I.—GLAUCOMA

(1) de Grosz, Emile (Budapest).—Cyclo-dialysis from an experience of one thousand operations. (Les indications de la cyclo-dialyse d'après un millier d'opérations). Arch. d'Ophthalm., October, 1932.

In a short and mainly statistical paper, de Grosz publishes some interesting facts and figures concerning glaucoma and the operative treatment thereof, from the University Clinique in Budapest. In “inflammatory” glaucoma in both the prodromal and the acute stage, iridectomy, introduced by von Graefe 75 years ago still holds its well-established position. In chronic “inflammatory” glaucoma the results (as noted by von Graefe himself) are unsatisfactory; it is this type of the disease which most frequently calls for operation. de Grosz’ experience, in common with that of his colleagues in other countries, is that, unfortunately, these cases rarely come under observation in an early stage of the disease. His figures are convincing: of 3,725 glaucoma patients, 8 per cent. came during the first week, 13 per cent. during the first month, 21 per cent. in the first half-year, and 39 per cent. after an interval of several years.

The alternative operations to iridectomy most frequently performed in Budapest are trephining and cyclo-dialysis in “chronic inflammatory” glaucoma; Lagrange’s irido-sclerectomy in “simple” glaucoma; de Wecker’s sclerotomy in the juvenile form. de Grosz has performed over 1,000 cyclo-dialysis operations and records the following results: In 87.7 per cent. of the cases of “chronic inflammatory” glaucoma the immediate result was favourable. Reliable late information was obtainable in only 300 cases: of these 62 per cent. were satisfactory at the expiration of one year, 54 per cent. after two years, 50 per cent. after five years. These figures justify the author’s opinion that the effect of cyclo-dialysis is not permanent. On the other hand a measure of compensation for this defect is to be found in the ease with which a repetition of the procedure, or more than one, can be carried out. In secondary glaucoma following luxation of the lens, cyclo-dialysis has proved the most effective operative procedure. Cyclo-dialysis is probably the least dangerous of all anti-glaucoma operations. In the author’s 1,000 cases no single instance of infection or of sympathetic inflammation was observed.

J. B. Lawford.

(2) From an extensive investigation with the gonioscope, covering about 100 normal eyes, 119 eyes subject to primary glaucoma, and 11 "partner-eyes," i.e., the symptomless eye in one-sided glaucoma, Werner arrives at the following conclusions:

1. In all normal eyes the filtration angle was open.
2. In 34 glaucomatous eyes gonioscopy, before any treatment was carried out, showed peripheral anterior synechiae in 12; in the remaining 22, all of them glaucoma simplex, the angle was open. Whilst all cases of inflammatory glaucoma showed peripheral anterior synechiae, in most cases of glaucoma simplex these were not present. Synechiae may exist before any signs of glaucoma; they are indicative of a disposition to glaucoma or of an unobserved attack. The width of the pupil has no influence on the formation of synechiae, nor have synechiae any effect on the pupil; the depth of the anterior chamber probably plays some part in the formation of adhesions. The presence of synechiae has but little influence on tension in untreated primary glaucoma. Synechiae in inflammatory glaucoma are probably results rather than causes of the glaucomatous process.

3. Gonioscopy carried out under miosis and under mydriasis in both normal and glaucomatous eyes revealed that:

(a) Widening of the filtration angle in miosis is caused by light or miotics, and narrowing but not occlusion of the angle in mydriasis caused by the contrary factors. In glaucoma cases with open angles the reactions were as in the normal.

(b) In 9 eyes with synechiae, miosis broke down the adhesions in 2 eyes completely, in 4 partially, and in 3 not at all.

(c) In 9 eyes with open angle, maximal adrenalin mydriasis kept the angle open.

(d) In 60 eyes treated with miotics, synechiae were still observed in inflammatory glaucoma, and an open angle in most cases of glaucoma simplex.

(e) In all cases with synechiae normal tension was obtained by miotics, though the angle was opened in only some of them. On the other hand, a normal tension was not obtained by miotics in all eyes with an open angle. The effect of miotics on synechiae is therefore not a factor in their lowering of tension.

(f) In adrenalin mydriasis a lowered tension was observed in most cases (6) though in some (3) the tension rose in spite of the angle remaining open.

