ABSTRACTS

I.—RETINA


(1) The reviewer has read McAlpine's article with care and has come reluctantly to the conclusion that he is not capable of reducing it to the form of an abstract which would not be apt to mislead the reader through what would be merely a partial statement of the author's closely reasoned argument. The thesis, based partly on the work of others and partly on his own, is that the terms "albuminuric," or "renal" retinitis, should be given up and replaced by the term "hypertensive." The matter may be summed up in the author's words: "The term 'hypertensive' should replace that of 'albuminuric' or 'renal,' as suggested by Fischberg and Oppenheimer, because the retinal changes, usually described under these names, may occur in the absence of any appreciable renal disease. Moreover, evidence is accumulating in favour of the view that, in certain cases of hypertension with albuminuria, the kidney is merely sharing in the effects of a widespread arteriolar constriction, the results of which may also be apparent in the fundus, brain, heart, and extremities." For the arguments the reader must go to the original.

Ernest Thomson.


(2) Kalt reports in detail the pathological findings in an eye of a woman, aged 73 years, affected with exudative retinitis in the macular and perimacular area. Beyond the fact that after enucleation a white appearance like a halo was seen around the macular area of the divided eye, nothing was known of the fundus oculi owing to the presence of cataract. Kalt refers to four clinical cases of exudative retinitis in patients with no evidence of retinal vascular disease. He cites these as examples of the same type as that of the case examined histologically. These cases all fall into what is called "the second or chronic (torpide) group of albuminuric retinitis," in which at the time of examination no albuminuria may be found. The first group is that of "acute albuminuric retinitis," of cases seen commonly at hospital
including those of pregnancy, with swollen optic disc, macular star and haemorrhages. In the case examined by serial sections no trace of disease of blood-vessels—even of the capillaries—could be found with careful search. It is suggested that the exudate, which consists of structureless coagulated albumen in the sections is the result of toxins which, entering by way of the optic nerve, increase the permeability of the capillaries. The exudates all occur in the inner nuclear, the internuclear and to a less extent the outer nuclear layers—the site of the smallest blood-vessels. The intensely swollen disc with exudates and haemorrhages in cerebral tumour cases are compared with the changes of acute albuminuric retinitis of eclampsia, and the simple oedema of tumour cases with the appearance of chronic albuminuric retinitis. In the eclampsia cases it is well recognized that the eye changes are due to a toxic effect on the capillaries and in the severe changes of cerebral tumour a similar cause may obtain. The toxins are presumed to reach the eye from the meninges by way of the subdural space and thence through the optic nerve to the retina at the posterior pole of the eye. For this to occur, it is assumed that toxic products of renal disease, capable of producing meningeal oedema are present in the cerebro-spinal fluid.

For details of the histological appearances—with illustrations—and of the white retinal exudates with rare haemorrhages and occasional glistening crystals in the four clinical cases, the original paper should be consulted.

**Humphrey Neame.**

(3) **Bessière, E. (Bordeaux).—** Does diabetic retinitis occur in the absence of renal disease? (Existe-t-il une rétinite diabétique en l'absence d'altérations rénales?) *Arch. d'Ophtal.,* April, 1932.

(3) In a research into the question indicated in the title of this paper, **Bessière** has made a careful examination of 23 diabetic subjects with ocular lesions. In a very long communication, he culls from the writings of many previous observers, as far back as Jaeger in 1858. He gives clinical notes of 18 cases under his own observation, with two coloured drawings of sections of the retina from a case of glycosuria and albuminuria. He then discusses the question at issue in the light of the views of earlier observers and the findings in his own patients. He holds that though “this question demands further study” diabetic and albuminuric retinal lesions are analogous. “The appearance of retinitis in a non-albuminuric diabetic should be considered as a premonitory sign of approaching renal insufficiency.” “Every
diabetic the subject of an exudative retinitis, is in reality, an undiscovered renal case." To this paper is appended a very full bibliography containing 84 references.

