
(1) Charamis gives notes of twelve cases in which he found great advantage resulted in ensuring that the flap had a thin muscular bed on which to lie.

He emphasises the need for particular care in the preparation of the injured area, the prevention of capillary haemorrhage in the flap, and the inclusion of an efficient arterial supply.

Heliotherapy he employs to accelerate the healing.

Blepharoplasties such as these have been found to give equally good results in cases the results of burns, and where they were complicated by suppurating fistulae.

F. R. Hill.


(2) Wagner has demonstrated by experiment that it is possible, although this had previously been contested, to produce cataract in albinotic as well as in pigmented rabbits' eyes with penetrating short wave infra-red rays; the opacity in the lens was confined to the part traversed by these rays, i.e., was due to direct absorption, and was not associated with any anatomical changes in the albino iris or with lens opacities where the iris and lens were in contact.

The close analogy between this experimental cataract and the fire cataract seen in glassblowers and ironworkers is emphasised, both as regards their axial situation and morphological features, the absence of injury to iris and cornea and, it is claimed, their common cause.

It is shown that the emission-spectrum of molten glass yields its maximum in the infra-red; visible and ultra-violet light are present in too small quantity to warrant any consideration as to the cause of glassblowers' cataract, while of the infra-red emitted only the short wave portion possesses any penetrative power capable of producing deep seated changes in the eye.

Fire cataract is not associated with burns of the iris and cornea and subsequent complicated cataract; in glassblowers, changes in the iris were never observed. In fire cataract there is direct absorption of the infra-red rays in the lens.
The author has made use of these rays in some cases of tuberculous iridocyclitis, episcleritis and phlyctenules with favourable results.

An explanation of their action is not forthcoming; but it is suggested that the good effect may be purely thermal, together with a consequent increase of the antigens in the anterior chamber.

THOS. SNOWBALL.

(3) **Kozlowski, B. (Poznan).**—A case of ophthalmic complications due to exhaust gases from an internal combustion engine. *Klinika Oczna*, May, 1938.

(3) **Kozlowski** describes the clinical history of a patient who was acting as driver of a motor boat during army manoeuvres.

The boat was completely covered up to resemble a submarine. The escape of the exhaust gases was prevented and the driver after being 20 minutes in the cabin had lost consciousness. When he became conscious nine hours later he could not see anything. Six days later he was seen by Kozlowski. At examination he was found to have a left homonymous hemianopia involving the fixation points. The patient completely recovered after a stay at the hospital of two weeks. At the first examination his pupillary reactions were normal and the author infers that the lesion must have been near the external geniculate body or in the internal capsule on the right side of the brain. He supposes that carbon monoxide which is the most toxic of all exhaust gases had caused an angiospasm or haemorrhage of cerebral vessels in the above mentioned region of the brain. Reviewing the literature he states that petrol even in small concentrations in the air (0.5-2 mgr. per litre) has a toxic effect on the central nervous system. After a short exposure patients develop a cough, irregular breathing, a feeling in the hands as though they did not belong to them, a state of excitement with increased movements and exhilaration; later a fall of body temperature and loss of consciousness. The eyes in such states of intoxications show changes of pupillary reactions (dilatation and rarely contraction of pupils). In advanced cases signs of retrobulbar neuritis and even complete loss of vision may follow. All these complications are of a temporary nature and the patient usually recovers without any ill effects. The exhaust gases are more toxic. Motor mechanics and at times drivers or passengers travelling in closed cars have been known to show intoxication due to non-escape of exhaust gases, the composition of which is as follows: carbon monoxide, carbon dioxide, oxygen, water vapour, hydrogen gas, methane gas, nitrogen and others. The patients complain of headache, giddiness, noises in the ears and sickness. Some patients may lose consciousness, fatal cases have been reported. Carbon monoxide is the most toxic of all exhaust gases. Many cases are reported in the literature with a variety of ophthalmic complications.
Blindness lasting a few days, peripheral constriction of fields of vision, ocular palsies, retrobulbar neuritis, changes in pupillary reactions, and Sattler described a case of herpes ophthalmicus with oedema of the Gasserian ganglion. The fundi are usually normal but occasionally haemorrhages and exudates are seen with vaso-constriction or vaso-dilatation of the retinal vessels.

JOSEPH MINTON.


Wroblewski has investigated the blood of 287 patients suffering from tuberculosis of various organs, of these 144 had tuberculosis of the eye. He has shown the presence of tubercle bacilli in the blood in 205 cases out of the 287 investigated.

Experimental animals were treated with autogenous vaccines and serum. The tuberculous infection was arrested in a great number of cases. Following these investigations patients suffering from tuberculosis of the eye were treated with autogenous tuberculous vaccines at the ophthalmic clinic of the University of Warsaw. The results of the treatment are so far encouraging. The vaccines are given subcutaneously, the number of organisms injected being from 10-100 million killed tubercle bacilli in 1 c.cm.

JOSEPH MINTON.