(g) In after-examination of treated cases progression of the glaucomatous process was frequently observed, though in no case had the synechiae become more numerous or more marked.
In 44 eyes operations had been done. Iridectomy had been carried out in 11 and in the field of the coloboma the angle was found open. Elsewhere synechiae present were only mildly disturbed, if at all. In all but 3 cases the tension became normal, the best results being obtained in those cases in which the pillars were not well replaced. Iridencleisis was carried out in 19 cases; after operation peripheral synechiae were observed in eyes in which the angle was previously free—and in all but one case the tension became normal. Trephining was carried out in 14 cases. In all cases the anterior chamber was found to have been entered in front of the canal of Schlemm, and in most cases peripheral synechiae, such as seen in iridencleisis, were observed. Also in most cases vision had deteriorated in spite of regulated tension.

ARNOLD SORSBY.


(3) Berg gives a family tree of 6 persons in 7 generations, in 21 individuals in 5 generations juvenile glaucoma was present; only 17 of these (in 3 generations) were personally observed, the remaining 4 affected members being dead. The mode of inheritance is a simple dominant. In all observed cases the glaucoma was associated with more or less marked defect in the anterior layers of the iris—an anomaly not present in the unaffected members of the family. In two cases buphthalmos was present; and in all cases the anterior chamber was well formed—normal or rather deeper than normal. The affection ran a chronic course, the prodromal symptoms being marked features. In 8 members total blindness supervened, this setting in at ages varying between 15 and 53 years.

ARNOLD SORSBY.

II.—CONJUNCTIVA


(1) Barrie's unusual case is that of a man, aged 21 years, who worked in a brush factory. His actual job is as "a brush fibre mixer." In this employment he is liable to get "fibres" into the conjunctival sac. When this happens the worker gives the lid a
“flick” by which the lid is pulled forward and the fibre settles into position and, in time, works its way out at the inner canthus. When the patient consulted Barrie in April, 1931, he did so on account of myopia (not, the reviewer gathers, on account of a foreign body) and it was then noticed that there was a certain degree of enophthalmos of the left eye associated with an increased action of the left occipito-frontalis when an attempt was made to open the eyes widely.

“On everting the upper lid of the left eye a well defined reddish layer slipped forward as far as the cornea; a similar appearance was presented when the lower lid was everted. These two layers extended to the upper and lower fornices respectively; they did not extend upon the inner surfaces of the lids, nor did they reach the cornea.”

A portion was excised for examination and at the same time, if the reviewer understands the facts related, a bristle, half an inch long, was removed from the upper fornix. Examination of the excised specimen by Dr. J. R. Tennent proved negative, the appearances being that of “altered conjunctiva.” Some months later, in August, 1931, the condition of the conjunctiva remained about the same, but, one year after the first examination, “the neoplasm had disappeared except for traces close to the upper fornix and a slight wrinkling of the conjunctiva on eversion of the upper lid.”

The author comes to the conclusion (1) That this is an occupational disease and that similar cases will be found from time to time. (2) That the rapid healing which took place between August, 1931, and April, 1932, was due to the fact that during this period the patient had been unemployed “and it seems reasonable to conclude that his recovery was due to the cessation of the irritation due to the entry of bristles into the conjunctival sac and their lodgment there for indefinite periods.”

**Ernest Thomson.**

(2) *Sorour (Cairo).—Spring catarrh; treatment by splenic extract.*

*Tobgy (Cairo).—Spring catarrh.*


(2) *Sorour’s* reason for treating spring catarrh by injections of splenic extract was as follows:—In Egypt there is an endemic form of splenomegaly associated with bilharziosis of the liver, alimentary canal and urinary passages. Active bilharziosis is, as a rule, accompanied by an appreciable eosinophilia in the blood. Cases of active bilharziosis complicated by splenomegaly frequently show
leucopenia and very low eosinophilia or perhaps none. If splenec-
tomy is done the eosinophiles begin to appear and increase in the blood,
the condition persisting for a few months. It was therefore thought
that the large hyperactive spleen must have an inhibiting influence
on the production of eosinophiles, even in the presence of an
eosinophile provoker such as the bilharzia toxin, or at least a
destructive action on the eosinophiles in the blood. The author
had in his mind the eosinophilia localised in the conjunctival sac
which is so characteristic of spring catarrh, so it occurred to him to
treat spring catarrh with an extract from fresh spleens removed
during the operation for splenomegaly. The author of this paper,
who is a pathologist, is of opinion that this treatment is of some
value. If he pursues his researches he will be able to note that the
presence of internal parasites produces an eosinophilia of the blood
but not of the conjunctiva, while in spring catarrh there is usually,
but not always, eosinophilia of the conjunctival secretion, but in
the absence of internal parasites or other cause there is no eosino-
philia of the blood.