J. B. Lawford.


(4) Goulden in the Montgomery Memorial Lecture, delivered at the Royal College of Surgeons in Ireland on November 25, 1932, gave a description of the development of the human retina, the history and theories concerning the aetiology of retinal detachment from the time of its recognition early in the last century to the present day. The manner in which a retinal tear occurs is discussed and statistics are given concerning its incidence, site, and clinical variety. Stress is laid on the importance of taking a careful case history of the local symptoms, visual disturbances, "floaters," "phosphenes," and the part of the visual field first affected. The object of this is to obtain some idea of the site of the retinal tear which often corresponds to the part irritated so as to produce a "phosphene" and to the area of retina first detached. Methods of examination and the technique of localization of retinal tears are described. Brief accounts of Gonin’s operation, Guist’s caustic operation and the operation by diathermy are given. Tables of operative results terminate the paper.

H. B. Stallard.


(5) Arruga describes in detail, with clinical notes, typical case histories from a group of 38 patients with cured detachment. Altogether 158 cases were operated on of which 38 remained cured for intervals varying from two months to three years and eleven months. A large number of the patients were myopes and in all cases save three, the hole was found. The operation performed varied. In the group of successful cases puncture with the thermo-cautery was used twice, with the galvano-cautery 24 times, while the Lindner-Guist operation and a modification of it were also employed. The duration of the detachment before operation varied from two days to a year. Restoration of visual acuity was not complete in the majority of cases, but many showed pre-existing choroido-retinitis.

Ida Mann.

(1) Jahnke and Wámoscher review the literature on the type of pneumococcus found in pneumococcal eye conditions. Out of 85 cases reported by different authors, 71 showed pneumococcus Type IV. Of 73 cases investigated by the authors, 51 were likewise of this type. Only one case in their series belonged to Type I. Seeing that serumtherapy is effective only in Type I, it holds out but little hope in the treatment of pneumococcal conditions of the eye.

ARNOLD SORSBY.


(2) Aulamo reports on 160 cases of ocular conditions diagnosed as tuberculous and treated by X-rays. Twenty-three were cases of phlyctenular disease and the remainder, cases of iritis, iridocyclitis, scleritis and choroiditis and allied conditions. One to five applications had to be given, and in one case seven; 79 per cent. of phlyctenular conditions were cured as also 91 per cent. of iritis cases, and 82 per cent. of uveitis cases, whilst of the remaining conditions, cure was obtained in about 60 per cent. of cases. The treatment is simple and without danger when used with care; the poorest results are in sclero-keratitis, choroiditis and iridocyclitis.

ARNOLD SORSBY.


(3) Ferrer states that he became impressed with the dangers of too great a focal reaction during the treatment of ocular tuberculosis with tuberculin, even the most minute doses being followed occasionally by grave consequences. He therefore attempted to find some substitute or adjuvant, and after having tried and abandoned phototherapy as uncertain in action, he began in 1923 to experiment with guaiacol sulphonate and calcium. He uses a 10 c.c. injection twice a week at the beginning and works up
gradually to three injections a week of 20 c.c. each. Case notes of ten patients are given in detail. The patients ranged from 15 to 35 years. In more than half there were proved tuberculous lesions elsewhere (phthisis, lupus, etc.). All were treated with intravenous guaiacol sulphonate and calcium as adjuvant to local treatment with atropine and heat. In some cases generalized ultra-violet light also was given. All the cases cleared up with good visual results in time varying from one to six months. Some of them have been under observation since 1927 and have remained well until the present time.

IDA MANN.


(4) This paper deals with Bordas' experiences in the use of percaïne as a substitute for cocaine. He concludes that it is equally efficacious as an anaesthetic and possesses certain advantages and also disadvantages. In the first place it produces anaesthesia in much weaker dilutions than cocaine, namely, 0.5 per cent. or even 0.1 per cent. It also possesses the advantage of being thermostable and can be sterilized by boiling. It is non-toxic and exercises no harmful effect whatever on the corneal epithelium. It may cause some conjunctival hyperaemia but this can be abolished by one drop of adrenaline. On the other hand, full anaesthesia is not produced for 15 to 30 minutes and the patients often complain of much irritation and burning when it is instilled. This can be avoided by beginning with very weak solutions. As in other local anaesthetics its action is much weakened in the presence of acute inflammation. It forms a useful substitute for cocaine when required over a long period, as in superficial keratitis, but its use is somewhat limited.

IDA MANN.