Bunge and Heyn have examined eight cases of albinism by means of the Engelking and Hartung adaptometer and compared their average curve for dark adaptation with that obtained from twenty normal persons. There was no difference in the course of dark adaptation, nor did fair nor dark people show any variation from the normal. This disproves the theory that the amount of retinal pigment can affect the regeneration of visual purple.

D. R. CAMPBELL.


Uvnas and Wolff could find no acetyl-choline esterase in the bovine aqueous humour under normal conditions; it could be detected only after previous puncture of the anterior chamber or as
post-mortem change. The vitreous, however, contains the enzyme; bovine vitreous contains enzyme to about 1/8 of the content of human and horse blood; horse vitreous contains much less. The enzyme activity of the aqueous may result from an active or passive inflow from the vitreous.

ARNOLD SORSBY.


(7) Larsson draws attention to an abnormality which occasionally leads to unsuccessful probing in congenital lacrimal obstruction. The nasal duct is prolonged downwards as a mucous tube beneath the inferior turbinate, and a probe passed down does not therefore establish any opening into the nose. He reports two cases of this type and describes an operation involving resection of the inferior turbinate and cutting down on to a probe passed into the duct.

ARNOLD SORSBY.


(8) Raski draws attention to the fact that in the literature on retinitis pigmentosa an incidental reference to the state of refraction often gives it as myopia. He reports 100 cases personally studied, of whom 46 were myopes, against an incidence of 12 per cent. of myopia in a control series embracing over 20,000 cases. Some of the patients with retinitis pigmentosa were highly myopic, and the conclusion is drawn that myopia and retinal degeneration are correlated.

ARNOLD SORSBY.


(9) Vogt has made a study of 19 pairs of identical twins with regard to the occurrence of such senile changes as pterygium, pinguecula, gerontoxon, Krukenberg's spindle, senile guttate keratitis, senile cataract, choroidal atrophy and retinal haemorrhages. The continuance of the effects of inheritance throughout life is most striking.

D. R. CAMPBELL.

Wegner describes a new defect inherited as a dominant feature and characterised by the formation of a loculated membrane in the equatorial region of the retina, which is continuous with the internal limiting membrane. The vitreous is fluid and contains floating strands. In some cases the field of vision shows concentric contraction and there is night blindness, myopia and defective vision, while later, punctiform opacities occur in the posterior cortex of the lens and are followed by nuclear cataract.

The defect bears some resemblance to retinitis pigmentosa, though the characteristic pigmentation does not occur. It must be a congenital defect originating in the ectodermal tissues of retina and vitreous.

D. R. Campbell.


The authors gives full details of this operation, and say that it causes a rise in blood pressure, which is maintained both in the systemic and in the retinal arteries. The effect is more pronounced if the operation is bilateral, and is best combined with treatment which lowers the intra-ocular pressure—as advised by Lauber and his school. Out of a total of 63 sympathectomies in cases of optic atrophy, retinitis pigmentosa, specific choroiditis and retrobulbar neuritis, an improvement of vision occurred in about 50 per cent.

D. R. Campbell.


Siegert concludes in a resumé of his article on this subject that the presence of calcareous deposit in the internal carotid artery
MISCELLANEOUS

is of little significance, and cannot be cited as proof of a compression of the optic nerve, as some writers have held.

The X-ray examination of a considerable number of elderly persons reveals a high percentage of calcification in this artery, corresponding roughly to the age of the individuals. Calcification of the basal arteries of the brain is thus quite generally demonstrable as also in all varieties of eye diseases, most frequently of course in arterio-sclerotic affections of the retina and choroid. It is not admissible, in cases where the aetiology is obscure and X-ray examination is resorted to in order to elucidate it, straightway to attribute the cause to calcification of the carotid when it happens to be found.

A study of a large amount of material shows that a manifest atheroma of the large cerebral vessels seldom occurs without simultaneous sclerosis of the central retinal vessels, quite apart from the fact that there is in most cases little correspondence between the degree of sclerosis of the central vessels and that in the peripheral.

This fact justifies the view, especially having regard to histological evidence and the results of autopsies, that functional disturbances of the visual path are in the vast majority of cases due to disturbances of nutrition with arteriosclerosis or cerebral softening and not to localised compression. This holds good especially for simple descending optic atrophy.

In this connection arteriographic signs of a (thrombotic) obliteration of the internal carotid artery without pathological changes in the optic nerve are noteworthy, as well as the numerous cases of carotid calcification shown by X-ray examination with an absence of any sign of disease.

In only a few isolated cases could characteristic functional disturbances be proved, and of these changes defects in the visual field could be attributed to a break of conduction in the peripheral optic fibres by compression.

THOS. SNOWBALL.

BOOK NOTICES


The papers in this publication, to which reference is made in our annotation, are as follows:—R. Granit, Helsingfors: Processes of adaptation in the vertebrate retina in the light of recent photochemical and electrophysiological research. F. P. Fischer, Utrecht: Der Wasserhaushalt des Auges und seiner Teile. P.