Now the transilluminator is pressed against the wall of the globe somewhere about the right spot, which may be done by any assistant or nurse. Whilst ophthalmoscoping, the surgeon gets in view the light of the transilluminator which penetrates the sclera. He is then able to direct this light in such a way that it coincides with the spot of the retina which must be treated. If, finally, this is the case the surgeon allows a diathermic current to run through the wire of platinum by means of a foot-circuit-closer. By doing so a small burned spot on the sclera will mark the exact spot of the centre of his pencil of light. The apparatus is now taken away and the therapeutic diathermic current is applied, either surface coagulation alone or combined with perforation, depending on the case. After treatment the instrument is useful for control of the results.

Why not go one step further and make a sort of "Universal instrument," by which it would be possible to apply at once the necessary amount of diathermic current at the same time as marking the exact spot?

This question was asked by Professor Weve when I showed him the apparatus. Weve made such an instrument in which the wire of platinum was made movable so that it could also be used for perforation, but for this purpose it was necessary to change the particular shape of the glass bar and to make it much thicker and less curved. By doing so it becomes less practical. After some experiments we abandoned this idea. The apparatus should only be used for marking, not at the same time for therapeutic purposes.

I have been using this instrument in private work for over a year and have obtained satisfactory results.

ABSTRACTS

I.—GENERAL MEDICINE


(1) Kreibig holds that apart from orbital and retinal infiltration, leukaemia also gives characteristic conjunctival lesions. They are of particular significance as they may be the first manifestation of the disease. His article is based on isolated cases reported
in the literature and on five cases of his own. He distinguishes three clinical types: (1) Most commonly the infiltrates affect the fornices; diffuse, oedematous thickening is present in which follicles may be distinguished; only exceptionally does this thickening spread on to the bulbar or tarsal conjunctiva.

(2) In some cases the bulbar conjunctiva is mainly affected by this diffuse thickening, with the fornices relatively free; the swelling is most marked at the limbus, and in these cases exophthalmos is generally present. The infiltrate spreads backwards in and around the capsule of Tenon.

(3) A nodular form in which brown or bluish-red clearly demarcated nodules are seen in the conjunctiva, especially in the fornices. These particular changes occurred only in a leukaemic lymphadenosis.

Attention is drawn to the orbital lymphatics as a channel for spread and to the fact that conjunctival changes are not seen in the myelogenous form of leukaemia.

ARNOLD SORSBY.


(2) Cogan reports a case of uveo-parotitis in a woman, 29 years of age, who had suffered from mumps 6 years previously and in childhood had tuberculous cervical glands with sinuses, now healed. Facial paralysis of toxic origin, dental abscesses, and Vincent’s infection of the mouth were other clinical signs of interest besides those typical of the disease.

The literature of this subject is briefly reviewed and the aetiology, clinical features and sequelae discussed. The author is in favour of the theory that tuberculous disease of a fibrosing, non-caseating, lymphadenopathic type is an aetiological factor although he admits that tubercle bacilli have never been isolated from the affected lymph nodes and parotids.

H. B. STALLARD.


(3) Kruskal and Levitt review the literature of uveo-parotitis and give a brief account of the main clinical features of this disease. They support the conception that tuberculosis is an aetiological factor.

They record 2 cases from their practices. One case, a married woman, 34 years of age, had an enlarged supra-clavicular gland removed and sectioned. The histological characters bore some resemblance to tuberculous lesions but showed no areas of caseation. Giant cells surrounded by endothelial cells and
lymphocytes are described but there is no note about the staining of these sections to show tubercle bacilli and none to the effect that a portion of the gland removed was minced and injected into guinea pigs. The authors state that in this case the Mantoux test was negative. Few pathologists would dogmatize about the histological appearances as shown in the excellent microphotographs which accompany this paper. It is evident that the cells are typical of those seen in chronic granulation tissue. In similar cases reported by other authorities the histology of the lesions has revealed no areas of caseation and tubercle bacilli have not been seen.

A slight anaemia, palpable spleen, intermittent pyrexia rising to 100.8°F. and bilateral enlargement of the lymph nodes at the hila of the lungs are other clinical features.

