
(1) It is known that corneal tissue exhibits optical anisotropism. The long and short axis of the index-ellipses of double refraction lie in the direction of the vertical and of the horizontal meridian respectively. Schreuder tested the elasticity of bovine corneas in these two directions. The resulting data make it highly probable that the cornea is more elastic in the vertical than in the horizontal direction. He holds that this anisotropism of elasticity might help to explain corneal astigmatism in glaucoma.

ARNOLD SORSBY.


(2) Blumenthal describes a case of cataract extraction which the day after operation showed signs of acute and severe intra-ocular infection. M. and B. 693, 1 tablet 4-hourly by day; was administered but not tolerated and this treatment had to be abandoned. On the second day after operation the condition of the eye was worse. Under local anaesthesia Blumenthal washed out the anterior chamber with mercuriochrome 5 per cent. and glycerine 10 per cent., leaving this solution in the anterior chamber after the hypopyon had been removed.

Next day there was considerable chemosis and the tension became soft. After a few weeks the intra-ocular pressure rose and the eye was treated successfully by short wave diathermy twice daily. Four months after operation projection of light was accurate, tension normal and visual acuity counting fingers. Ultimately the patient recovered vision of 6/6 with glasses after capsulotomy.

H. B. STALLARD.


(3) Bruce Hamilton describes one case of congenital keratitis sicca, four cases of Sjogren’s syndrome and three of recurrent corneal ulceration with diminished tear secretion. Sjogren’s syndrome consists of dry eyes, keratitis, idiopathic swelling of the salivary glands, dry mouth, anhydrosis and articular changes in
females at the menopause. The corneal lesions are of two types: (1) dry, multiple erosions, secondary keratitis, practically painless and continuous; (2) primary keratitis, due to a direct toxic effect on the cornea, and characterized by vesicular and filamentary features. It is intermittent, very painful and often associated with arthritis.

The aetiology of this disorder is obscure. It may be of a chronic inflammatory nature. Bruce Hamilton applied Schirmer's test for lacrimation. A piece of filter paper 25 x 5 mm. is bent 3 mm. from one end and this is placed over the lower punctum. The length of paper saturated with tears at the end of 5 minutes is recorded; 5-10 mm. indicates a dry eye, below 15 is abnormal and 20-25 is considered normal.

Treatment consists in sealing the canaliculi by a diathermy needle and the use of artificial tears, made from autogenous blood serum 10 per cent. in Ringer's solution to which chloretone grs. 1 ad oz. is added. The artificial tears are instilled as drops four-hourly at first and later twice daily. In cases of filamentary keratitis methyl violet 1/2000 and adexolin (B.W. & Co.) three times a day gives comfort.

It seems that corneal vitality and quantitative lacrimation are intimately associated. Bruce Hamilton suggests further research in the progress of the associated arthritis, blood counts, endocrine factors and the possible reduction of lysozyme in idiopathic corneal ulceration.

H. B. Stallard.