(5) Some five years ago Weekers reported a series of cases of spasmodic entropion successfully treated by injection of alcohol into the lid. Some of his patients remain cured after more than five years, but in others the entropion has become re-established. Weekers now adds canthotomy to the treatment by injection and has obtained more satisfactory results. His technique is, in brief,
the subcutaneous injection of 1 c.cm. of a 4 per cent. solution of novocaine, along the length of the palpebral border of the eye-lid and in the region of the external canthus: canthotomy with straight scissors: injection of 1 to 1.5 c.cm. of 80 per cent. alcohol under the skin of the lid. To avoid necrosis of the epidermis the injection should penetrate deeply. The treatment is painless and does not necessitate detention of the patient. Seven cases have been thus treated; the longest period is 1½ years; no relapses have been noted. In one instance the effect was rather excessive.

J. B. Lawford.

III.—MISCELLANEOUS


(1) A new feature in the weekly issue of the Medical Press and Circular is the quarterly supplement on minor surgery for the benefit of those in general practice. The first supplement contains short accounts on the minor surgery of the eye, the foot, the ear, and muscles and tendons.

It goes without saying that the section on the eye by Bishop Harman is well done. He deals with certain features of the treatment of conjunctival conditions, the methods of removal of foreign bodies from the cornea and conjunctival sac, the operative treatment of chalazion, some forms of corneal ulcer, and the examination of the lacrimal apparatus with the treatment of lacrimal abscess. A competent general practitioner should be able to deal with any of these conditions and thus save the patient hours of discomfort and actual pain. The in-growing lash or the cilium that has been washed into the lower or upper canaliculus is easily overlooked and nearly always easily to be removed. The author strikes a timely note of warning when he says that though he has described these small operations as minor, there is nothing little about them. Each may be almost as serious as an acute glaucoma; each if neglected may destroy an eye.

R.R.J.


(2) Xeroderma Pigmentosum, or Kaposi's disease is a rare condition marked by roughening, dryness, pigmentation, and ulceration of the skin; it is often accompanied by the formation
of telangiectases and tumours in the skin. Its course is prolonged but invariably fatal and eye changes have been reported by several observers in this country, notably by Richardson Cross. Cope and Hayes report four cases. The first occurred in a Jewess, aged 22 years. She was the offspring of healthy parents who were first cousins, and at birth she was normal in all respects. She was one of a family of four children, the others being healthy. The first signs of Kaposi's disease showed themselves when she was two years old and followed exposure to sunlight. There was at first generalized redness of the skin which later was transformed into brownish spots like freckles. The skin became dry and scaly and pigmentation increased. At the age of 8 years she had treatment by radium for the keratoses in the region of the face and was then lost sight of. At last loss of vision in the left eye brought her back to hospital. She was then found to be fairly well nourished, the hair was normal, the skin of the face showed irregular, deeply pigmented areas interspersed with areas of leukoderma. Keratoses were present abundantly, especially in the area of the outer canthus, and there was a papilloma of the right upper lid. The right eye showed an irregular nodular mass invading the nasal half of the cornea; the lower lid showed ectropion; in spite of a previous operation to correct it. The left eye was normal. The nose was much deformed. Because of inflammation of the right eyeball, the globe was excised and at the same time a small warty mass was removed from the right temple; the latter proved, on microscopical examination, to be a pigmented basal-celled epithelioma.

The second case occurred in an Italian girl of nine years of age in 1930. The disease first appeared at the age of eighteen months and had steadily progressed, the cornea having been ulcerated. When admitted to hospital she was found to be in fair bodily health with no marked anaemia. The skin of the face was much involved by dry, scaly patches with marked pigmentation, ulceration and fissures. From the edge of the right upper lid a polypoid ulcerating mass protruded. The cornea showed extensive leucoma. Treatment by radium produced a temporary improvement. In 1928, the left eyelids showed extensive ulceration. Biopsies showed plasmo-celled granulomata. The orbit and left antrum became involved. The patient died early in 1930.

The other two cases occurred in sisters, aged 6 and 5 years respectively. The general signs were well marked and in addition conjunctivitis and ectropion were present. A biopsy taken from the neck of the elder girl showed a squamous-celled carcinoma, grade I. A later biopsy showed that the carcinoma was then of grade II, radio-resistant. She was in much the same state in April, 1932, and no further notes of her case are available.
The younger sister, also an Italian, began to show signs of the disease at nine months. On admission, in 1930, extensive ulceration was present at the angle of the mouth; a biopsy of this ulcerated area showed the presence of squamous-celled carcinoma, grade I, radio-resistant. The general condition has remained fairly satisfactory.