H. B. Stallard.


(4) Thiel records a case of hepato-lenticular degeneration (Kinnier Wilson disease) in a boy, 15 years of age. In addition to the neurological signs, involvement of the liver and the Kayser-Fleischer ring were present. The interest in this case was the presence of a sunflower cataract, typically seen in chalcosis, and previously noted in hepato-lenticular degeneration by Siemerling and Oloff and also by Vogt, who recorded his case in detail in the second edition of his Atlas. The possibility of the sunflower cataract in this affection being due to haematogenously deposited copper is discussed and its bearing on the nature of the pigmentation of the Kayser-Fleischer ring is discussed. A colour plate illustrating the appearances is given.

Arnold Sorsby.


(5) Carroll's paper is based on the examination of 55 patients with tobacco-alcohol ambyopia. The condition would appear to be fairly common in New York, occurring in 0.3 to 0.5 per cent. of all new eye patients at one hospital. Among the 55 only two were women. The average age was 55.6 years, the youngest being 25 and the oldest 77. Onset was usually gradual. In one case which came for refraction 20/20 was obtained in each eye without a glass, and forty-nine days later the right eye could see only 10/200 and the left 20/100 with typical field changes. Five weeks
after giving up tobacco, vision had improved to 20/30. Illiterate patients complained surprisingly little about their symptoms while those who retained sufficient visual acuity to read found they could do so better with the left eye, than with the right, because of the position of the scotoma. This scotoma was caeco-central and usually much larger for red than for blue; in no case was there any contraction of peripheral fields to a 3/300 white object. Central vision was usually much diminished though one patient could see 20/20. No pathological changes were detected in the eyes except for the presence of pallor in the temporal halves of the discs in 19 patients and in 16, faint fine mottling of the macular area of the retina. With regard to aetiology the author states that it is often impossible to tell whether the amblyopia is due principally to the alcohol or to the tobacco. He records a case where cure followed abstinence from alcohol while cigarette smoking (14 packages a week) was continued. Susceptibility is of more importance than quantity, since some patients used only small amounts of alcohol and tobacco and yet developed amblyopia; none had diabetes but two showed a trace of glycosuria on one examination. None showed any hypersensitiveness to tobacco by intradermal tests. Abstention is the most important factor in treatment, but it is worthy of note that among 17 patients who did not give up their tobacco and alcohol, 3 improved.

F. A. W-N.


(6) Böck and Rizak recall the literature on the cerebral factor in the genesis of retinitis pigmentosa, and in reporting a case of this affection in a man, 28 years of age, the subject of gigantism of the late eunochoid type, they hold that the findings support the view as to the cerebral origin of the retinal degeneration. There was no history of heredity or consanguinity, but oliguria and diminished salt secretion were present. Therapeutic tests with pituitary extract, chloretone and harmin supported their reading of the case as one of affection or maldevelopment of the midbrain.

ARNOLD SORSBY.


(7) As opposed to the current views that eclamptic retinitis is caused either by the direct action of toxins on the retina or by a
vascular spasm, Koyanagi advances evidence that the changes are produced by the secretory activity of the pigment epithelium. From histological study of two cases he shows the presence of subretinal exudates made up of multiple drops which in part give the staining reactions of hyaline tissue. Moreover, the pigment epithelium shows in addition to its normal components bodies that he regards as the morphological precursors of the drop-like exudate. The intermediate stages in this transformation are traced and illustrated. The ultimate cause of these changes is traced to hyaline degeneration of the smaller choroidal arteries, and lecithin in the serum is perhaps the toxic agent responsible for the vascular changes.

Arnold Sorsby.


(8) Much and Hüppi record the case of a woman, 37 years of age, who developed bilateral acute optic neuritis with complete blindness and inactive pupils. A week later typical symptoms and signs of acute poliomyelitis developed. Subsequently, some optic atrophy supervened but vision was practically fully restored, though a central scotoma and shrunken fields for colour persisted for some time; paresis of accommodation was also present for some time. The case is of interest in that the first sign of the widespread disease was ocular in nature; the circumscribed ophthalmoplegia interna and the optic neuritis must have been due to localized action of the virus. [The case is also of interest as a parallel to neuromyelitis optica.—A. S.]

Arnold Sorsby.


(9) In an article illustrated by a number of tables, Brana and Radnai give an analysis of 100 cases of vascular hypertension studied from both the general and ocular aspects. They find that the height of the systolic or diastolic pressure is no guide to prognosis in any individual case; much more can be learnt from the appearances in the fundus, even though the fundus changes
have no parallelism to the blood pressure. Classifying the fundus changes into three groups according to the degree of arteriovenous compression, they found that whilst in mild cases, the mortality within a year was 2 per cent., medium cases gave 60 per cent. and the severest, 100 per cent. (9 cases).

