ABSTRACTS

I—MUSCLES


Mackay's paper opens with the description of a case of ophthalmoplegic migraine in a man aged 28 years. In his first attack at the age of 18 there was no ophthalmoplegia, but a month later he had a second attack with ptosis and inability to move the eye. The subsequent attacks occurred annually, without any residual palsy between them. When seen by Mackay, the headache had disappeared the day before and the patient was found to have a complete third and fourth nerve paralysis with reduction of vision to ability to count fingers. There was also slight weakness of the right facial nerve. All tests including fundus examination were negative. Six weeks later there was partial recovery which became almost complete in a further fortnight.

Mackay then gives a survey of the literature from which it appears that although Moebius is usually given credit for the first description of this disease a case was fully described two years previously by an Englishman called Saundby. The following characteristics are noted by Mackay. The palsy invariably occurs on the same side as the pain and subsequent attacks usually involve the same side though, occasionally, alternating ophthalmoplegic migraine has been reported. The palsy may vary from a slight weakness to a complete paralysis and the third nerve is the one most commonly involved generally producing both external and internal ophthalmoplegia.

The duration of the paralysis varies from days to months and tends to become greater in subsequent attacks, occasionally becoming permanent. Sometimes instead of paralysis there is a spasm of the affected muscles. Mackay considers that vasomotor changes may be responsible for the condition in some cases, but that in others a localised oedema of the brain may be the aetiological factor. This oedema is probably allergic in origin, as there is evidence that allergy is frequently associated with migraine. The lesion producing the palsy is almost certainly infranuclear, since it is only the third nerve of one side which is paralysed although this nerve receives part of its fibres from the contralateral nucleus. Also other nerves on the same side may be involved as well. In some cases, however, there must also be supranuclear involvement, since symptoms such as aphasia may accompany a right facial palsy.
There is no mention in this paper of the association of ophthalmoplegic migraine with the presence of aneurysms in the circle of Willis.

F. A. W.-N.

(2) Frenkel, H. (Toulouse) and Calmettes, M.—A case of unilateral ophthalmoplegia interna, the only symptom of cerebral syphilis. (Sur un cas d'Ophthalmoplegie interne monolatérale seule symptome de Syphilis cérébrale.) Arch. d'Ophthal., September, 1929.

(2) Two recent papers on a similar subject have led Frenkel and Calmettes to publish a case, under their observation for more than three years, in which a one-sided ophthalmoplegia interna has been and still is the only pathological sign of an affection pronounced syphilitic by examination of the blood and the cerebrospinal fluid. Contrary to what is usual in the early stage of tabes and general paralysis, in which this symptom is a forerunner of more serious developments, some improvement resulted from specific treatment. Although the ophthalmoplegia has not been cured, it has not been followed by any other manifestation of disease in either the nervous or the somatic system.

The published clinical record of this case is very full and detailed. Briefly, it is that of a female, aged 35 years; twice married, one child by each husband, one living and healthy, the other dead at two months of gastro-enteritis. Incidentally the second husband had a Wassermann blood test in 1922 with a negative result. The first complaint, in January, 1926, was of severe pain in the right frontal and periorbital region lasting for several days, after which she noticed that she had difficulty in reading binocularly, and that she could not read at all with the right eye alone. She was examined on February 9, when, excluding the ocular disturbance, nothing abnormal was discovered. The left eye had normal vision and an amplitude of accommodation of 6.5D.; all reflexes normal. The right eye had full distant vision with +0.5D. sph. but required +3.5D. to read 1J. at 33 cm. Pupil 7 mm., all reflexes abolished. T.n., fundus normal. Suspicion of atropine mydriasis was entertained; eight days later the condition was unchanged.

A Wassermann blood test on February 19 was strongly positive: lumbar puncture one week later furnished a limpid fluid, leucocytosis 10·5 to a cubic mm., Wassermann reaction strongly positive.

Antisyphilitic treatment was adopted and was followed by diminution of the mydriasis so that by April 2 the pupils were equal.

In June, 1929, the right pupil was again larger than the left,
under all conditions of illumination; the amplitude of accommo-
dation was 5D. in each eye. Wassermann test gave a negative reac-
tion, but a few weeks later after two injections of acetylarsan it became positive again.

The dissociation of intrinsic and extrinsic paralyses of the third
nerve has been explained by the origin and distribution of the
blood vessels supplying the nuclei of origin. Shimamura's
researches seem to show that in the region of these nuclei there
are two blood streams, one coming from the internal carotid artery,
the other from the vertebral; moreover the vessels run from the
base of the skull almost vertically towards the nuclei; these vessels
are without exception terminal arteries.

D'Astros, from his researches, believes that the blood supply of
the superior and the inferior portions of the third nerve nuclei
is derived from different arterial branches.

These anatomical statements permit the suggestion that
ophthalmoplegia interna is due to lesions in the arterioles destined
for the anterior group of cells of the third pair, in which is situated
the nucleus of the sphincter pupillae and musculus ciliaris. The
authors express their surprise at the number of published reports
they discovered of isolated ophthalmoplegia in young subjects and
in hereditary syphilis, and conclude that the condition is less
uncommon than is generally supposed.