In commenting on these four cases the authors say that consanguinity appears to be a factor in the case, though whether heredity plays any rôle, is a debatable point. Not all the members of a family need be affected. A good description of the pathological lesions is followed by a careful analysis of the aetiological factors. The exciting cause would appear to be exposure to the actinic rays of the sun in cases which are predisposed to the condition. There may be a relationship between Kaposi’s disease and haematoporphyrinuria though in congenital haematoporphyrinuria xeroderma does not occur. In two of the author’s cases examination of the urine was negative, and the blood of one of them showed no laking. The disease is invariably fatal, death usually occurring before the twenty-first year of life. The treatment is for the most part palliative: parents are advised to keep the sufferers in doors as much as possible, and when out of doors those parts of the body exposed to sunlight should be suitably protected by black clothing, shades, gloves, etc. In early cases radium therapy seems to be beneficial, but is not indicated if the lesions are wide spread.

The article is illustrated by excellent photographs of the children’s faces, and microphotographs of the biopsies. A bibliography of 33 items completes the paper. Richardson Cross's paper in the Ophthalmic Review, Vol. XXXIV, 1915, occupies a place, but the authors have missed his paper in the Trans. Ophthal. Soc. U.K., Vol. XXXV, and the pathological report by Affleck Greeves in the same volume.

R.R.J.


(8) This fully reported case by Gourfein Welt is one which must have caused great difficulty in diagnosis and prognosis especially as to the question of excision. Briefly, the patient was a boy, aged 8 years, who was wounded seriously in the right eye by the explosion of a detonator. Radiography failed to disclose any foreign body and the eye quickly quieted down. The patient was dismissed from hospital in a fortnight. Two months later he returned with a profuse haemorrhage in the right anterior chamber.
which absorbed and recurred several times. Exactly two months later again there was a vitreous haemorrhage in the left eye with a soft-looking disc (papille floue) and slight dilatation of the veins on the disc. Visual acuity 5/10. The right eye was now removed: it was injected, soft and sightless. The left vitreous cleared up; the eye became normal with full visual acuity. On dissection, the right eye was disorganized and it contained a small piece of copper which radiography had failed to reveal. Full details of the personal and the family history and of the examination of the excised eye are given by the author, who concludes as follows:—

"The case is one of sympathetic ophthalmitis in the very rare form which affects the posterior segment of the eye, sympathetic papillitis. Influenced by this, ocular haemorrhages occurred due to a pre-existing defect, namely, the blood instability diathesis known as haemogenesis (hémogenie)."

**ERNEST THOMSON.**

(4) **Saradindu, Sanyal.—Fungus infection of the eye.** *Calcutta Medical Journal*, Vol. XXVII, No. 6, December, 1932.

(4) **Sanyal** begins this paper with a brief review of the types of fungus infection found in the lids, canaliculi, conjunctiva, and cornea of human beings. He describes a case of a married Hindu female, aged 15 years, suffering from ptosis due to a thickened upper lid on the conjunctival surface of which were reddish finger-like projections. The palpebral conjunctiva of the lower lid was uneven but smooth and covered by a yellowish-red mass. At operation the mass on the palpebral conjunctiva was found to be friable and contained numerous granules. It was removed by curetting. Pathological examination revealed a streptothrix. Recovery was complete in ten days.

**H. B. STALLARD.**


(5) The paradoxical reaction of the pupil to light is rare, but the paradoxical reaction to accommodation is much rarer. The first is almost always preceded by miosis, and is always associated with severe syphilitic lesions of the central nervous system. There are several conditions which may give rise to the diagnosis of paradoxical reaction to light, when this is not really present: of these the most common depends on the fact that the eye under examination may diverge either from muscular paresis or heterophoria; we may then often see movement of the pupil.

**HAROLD GRIMSDALE.**
(6) Tonelli, Lanfranco (Italy).—Deformation of the pupil as a sign of death. *Policlinico*, February 8, 1932.