ARNOLD SORSBY.


(10) Knapp reports three cases suggestive of Raynaud's disease in patients, 38, 18 and 28 years of age. They all had phenomena of spasm of the retinal arteries and in one case, the onset and termination of the spasm was observed ophthalmoscopically. This attack only lasted one minute; the disc had become pale and the patient had the sensation of sudden clouding of vision. The author holds that the spasms are of nervous origin and that permanent narrowing of the arteries supervenes only if the attacks are persistent or of frequent recurrence.

ARNOLD SORSBY.


(11) Damel has studied in detail a case of occlusion of the central artery of the retina from 48 hours to 5 months after its occurrence. His article includes excellent photographs of the retina taken on the first visit of the patient, and showing the condition of the arteries, the disc and the macular region; photographs were taken at later intervals showing the re-establishment of the circulation and the changes taking place, especially in the macular region and at the disc. He discusses the time of onset of the macular oedema, and also the causes and time of appearance of the cherry red spot. The author quotes in some detail the opinion of various authorities on this subject, and he considers that the differences in appearance of the vessels in these cases of central block as described by other authors is simply due to the moment at which the patient was examined.

The author's patient had had a stroke 5 months before he suddenly lost the vision in the left eye, this stroke left him with a right hemiplegia.

The pathology of this condition has been treated in great detail.

E. E. Cass.

Terry has investigated the incidence of angioid streaks in osteitis deformans. His paper describes the fundus appearances of angioid streaks and the histopathological findings of Verhoeff's case in which there was found localized proliferation of the retinal pigment epithelium in furrow-like creases, plication of Bruch's membrane and the choriocapillaris, fibrosis of the choroid, sclerosis of the choroidal vessels, tears and local separation of the choroid from the sclera and ruptures in Bruch's membrane.

In 106 cases of angioid streaks reported in the literature osteitis deformans was evident in 84.9 per cent., and all the cases in which these two diseases were associated exhibited marked bony changes in the skull. Angioid streaks may be present before osteitis deformans is clinically demonstrable. The author states that radiographic evidence of osteitis deformans may be present before clinical signs appear and therefore urges the necessity for this investigation in suspected cases. He believes that arteriolar sclerosis combined with some other pathological factor, at present unknown, may initiate changes in bone and in the choroid producing sclerosis in these structures.

Of 22 cases of osteitis deformans examined by the author 3 showed angioid streaks, 4 a 'halo' around the optic disc due to loss of pigment and degeneration in the choroid, one choroidal fibrosis, 3 colloidal excrescences in the fundi, 5 retinal arteriosclerosis, 2 retinal haemorrhage, 3 choroidal haemorrhage, 1 central retinal vein thrombosis and 1 case showed pseudo-xanthoma elasticum.

Walker has pointed out the similarity between the structure of the choroid and that of the organ of Corti and suggests that sclerosis in these structures might explain both the angioid streaks and deafness associated with osteitis deformans.

H. B. Stallard.


Pavia states that only two cases have been recorded in which alterations in the optic nerve have occurred during an attack of chicken-pox.

The first is a case recorded by Hutchinson in the Ophthalmic Review of September 1886. The other is recorded by Chavernac in 1906.
The author's case is one of a child, 9 years of age, who had had chicken-pox a month before; the temperature had been high for 5 days, the child had complained of pain in the limbs, it frequently vomited and had severe headaches. After the fever had left him for 15 days, he went back to school, and it was then found that he could not see to read nor write.

On examination, the right vision was 5/10 and the left vision was 6/10. There was a papilloedema in both eyes and also an oedema of the surrounding retina.

X-rays of the skull showed nothing abnormal. The Wassermann reaction was negative, the cerebro-spinal fluid pressure was "40" and came down to "10" after 8 c.c. had been extracted. Nothing abnormal was found in it, but immediately after the lumbar puncture, the child felt better. He was given 10 injections of 25 per cent. glucose intravenously. At the end of a month the right vision had improved to 8/10 and the left to 9/10. There was then some pallor of the discs, which were of normal size and had well-defined edges. The veins and arteries were normal in calibre, but in the macular region there still remained some slight oedema.

The author gives the details of Chavernac's case in which there was also a rapid improvement in the vision.