Tobgy gives a good clinical description of spring catarrh. He
has tried the effect of splenic extract as prepared by Sorour and found
it to be valueless as a treatment. He has had some fair results from
treatment with radium of 25 palpebral cases. He used 10 milli-
grammes of radium bromide kept in a 1 centimetre square plaque; the
gold filter was 0.3 mm. thick; the application was given at intervals of
two weeks; each application was for 6 to 10 minutes directly to
the conjunctiva of the everted lid. The full course was reckoned
to be about 400 milligramme minutes.

A. F. MacCallan.

(3) Pillat, A. (Pieping, China).—Production of pigment in the

(3) Pillat's name is already well known in connection with
work on deficiency diseases in China, and the present paper deals in
considerable detail with the pigmentary changes occurring in
vitamin A deficiency. The various stages of the disease comprise,
night blindness, "prexerosis corneae," xerosis epithelialis, and
keratomalacia of adults. Pigmentation may develop in any of
these. Its intensity varies in different cases and in different parts
of the same eye, being most marked in the lower fornix; it varies
also with the duration of the vitamin A deficiency, rather than with
the stage of the disease. The pigment is produced by the local
activity of two types of conjunctival cells, the dendritic cells or
melanoblasts and the ordinary epithelial cells. In cases of long
duration almost every one of the latter contains a considerable
amount of pigment. Under treatment with cod liver oil these cells
are gradually exfoliated and replaced by unpigmented ones. The pigment is thought to be produced as a protection to the devitalised cells against the effects of light.

**F. A. W-N.**


(4) The bacillus of Koch-Weeks' conjunctivitis is not very easy to cultivate; but the disease almost always occurs in epidemics, great or small. It is important to know how the contagion is handed on. It has been supposed that the bacilli are carried into the air by the actions of coughing or sneezing. If this is so, the bacilli must exist in the nose and naso-pharynx. **Cusumano** has examined the bacterial flora of these regions of 25 people who were suffering from this disease; he has found no evidence of persistence of the bacilli in the secretion of the nose or naso-pharynx. Since there can be little doubt that the bacilli enter the tear passages and could by them reach the nose, they must be prevented in some way. The author thinks it probable that the bacilli, which are easily killed, are destroyed by the antiseptic action of the tears. It seems clear from this paper that the contagion is not conveyed by coughing or sneezing.

**Harold Grimsdale.**


(5) **Gallenga** experimented on rabbits, injecting intravenously a large dose of trypan blue and, following this, instilling a culture of pneumococcus into the cul-de-sac of the conjunctiva; special care was taken to avoid injuring the conjunctiva in any way. He found that in all the rabbits treated with trypan blue, the pneumococcal injections produced an acute conjunctivitis and the animals in all cases lost weight and died.

When smaller doses were injected, and in the control rabbits in which no injection was made, the pneumococcus produced no serious conjunctival reaction.

The author thinks that the diminished immunity was due rather to the general toxic action of trypan blue, than to a hypothetical block of the cells.

**Harold Grimsdale.**
III.—MISCELLANEOUS


Alajmo reports a case at some length in which a tuberculoma attacked the lenticular ganglion and the optic thalamus together with the posterior limb of the internal capsule. The man had during the last weeks of his life developed loss of conjugate movements and papilloedema. Alajmo discusses the mechanism of the production of these phenomena.

HAROLD GRIMSDALE.


De Petri gives the history of two cases of this rare secondary infection; in both the affection was bilateral. The onset was sudden and the course of the disease rapid. Examination of the bacterial flora of the conjunctival sac showed no gonococci. De Petri concludes that the inflammation was set up by toxins elaborated in the urethra and thence poured into the circulation.

HAROLD GRIMSDALE.


