

Selected Abstracts

Pages with reference to book, From 117 To 118

Electrophysiological Studies Before and After Argon-Laser Photocoagulation in Diabetic Retinopathy. J. Francous, A. De Rouck, E. Cambie and A. Castanheira-Dinis. *Ophthalmologica*, 1978, 176:133.

Electrophysiologic rests, fluorescein angiography and psychophysiological dark-adaptation curves were performed in 50 eyes of patients with diabetic retinopathy, before and after photocoagulation with the argon laser. The 50 eyes were in 31 patients, 16 men and 15 women, ranging in age from 24 to 64 years. The diabetic condition had existed from two to 30 years at the time of the first examination. After treatment, decreases of the light difference ratio shown on electro-oculograms and of the amplitudes of all electroretinogram components were found. The scotopic b waves were more involved than the photopic b waves. The peak times showed little modification. The dark-adaptation curves were not modified. In the findings pretreatment, the electro-oculograms were involved before the electroretinograms. The decreases in the light difference ratios began when avascular and ischemic zones were seen on fluorescein angiography.

Joshua Zuckerman

The Surgical Treatment of Open-Angle Glaucoma in Nigerians. J.H. Sandford-Smith. *Br. J. Ophthalmol.*, 1978, 62:283.

One hundred and twenty-three consecutive operations for open-angle glaucoma were done between November 1974 and December 1976, all upon African Negroes. It was possible to observe 78 of these patients for three months or more, and the results of these 78 operations were reported as being successful if the final applanation pressure was 20 mm.Hg or less, unsuccessful if the pressure was 35 mm.Hg or more and indeterminate if the pressure was between these values. None of the patients were receiving any medication when the pressures were recorded postoperatively.

Trabeculectomies were successful in 33 of 51 patients, 65 per cent, and sclerectomies in 16 of 27, 60 per cent. Some transient delay in the reformation of the anterior chamber postoperatively was common. However, by the fourth day the chamber was still flat or very shallow in 2 per cent of the patients who underwent trabeculectomy and 17 per cent of the patients who had sclerectomy. Hyphemas were recorded only if macroscopic and they all resolved satisfactorily; they occurred in 6 per cent of the patients with trabeculectomy and 10 per cent of those with sclerectomy.

Of the patients who had trabeculectomy, there was only one instance of malignant glaucoma, which responded readily to medical therapy. Sclerectomy resulted in one instance of endophthalmitis, and two instances of large thin blebs with hypotony. One patient returned with a blind eye from malignant glaucoma thought to be caused by rupture of a thin conjunctival bleb and loss of aqueous fluid.

There was little difference between the results of trabeculectomy and sclerectomy in the African Negro, except that trabeculectomy resulted in fewer long term complications. Excision of Tenon's capsule and the use of local steroids postoperatively were advocated. It was believed that these procedures are probably significant in preventing failure of aqueous drainage from subconjunctival fibrosis.

Paul M.H. Cherry

Whiplash Maculopathy. James S. Kelley, Richard E. Hoover and Terry George; *Arch. Ophthalmol.*, 1978, 96:834.

Flexion and extension trauma to the head and neck, whiplash injury, can lead to immediate mild reduction of central visual acuity in one or both eyes. Upon examination, there is greyish swelling of the foveal zone accompanied by a small, 50 to 100 μ , pit or depression in the fovea. The opacification of

the retina and the visual disturbance are transient and are believed to be caused by traction forces at the vitreoretinal interface. The tiny depression in the retina, with its whitish border, is permanent. Three patients with whiplash maculopathy as described are presented.

Paul M.H. Cherry

New System of Microsurgery for Human and Experimental Corneal Grafting-I, the Contact Lens Corneal Cutter, Stereotaxic Eye Holder, Donor Disc Chuck, and Frame. G.W. Crock, L. Pericic, J.S. Chapman-Smith and others. Br. T. Ophthalmol., 1978, 62:74.

The development of a contact lens corneal cutter of stainless steel, which is engaged to the front surface of the eye by a notched circular foot plate, is described. A quartz contact lens permits direct visualization through the funnellike cutter while a single cutting blade is hand driven in a perfectly circular manner. Depth of the blade is controlled by a second screw, a single revolution of which advances the cutting tip 0.3 mm. A single use, disposable blade is recommended. The corneal cutters are now made in 7, 8 and 9 mm. diameters. The system is integrated with a donor disc holding chuck which enables sutures to be placed without forceps engagement of the donor disc. A third component, a stereotaxic eye holder, gives control of an enucleated donor eye. All of the equipment can be flash autoclaved. The earlier attempts a mechanical and electric motor-driven operations were abandoned. This system overcomes the usual disadvantages of precluding the surgical microscope during trephination.

Arthur H. Keeney

Surgical Management of Eustachian Tube Dysfunction and Its Importance in Middle Ear Effusion. James A. Donaldson. Pediatrics, 1978,61:774.

The problem of poor ventilation of the middle ear or middle ear fluid, or both, is a very common one. Fluid may persist after an incompletely treated infection of the middle ear, often resulting in moderate impairment of hearing. Medical management of the problem includes removal of known infections and the use of topical vasoconstrictors, antihistamine decongestants and treatment of allergies. Ventilation of the eustachian tube may also be of value. The most effective form of surgical treatment appears to be myringotomy and insertion of a ventilation tube. The importance of adenoidectomy is debated, but tonsillectomy seems to have little connection with function of the eustachian tube.

Complications of chronic inadequacy of the eustachian tube include formation of cholesteatoma with the associated dangers. Specific complications of ventilation tubes include permanent perforations of the tympanic membrane and middle ear infection. The correct time to remove a ventilation tube and the prognosis of patients with malfunction of tubes are important but unanswered questions.

Ralph F. Naunton

Actinomycosis; Masquerader in the Head and Neck. Robin M. Rankow and David M. Abraham. Ann. Otol. Rhinol. Laryngol., 1978, 87:230.

Fifteen patients with cervicofacial actinomy cosis are presented and the highlights of diagnosis and treatment are explained. A combination of careful microhiopsy and histopathologic techniques should be used to detect the causative organism. Often, this diagnosis is delayed because of improper previous treatment. Adequate surgical excision, if feasible, seems to give the best results. The chemotherapeutic regimen of choice consists of administration of high doses of penicillin. Clindamycin and tetracycline are drugs of second choice to treat this disease. Sulfonamide drugs have also been used widely. The antibiotics should be given in an appropriate dosage and for sufficient duration, a high dose for two to four weeks and a maintenance dose for up to six months. A short review of the literature is presented.

Helmuh Goepfert