Pavia suggests that the oedema in these cases is part of the picture of a very mild serous-meningitis, and says that it very frequently follows infectious conditions in children. He himself has observed it in cases of pneumonia, influenza, erysipelas and typhus, and above all in cases following infections of otic origin.

He draws attention to the fact that excellent results are obtained from lumbar puncture and hypertonic injections, both of which are active agents in bringing down intra-cranial pressure.

E. E. Cass.

II—MEDICAL OPHTHALMOLOGY


(1) Steen prefaces the account of his case with an excellent review of the disease. His patient was a girl, aged one year and 10 months, admitted to Dr. Steevens's Hospital in March, 1933.

The child had thrived up to the age of nine months, when her weight was 23lbs. She was holding her head up and using her arms and legs, and though she had not been able to sit up of her
own accord, she was able to reach out for things and to recognise her parents.

At nine months she became quiet, and later did not seem to recognise people. Her weight, at just under the age of one year, was nearly 32lbs., but it dropped steadily until, on admission, it was 18lbs. 4oz.

The family history is of much interest, no Jewish blood could be traced on either side of the family. In 1920-21 the father had been in a mental hospital suffering from delusion. He had apparently quite recovered and was at work. There were 11 children, of whom the patient was the youngest. The eldest, a boy, aged 20 years, is perfectly healthy. Twins followed, one, a boy, died at the age of five months from convulsions; the other, a girl, died from the effects of burns, at the age of nine years. The fourth member of the family is a healthy boy, aged 17 years. The fifth, a girl, aged 14 years 6 months, is healthy. Next came twins, prematurely; one stillborn, the other surviving 24 hours. The eighth member is a girl, aged 10 years, and healthy. The ninth, a boy, would seem to have been a case of Tay-Sachs' Disease. He did well until nine months of age, then deterioration appeared, and he died at the age of 21 months. The mother said that the course of the illness was exactly similar to that of the youngest child. The tenth member of the family is a girl, aged 4 years, and healthy.

Steen's patient on admission lay on her side and took no interest in her surroundings. The fontanelle was open and the head circumference was 19.75in. The teeth were backward; an almost constant chewing movement of the mouth was noted, with occasional facial twitching, like that seen in uraemia. Chvostek's sign was negative. Feeding was badly performed; no retraction of the head was present, no pain or resistance on flexing the head; and marked wasting was evident everywhere. Heart, lungs, abdomen and urine were normal.

The attitude was in some respects like that of decerebrate rigidity. The legs were extended, the feet, plantar-flexed, the arms flexed slightly at the elbows, markedly flexed at the wrists and finger joints, with inversion of the thumbs.

The pupils were equal, rather large, and reacted sluggishly to light. Well marked nystagmus was present, strabismus was noticed occasionally. Hearing was hyperacute. General wasting of the muscles was apparent, the deep reflexes were all exaggerated. Incontinence of urine was present throughout her stay in hospital. The fundus showed the typical picture on each side.

The article is illustrated by excellent pictures showing the child with typical attitude of the limbs and characteristic position of the
hand and wrist. There is also a monochrome plate of the fundi. The age of the child at death is not given.

R. R. J.


(2) Bhaduri read a paper on this subject at the Fourth Annual Conference of the All-India Ophthalmological Society in April, 1935. He reported nine cases of papilloedema in epidemic dropsy. In his present article a further case is reported, and the suggestion is advanced that the swelling of the nerve-head is probably due to raised intra-cranial pressure resulting from excess formation of cerebro-spinal fluid due to the involvement of the choroid plexuses in epidemic dropsy.

His case was that of a Hindu male, aged 43 years. He had suffered from epidemic dropsy for two months.

The intra-ocular tension was raised to 40 mm. Schiotz in the right eye and 32 mm. in the left; central vision was good. Examination of the field showed a full periphery and slight increase in the size of the blind spot.

There was 4 to 4.5 D. swelling of the right disc and 5.5 to 6 D. on the left side. The left fundus, in addition, showed massive haemorrhages on the disc and in the surrounding retina. The Wassermann reaction in the blood was negative and the urine normal. The patient refused to submit to lumbar puncture. A month later the patient was much better and he then ceased attending. Complete subsidence of the papilloedema in this disease usually occurs within two to three months.

An excellent coloured plate of the fundus accompanies the paper.