In the latter half of 1929 there was a limited epidemic of psittacosis in Florence. The case which is the subject of this report had not been in contact with any parrot, but had nursed her husband who had fallen a victim to the disease.

After the acute stage had passed, the patient complained of defective vision, and it was found that she showed bitemporal hemianopia. It is not unlikely that this came on during the acute stage when the headaches were severe, but was then overlooked. Later, the hemianopia disappeared and the fields were largely regained. Baquis imagines that there must have been a focus of meningitis which led to the disturbance of the optic nerves, which remained pale. In the paper the fields for the early and late stages are accidentally transposed.

HAROLD GRIMSDALE.
(4) Bardanzellu and Trovati (Genoa).—The clinical relations between trachoma and tuberculosis. (Sui rapporti fra tracoma e tuberculosi). Arch. di Ottal., 1931.

The importance of the diathesis in local disease has been a subject of much recent study in Italy. The present paper attempts to discover whether trachoma is influenced by those general predispositions which are commonly called “diatheses.” Many diseases have been proved by clinical experience to be influenced by hereditary constituents. The receptivity of any individual toward any disease is determined, at least in part, by his hereditary hormonic chemistry.

Bardanzellu and Trovati have examined 100 cases of trachoma selected at hazard from the patients attending the anti-trachomatous clinic, with special reference to tuberculosis. All these were examined by radioscopy and in many cases by radiography; further, the reaction of von Pirquet was noted. Seventy patients showed signs of old or active tuberculous trouble. They conclude that there is a clear concomitance between trachoma and tuberculosis.

HAROLD GRIMSDALE.

(5) Cattaneo (Sassari).—Raynaud’s disease and cataract. (Morbo di Raynaud e cataratta). Arch. di Ottal., December, 1931.

Cattaneo has observed a case of Raynaud’s disease in which there was lenticular change in both eyes. He remarks that this complication has not hitherto been reported. He thinks the age of the patient (forty-seven) would not account for the opacity; at that age senile cataract is hardly to be expected. He therefore suggests that the disturbance of the endocrine glands, of which Raynaud’s disease is the expression, is the true cause of the lens change.

HAROLD GRIMSDALE.

(6) Koch (Trieste).—Spontaneous tetrophthalmos in an amphibian. (Ricerche sul tetroftalmo spontaneo degli anfibi). Boll. d’Ocul., December, 1931.

The embryo, which is the subject of this paper, was found in an aquarium among a number of normal larvae. No other was affected. The monster represents a slight degree of anterior cleavage. Of the four eyes one was microphthalmic and showed no trace of a lens. The cause of the aphakia is discussed.

HAROLD GRIMSDALE.

Moretti has experimented on the oncolytic properties of the various tissues and humours of the eyes of rats in relation to a suspension of cells from a neoplasm; he finds that in these animals the oncolytic power is nil, and thence concludes that the eye is specially susceptible to attack by new growths.

Harold Grimsdale.


It is often difficult to interest these patients sufficiently to allow the taking of their visual fields accurately. Mazzi finds from the study of fields taken repeatedly in twenty melancholics, that though, when uninterested in the performance, the fields tend to be found smaller; in the later examinations, when their interest is excited, the fields often show slight enlargement. He concludes that the peripheral retina in these subjects has normal function.

Harold Grimsdale.

(9) Learmonth, James R. (The Mayo Clinic, Rochester, Minnesota).—The work of a neurosurgical clinic.

Paterson, J. E. (Glasgow).—A series of lesions in the vicinity of the optic chiasma: seven cases verified by operation.

Meighan, S. Spence (Glasgow).—Remarks on the diagnosis of chiasmal lesions from an ophthalmological aspect.


The four papers by Learmonth, a visitor from the Mayo Clinic, Paterson, Meighan and Black, were read at successive meetings of the Royal Medico-Chirurgical Society of Glasgow in November and December, 1931. They represent collectively a fine piece of team work, the abstraction of which is a practical impossibility by anyone who is not thoroughly educated in all four of the aspects concerned. The reviewer, therefore, recommends those ophthalmologists who are interested particularly in the subjects concerned, that they read the series of articles as a combined whole, which will be found in the *Glasgow Medical Journal* for September, 1932, of which Journal they occupy 46 pages.

Ernest Thomson.