological Surgeons

The 88th Meeting of the Society of British Neurological Surgeons was held in Middlesbrough on 7 and 9 May 1975.

ENDOCRINE EXOPHTHALMOS TREATED BY ORBITAL DECOMPRESSION

P. R. R. CLARKE (Middlesbrough) discussed a series of 20 patients with endocrine exophthalmos treated by lateral orbital decompression. There had been 14 bilateral decompressions, and in six patients a unilateral operation only had been performed. One patient had needed reoperation. Four patients had no thyroid abnormality, and two had untreated hyperthyroidism. In 14 patients exophthalmos had progressed after treatment for hyperthyroidism. The treatment given for hyperthyroidism had been thyroidectomy in eight, radioactive iodine in one, radioactive iodine and thyroidectomy in one, thiouracil in three, and pituitary irradiation and thiouracil in one. Eighteen of the 20 patients had been relieved of orbital discomfort, photophobia, and pain on eyeball movement. Of 12 patients with diplopia, eight had lost this symptom after operation. Papilloedema had subsided after operation in two cases. A postoperative corneal ulcer had developed in one of the three patients who had preoperative keratitis. The one patient who had corneal ulcer before operation developed a recurrent ulcer after decompression. One patient with a blood dyscrasia developed a corneal opacity after surgery, and another patient required treatment for entropion. It was suggested that orbital decompression might be considered more frequently than is often the case in view of its success in relieving discomfort in a high proportion of cases.

SIXTEEN CASES OF TRANSORBITAL STAB WOUNDS OF THE HEAD

J. C. de VILLIERS (Cape Town) presented a series of 16 patients with transorbital stab wounds. It was pointed out that low velocity wounds were usually associated with absence of eyeball damage, but this was not the case with high velocity wounds. Other structures which might be damaged were the optic nerve, the ocular muscles, the ocular nerves, and the lacrimal gland. Haemorrhage and infection might complicate the picture. The cerebral injury was usually a cortical laceration which might extend into a ventricle. Detailed radiology was essential before operation and arteriography was considered essential to exclude vascular injury, vascular spasm, or intracranial haematoma. Repeated arteriograms might be necessary to demonstrate the evolution of a false aneurysm or a carotid cavernous fistula.

Fresh knife wounds should be treated by removal of the knife, if it had not already been extracted, under radiological control in an environment where everything was in readiness to deal with a major vascular injury. In the absence of vascular injury, expectant treatment with antibiotics could be given. Intracerebral haematomas should be dealt with by burr craniotomy, as should wounds caused by sticks and pencils. Patients with carotid injuries were treated conservatively for two to three weeks, after which appropriate surgical treatment was carried out. In the series presented, five out of the 16 died, three causes of death being carotid thrombosis in one instance and massive intracerebral haemorrhages in the other four.

EYE MOVEMENTS AND BRAIN-STEM DYSFUNCTION AFTER HEAD INJURY

GRAHAM TEASDALE and JIM SMITH (Glasgow) had studied eye movements elicited by stimulation with iced water irrigation in the external auditory canals in head injured patients with impaired consciousness. The graded impairment of movement reflecting increasing brain dysfunction was shown first by the replacement of nystagmus by tonic deviation, second by the replacement of conjugate position by dys-conjugate position, and last by a total absence of response. This method of examination was significantly more reliable than either the observation of spontaneous motility or the 'doll's head' manoeuvre. The grade of movement observed after caloric stimulation was greater than the amount of spontaneous activity in almost half of the 272 examinations carried out on 100 patients, and it was higher than that induced by the 'doll's head' manoeuvre in one-third of the patients. There were loose general correlations between increasing impairment of the vestibulo-ocular reflex and depression of conscious