R. R. J.


(3) Simões describes a case that came to the Santa Isabel Hospital complaining that the vision in the right eye had been a little diminished for a few days. The patient admitted that he had had syphilis. He was diagnosed as optic neuritis and was treated with injections of 914. Twelve days later he developed an intolerable headache and on examination was found to have a marked oedema of the right optic disc. The headache became more and more severe, and a lumbar puncture was performed for diagnostic purposes. There was a marked increase of pressure of the cerebro-spinal fluid, which contained 0.6 per cent. albumin and 986 cells per cubic centimetre.
The theories of causation of a unilateral oedema are discussed at length. The author thinks the reason in this case was compression of the optic nerve with inflammatory oedema. He gives the differential diagnosis from cerebral tumour and other lesions. The patient was given urotropin and bismuth intravenously and another lumbar puncture was performed 15 days later. After this the oedema of the disc began to subside and finally the fundus returned to normal.

The author then discusses the action of arsenic on the optic nerve and also the "pros" and "cons" of giving arsenic in syphilitic cases where the optic nerve is affected. He discusses the relative toxicity of the various arsenical products used as anti-syphilitic remedies.

E. E. Cass.


Bengal is the home of cholera. Ocular changes in the disease have been noted since 1846, but since the appearance of Elliot's "Tropical Ophthalmology" few papers have been published.

Bhaduri has had experience of cholera cases in the Carmichael Medical College Hospital and in private practice.

After a brief discussion of the various ocular symptoms observed by others the author states his own findings.

"The pupillary reaction cannot be treated as of any prognostic importance regarding life." He has also observed that owing to the damaged epithelium of the cornea, due to the enormous loss of fluid in this disease, very weak hypo- or isotonic solutions of mydriatics give a maximum and prolonged mydriasis.

Lens opacities were seen in only two cases, and they were cases of senile cataract in patients who had contracted cholera. In a third patient, aged 19 years, nuclear sclerosis was found in one eye. It persisted after recovery.

No striking changes were noted in the papilla in his series, but an optic atrophy case became quite blind on the fourth day after developing cholera.

Dark discolouration of the retinal veins was very noticeable; not so in the arteries. A broken column in the veins was noted in three cases.

The intra-ocular tension was, of course, lowered. The author finds that the intra-ocular tension varies almost inversely with the specific gravity of the blood in cholera cases.

R. R. J.

Granström gives an exhaustive survey covering 160 pages on the changes in refraction in diabetes. There is a detailed study of 77 cases in addition to a review of the literature. He found that generally the changes in refraction are in the direction of an increase of the total refraction of the eye. Decrease in refraction occurs only in untreated cases of diabetes; such decrease ceases as soon as excretion of sugar is controlled therapeutically. He also points out that it would appear that increase of refraction can also occur if excretion of sugar is diminished for other than therapeutic reasons. Changes of refraction occur frequently at a time when diabetics are first treated, irrespective of whether insulin is used or not. In the later stages in the treatment of diabetics, increase of refraction is less frequent. Changes in refraction seem to be distributed equally over different ages and they are not more common at the presbyopic age, though marked changes in refraction seem to be definitely more frequent in young individuals. A transient increase in refraction occurs a few days after the beginning of treatment and generally lasts from two to four weeks. Regression is slower than the development of these transient refractive changes and in half the cases was not associated with any subjective symptoms. The author could find no association between the presence of acetone bodies and acidosis and changes in refraction, nor could he establish any relationship between the state of partial hunger during treatment and decrease of refraction.

As regards the cornea, the author confirms the observation of earlier investigators that no changes in the radius of curvature occur. He further found that there is no change in the position of the macula. Increase in refraction was associated with an increased positive aberration, decrease with a diminished positive aberration. The changes in refraction seemed to be localised to the axial part of the refractive media. Transitory changes in refraction were found to be frequently associated with a diminished range of accommodation in patients under the age of 40. This was practically the rule in patients under the age of 30. After 30 there seems to be no effect on a range of accommodation. The changes in refraction are caused by changes in the lens. Stigmatoscopic investigations tend to show that these changes are intracapsular and are probably caused by changes in the index power of the central parts of the lens, a view which is supported by the findings as regards accommodation. He concludes by discussing the possibility of the changes in the lenses being caused by a disturbance in the water and salt metabolism in diabetics.

**Arnold Sorsby.**
(6) Villani (Rome).—The lesions of the pigmented epithelium of the iris and ciliary body in artificial diabetes. (Studio istologico delle lesioni dell'epitelio pigmentato dell'iride e dell'epitelio del corpo ciliare del diabete sperimentale). Ann. di Ottal., September, 1934.