(6) The problem of distinguishing with absolute certainty between real and apparent death is one that has given physicians concern since the earliest times. Many people have a fear of being buried alive although the physician who gives the death certificate has numerous methods of determining that life is extinct. Tonelli’s paper is referred to at length in the *American Medical Journal* for October 29, 1932. Here only the ocular signs of death will be referred to. A dilated pupil with a film on the cornea is usually taken to be a fatal sign, though it is certainly not a sure one. If the subject is examined ophthalmoscopically a few minutes after death the capillary redness of the optic disc disappears, and its surface becomes very pale. The arteries cease to be recognizable upon the disc, appearing to commence at its edge, beyond which they are at first distinct. The columns of blood in the vessels soon become interrupted and broken into segments, giving a beaded appearance. The arteries become unrecognizable, while the veins remain distinct with increased beading. The normal tint of the choroid lessens in intensity. The retina commences to become opaque, while there may be a red spot at the macula similar to that seen in embolism of the central artery. These appearances persist until, after some hours, the progressive opacity of the media prevents further observation. These observations were made by Sir William Gowers.

The injection of fluorescein into the circulation of a living creature quickly results in staining of the conjunctiva. This experiment must obviously fail in a corpse. It is pathognomonic of death.

According to Tonelli strong pressure applied with the two fingers to the eyeball of a living or apparently dead person produces no modification of the round contour of the pupil. However, in a corpse bilateral pressure applied to the eye, even though slight, will produce an easily observable deformation of the pupil, which becomes oval, triangular or polygonal, depending on the direction of the force applied. The research was carried out in 649 cases.

A. F. MacCallan.

(7) Oswaldo (Padua).—The variation of visual acuity with diminishing light. *(Sull’ acuttezza visiva a luce decrescente).* *Ann. di Ottal.*, September, 1932.

(7) In the observations which have been made on the subject of the variation of visual acuity in diminishing light, no account has been taken, says Oswaldo, of the size of the pupil. He has tested the acuity of a number of individuals both with the normal
pupil and with the pupil dilated by homatropine. The dilatation
of the pupil has two effects: by enlargement it allows a greater
amount of light to enter the eye but at the same time by un-
covering the periphery of the lens a greater degree of blurring
of the image is found owing to aberration. In the tests Oswaldo
used a Landolt's ring 1.5 mm. broad. This was placed at 6 m.
from the patient and illuminated by a lamp whose power was
varied by a resistance between 41.5 candles (Hefner) and
0.035 candles. The acuity in the undilated eyes showed
little decrease until the light had fallen to one-tenth of the maximum.
From this point onward the acuity fell rapidly. With the dilated
pupil the acuity diminished more rapidly, but below a certain
intensity, the two curves were very close. The curve of variations
of acuity with the undilated pupil is approximately a hyperbola.

HAROLD GRIMSDALE.

(8) Bardanzellu (Genoa).—A note on the study of oxycephaly.
(Contributo clinico allo studio dell'oxicefalìa). Arch. di
Ottal., May. 1932.

(8) The term "oxycephaly" has been used in two senses: to
indicate a form of skull, and also to indicate a form of pathological
closure of the cranial sutures, bringing about changes in the base
of the skull and in the optic nerves, without necessarily gross
deformity of the general shape of the skull. There has been great
difference of opinion as to the place of synostosis causing the
oxycephaly. Virchow thought that the fault lay in the premature
closure of the sutures between the occipital and the adjacent parietal
and temporal bones. Most other observers founding their opinions
on radiographs, think it due to closure of the sagittal and coronal
sutures. In the case which Bardanzellu narrates a premature
synostosis (lordosis basilare) was accompanied by atrophy of both
optic nerves, marked exophthalmos with spontaneous luxation of
the left eye, and nystagmus. The boy showed signs of rickets, but
as Bardanzellu points out, this could not have any bearing on the
oxycephaly.

HAROLD GRIMSDALE.

(9) Alajmo (Catania). On the importance of the colour fields for
the diagnosis of lesions of the chiasma. (Sull'importanza del
campo visivo dei colori per la diagnosi di "Sindrome

(9) Alajmo reports a case in which the examination of the
colour-fields in the only eye with vision led to the discovery of a
pituitary tumour. The administration of X-rays was followed by
considerable recovery of the eye previously blind, but the better
eye failed.

HAROLD GRIMSDALE.