(6) It is well known that the pigment epithelium of the iris is altered and the pigment loosened in glycosuric patients. Villani has produced glycosuria artificially in rabbits and has examined the pigment epithelium; he finds, that degeneration is constant, under one of two forms: either there is granular degeneration of the cell-protoplasm with alteration of the chromatin of the nucleus, or there is vacuolated degeneration of both parts of the cell. At a late stage there is necrosis of the cells and a complete loss of all the pigmented epithelium from the back of the iris.

HAROLD GRIMSDALE.

III.—MISCELLANEOUS

(1) Cavallacci (Pisa).—The effect of irradiation with ultra-violet rays on the ascorbic acid content of the rabbit's eye. (Sul comportamento dell'acido ascorbico (Vitamin C) nell'occhio di coniglio irradiato con raggi ultravioletti). Arch. di Ottal., May-June, 1935.

(1) Cavallacci discusses first the relation of ascorbic acid to vitamin C. He concludes that it is probable that vitamin C is not a simple body but that there are other constituents in addition to ascorbic acid; this, however, has the same property of protecting against scurvy, though according to some observers it is not so powerful.

Experiments have shown that this acid is present in considerable quantity in the lens and in the aqueous. In the aqueous it is much more abundant than in the blood and it has been suggested that it is manufactured in the lens and thence comes into the aqueous. Further knowledge on this point is very desirable.

In the experiments on which this paper is based, the author has subjected one eye of rabbits to irradiation by ultra-violet rays for various periods and has compared the content of ascorbic acid with that of the other eye. He supposed that the increased chemical activity under the rays would alter the amount of the substance; he finds a reduction in all the tissues of the eye. He thinks that in the retina the reduction is due to increased oxidation accelerated by the action of the rays; but that in the lens and humours, it is secondary to the intense congestion which follows exposure to ultra-violet light.

HAROLD GRIMSDALE.
(2) Pierguidi (Trieste).—The glutathione content of the ocular liquids and tissues. (Sul contenuto in glutazione di alcuni liquidi e tessuti oculari). Boll. d'Ocul., July, 1935.

A very important factor of internal respiration is glutathione, a compound of two molecules of cystein; these combining give up $H_2$ acting as reducing agents, and become cystine; under certain circumstances this takes up the H again and acts as an oxidiser. These reactions are constantly reversible.

Pierguidi finds that the cornea contains a large amount of glutathione. It was to be expected that the avascular cornea would hold in its tissues a large amount of substance to aid in its internal respiration. This is even more important for the lens which has to rely entirely on such substances to supply the oxygen necessary for its metabolism; it would seem that the lens has the power of selecting glutathione from the ocular liquids and storing it in quantity.

HAROLD GRIMSDALE.

(3) Villani (Rome).—The healing of wounds of the lids. (Studio sperimentale sulla riparazione delle ferite delle palpebre). Boll. d'Ocul., August, 1934.

Little is known of the process of healing in wounds of the lids. Villani has attempted to fill this gap in our knowledge by experiments on rabbits. They show that wounds that lie transversely in the lid heal rapidly, since there is no tendency for the edges to become separated. Vertical wounds, involving the free margin of the lid are much more likely to be followed by deformity, since the edges are drawn apart by the orbicularis. To secure rapid healing without deformity it is advisable to suture the conjunctiva since this may become intro- or extruded, and it is especially necessary to secure accurate coaptation of the two parts of the free margin.

The author notes that in his experiments, the Meibomian glands in most cases undergo necrosis in whole or part.

HAROLD GRIMSDALE.


It is generally assumed that dacryocystitis follows on stricture of the nasal duct. Ovio thinks that stricture, on the other hand, follows dacryocystitis. Anelli has examined the condition of the passages in 100 cases. He has tested the freedom of the passage by instilling a coloured solution into the conjunctival sac.
and observing the possible colouration of a pad of cotton wool in
the nostril of the same side. If the passage is pervious, the colour
will be seen within a few minutes. He finds that in the early
stage of dacryocystitis, when the contents of the sac are not
purulent, the passage is sometimes free, but when the process
is more advanced, the passages are always completely
obstructed. He thinks that generally the inflammation of the duct
which leads to obstruction, has origin in inflammation of the nasal
mucous membrane, which spreads to the lining of the duct.

HAROLD GRIMSDALE.

(5) Reed, H. and Meyer, L. (Chicago).—Bilateral temporal

(5) Reed and Mayer report a case of a Chinese male, 49 years
of age, in whom bilateral temporal pterygia were present and the
conjunctiva on the nasal part of the globe was unaffected by this
disease. They comment that this is the only case reported in the
literature up to date in which these clinical features are present.

H. B. STALLARD.

(6) Kraupa, E. (Brünn).—Late glaucoma in interstitial keratitis.
(Das Spätglaukom nach Keratitis parenchymatosa). Zeitschr.

(6) Kraupa reports three cases of late secondary glaucoma
in interstitial keratitis, in patients aged 36, 52 and 56. In the
first case cycloidalysis was needed after iridectomy; in the second
cycloidalysis after trephining. In the third case an iridectomy by
itself was successful. He argues that the prognosis is not so bad
as is generally believed, especially if cycloidalysis is performed,
but this operation is advised as the first interference only when the
iris is heavily damaged by the inflammation.

ARNOLD SORSBY.

(7) Cepero, G. and Gomas, L. (Havana).—Treatment of iritis by
diathermy. (Die Diathermie Behandlung der Iritis). Zeitschr.

(7) Cepero and Comas relate their experience of the use of
diathermy in 230 cases during the course of two and a half years.
They speak enthusiastically of its value in iritis, having experience
of 57 cases. They use a frequency current of 2 million and hold
that the effect is produced not merely by the heat engendered but
by protoplasmic changes. As contra-indications they give
haemorrhagic processes as also intra-ocular septic lesions. An
average of 7 to 10 sittings are necessary; atropine is the one other treatment employed and its effect is much enhanced by the diathermy.

**ARNOLD SORSBY.**


Allen and Benson (Chicago).—Late development of cataract following use of dinitrophenol about a year before. *Jl. Amer. Med. Assoc.*, September 7, 1935.

(8) The dangers of slimming forms the topic of a leader in the *Jl. of the Amer. Med. Assoc.* of the above date. "It is interesting to note that all the so-called reducing preparations on the market fall into three categories: first, laxatives that deny the body the benefit of its food intake, as the salts, crystals and herb teas; second, obvious frauds that depend for effect upon the stringent diets prescribed as part of the treatment; and third, the unquestionably effective but dangerous articles containing thyroid or dinitrophenol, both of which act by speeding up the utilization of food. All of them are unwarranted impositions on the public, which cannot evaluate claims made for the preparations and cannot readily appreciate the harm that may result from careless use of the products."

The cases reported are those of comparatively young individuals who took dinitrophenol for the purpose of relieving obesity. The treatment was efficacious but in each case was accompanied by rapid opacification of the lenses, mainly in the posterior cortex.

**A. F. MacCALLAN.**

(9) **Sala (Palermo).**—Chalcosis (staining by copper) of the eye with special regard to copper cataract. (Sulla calcosi oculare con particolare riguardo all’aspetto biomicroscopico della cataratta da rame). *Boll. d’Ocul.*, August, 1934.

(9) It has been recognized for a long time that a copper foreign body is able to set up violent inflammatory changes in the eye, even though it may have been introduced aseptically. The characteristic colouration of the various structures has been noted comparatively recently, and the name chalcosis, corresponding to siderosis is a recent coining.

Cataract from copper presents certain features; it is generally discoid in shape of the size of a normal pupil with rays and is
compared to a sunflower; it is greenish in colour and is invisible to transillumination; it is situated in the anterior part of the lens, in the anterior capsule or the adjacent epithelium. The cause of the shape has been supposed to be the pressure of the iris, but Sala thinks that this cannot be the sole cause as in his case the cataract was completely within the area of the normal pupil.

HAROLD GRIMSDALE.


(10) The question of compensation for the partial loss of vision from an accident is a difficult one. Many have tried to formulate standards which shall apply to all the variations and have not succeeded; it has not even been possible to find agreement about the total loss of one eye.

The congress at Rome in 1920 held that 7/10 of normal vision was all that was necessary for carrying on most work, and therefore concluded that any loss not exceeding this, deserved no compensation. But two points have since been agreed upon with practical unanimity. (1) That it is absurd to reckon compensation arithmetically as fractional loss of acuity without taking into consideration the collateral visual functions; (2) that compensation must be relatively greater, the greater the loss of vision, since the small loss entails no disability.

The capacity for work depends on many factors as well as the visual; and thus varies with the individual. Age has an important bearing. Is it just, asks Camozzi, to give the same amount of compensation for an equal loss of sight to a young man in the prime of life for whom the future may hold great possibilities, and to an old man for whom the future holds no prospect? Or is it right to base compensation in all cases on the wages received at the moment of injury, and thus to exclude the possibility of advancement?

The author suggests that there should be a body of impartial experts to examine and adjudge all cases of compensation, with a Court of Appeal for those not satisfied by their findings.

HAROLD GRIMSDALE.


(11) Bellows' experiments were performed on human corneae and the depth of anaesthesia was tested with von Frey's hairs. One drop of each solution was used, and the order of their
effectiveness was 0.5 per cent. p-n butylaminobenzoyl-dimethylaminooethanol hydrochloride; 1:500 nupercaine, 1 per cent. butyn, 2 per cent. cocaine, 1 per cent. phenacaine and 2 per cent. metacaine. The effectiveness was measured in units which represented the average depth of anaesthesia multiplied by its duration in minutes. Except with nupercaine there was insensibility to the initial stimulus within 30 seconds and the anaesthesia was at its maximum in 2 minutes; with nupercaine, the figures were 45 seconds and 5 minutes respectively. Cocaine was the only drug in the series that produced drying of the corneal epithelium and enlargement of the pupil and palpebral fissure. Butyn caused the least and phenacaine the greatest pain and congestion.

F. A. W-N.


Since the improvement in technique and the adoption of anaesthetics other than cocaine, the accidents following spinal anaesthesia have diminished considerably. Complications may follow a simple lumbar puncture; after a lumbar puncture there is always a fall of pressure followed by a prolonged rise.

Dr. Neuschuler mentions a case of complete external bilateral ophthalmoplegia in a boy, 16 years of age, following a spinal anaesthetic, on examination, however, he was found to have some slight hyperthyroidism and a latent disease of the nervous system, which was exacerbated by the anaesthetic. Other cases have been recorded of paresis of eye muscles (following a lumbar puncture) in which there was latent cerebral syphilis. In the case the author himself saw and described, there was no pre-existing nervous or organic disease. There was an external ophthalmoplegia of gradual onset, starting 4-5 days after operation and complete in both eyes in 7-8 days. This started to clear at the end of a week and only paresis of both 6th nerves remained after 4 months. Recovery was complete at the end of the year. There were never any signs of increased intra-cranial pressure.

Immediate manifestations after lumbar puncture are due to affection of the 4th ventricle or to bulbar anaemia.

Position of the patient during operation is of importance. Most eye complications follow the Trendelenburg position. Various theories of formation and circulation of the cerebro-spinal fluid are described. The author suggests that the causes of the complications following spinal anaesthesia may be:
1. Hypertension due to serous meningitis. (Inhibition of absorption of the cerebro-spinal fluid or increased formation).
2. Hypotension.
3. Basal meningitis without effusion, which may cause pressure on the nerves.
4. A neuritis due to a chemical union of the alkaloid with the nerve cells.
5. Exacerbation of a previous organic (i.e., endocrine or nervous) lesion.
6. Toxicity due to chemical alterations in the anaesthetic.

E. E. Cass.

BOOK NOTICE


This is a most elaborate book, published under the auspices of the Soc. franç. d'Ophth., and forms one of the collection which includes the several monographs on slit-lamp microscopy and Dr. Redslob's work on the vitreous body.

It is the largest book we are acquainted with treating of intracapsular extraction of the lens.

In the first chapter the author gives his reason for choosing the title of the book, and why he has discarded "Total extraction," "Intra-capsular extraction," and "Extractions in toto." He points out that the title he has chosen includes not only those cases in which the lens is removed in the complete capsule, but those in which the lens and the capsule are removed.

There follows a chapter on the historical aspect, and it is shown that in 1751 Pellier de Quengsy Père removed a cataract in its capsule by means of forceps, and Samuel Sharp in 1753 described cases of the intra-capsular operation that he had performed in that year.

Intra-capsular extractions may be classified under three headings:

(1) Technique by pressure alone as done by Colonel H. Smith;
(2) Technique by traction:
   (a) with forceps;
   (b) with a pneumatic sucker;
(3) Technique by a combination of pressure and traction.

There follows a chapter showing the anatomical possibility of the operation together with an elaborate consideration of the parts involved. This concludes the first part of the book.