Apart from syphilis isolated ophthalmoplegia interna appears to
be extremely uncommon. Frenkel and Calmettes give a few
references but express the opinion that most of the cases are open
to doubt. There is, of course, a small group of cases of traumatic
origin. A bibliography of 21 references adds much to the value and
interest of this paper.

Favory.—A propos d'un cas d'ophthalmoplegie intrinseque isolée. Arch.

Guillain and Barre.—Signe d'Argyll Robertson, unique manifestation apparente

J. B. Lawford.

(3) Bettremieux (Paris). — The classification of strabismus.
(Classification des strabismes.) La Clin. Ophtal., February,
1928.

(3) Bettremieux insists that the failure to cure strabismus is
due largely to the fear of over-correction if the operation is per-
formed in early childhood, and consequently to the delay in
operating. He asserts that all such fear is unnecessary if the
operation be confined to the non-deviated eye.

Ernest Thomson.
Muscles


Wilde's case was seen by him at the age of 9 years, the squint having been noticed first by the parents at the age of 4. The eyes were parallel when looking straight ahead and the vision of each was normal. Convergence was also normal, but on attempting to look to the right, the left eye was strongly adducted without any corresponding abduction in the right eye and the reverse occurred on attempting to look to the left. The patient was unconscious of any diplopia and no operation was advised as, in all probability, there was complete absence of both external recti. In reviewing the literature, the author notes that 54 cases have been recorded. An account of them by Duane will be found in the *Arch. of Ophthal.*, Vol. XXXIV, No. 2.

F. A. W.-N.


Liebermann holds that in the treatment of concomitant squint, tenotomy is an operation that can be justified on neither operative grounds, nor functional sequelae. If during the operation the fascial attachments of the internal rectus are left undisturbed, the operative result is poor; on the other hand, if the muscle is completely divided a state of affairs simulating paralysis of the muscle is produced. Should the operation have achieved its results in making the eyes parallel, this may have to be paid for by an insufficiency of convergence, even though there is no manifest divergence. These considerations apply equally whether the tenotomy be the only operation, the main one, or merely subsidiary to advancement.

Advancement of the external rectus is the operation to which Liebermann confines himself. That the results in most hands are insufficient is due, in his opinion, to faulty technique, following upon the failure to recognise what is happening to the sutures and the muscles in the days subsequent to operation. The author holds that not only is there a "primary cutting through" of the suture along the muscle-fibres at the time of the operation, but also a secondary effect of the same type owing to pressure necrosis of the muscle-fibres occasioned by the sutures. When it is also taken into consideration that this "secondary cutting through" may occur in the anchorage at the sclera, it becomes clear why there is often a marked diminution of the immediate operative result in the days following the operation. It is the failure to recognise the unavoidable mechanical effects of pressure necrosis before complete healing has taken place that leads to unsatisfactory results.
In performing an advancement, the aim should therefore be to minimise the tension of the sutures. The introduction of multiple sutures and anchorage points at the sclera would tend to distribute the tension, and thus minimise the pressure necrosis at any particular spot. But a better method is to introduce the sutures in such a way that one of them should be entirely relaxed, and only become taut when the suture that has been bearing all the tension has cut through after a few days. Liebermann achieves this result by introducing two sutures placed at right angles to the muscle-fibres, one being placed some little distance behind the other. These are then secured to the sclera in such a way that the more anterior suture is somewhat relaxed; this anterior suture will therefore only come into play when the posterior has cut through. The actual type of suture Liebermann prefers is Meller's "whipstitch."

The results of this procedure seem to be highly satisfactory in Liebermann's hands. Of 35 cases of squint, with an average angle of 35°89, the operation achieved an average reduction of 27°29. In the hands of most operators advancement of the external rectus does not give a result approaching this; for one of his cases the author achieved the reduction of an angle of 50°.

In those cases where in spite of advancement of the external rectus there is still left a squint of an angle of more than 10°, Liebermann advises advancement of the other external rectus. Only faulty technique will leave a residual angle of squint after bilateral advancement: for such cases partial tenotomy of the internal rectus will have to be considered.

ARNOLD SORSBY.

II.—THERAPEUTICS


(1) Ephedrine is an alkaloid, first isolated in 1887 from a plant ma huang, which is reputed to have been used for medical purposes in China for about 5,000 years. Like adrenalin, to which it is similar in action, though to a milder degree, it is capable of producing mydriasis, as was first demonstrated in the year the alkaloid was isolated, and recently several attempts have been made to re-introduce it to ophthalmic practice.
Chen and Poth recommend it for exploration of the fundus on account of its rapid action, the absence of cycloplegia, the short duration of the mydriasis and its harmlessness. In 21 normal eyes of white people a 10 per cent. solution instilled in the conjunctiva gave rise to an average dilatation of the pupil by 2 mm. within 15 to 30 minutes; the maximum effect becomes apparent within 30 to 60 minutes. The dilated pupil does, however, react somewhat to light, though the light reflex can be abolished by the addition of 0.1 per cent. homatropine or 1 per cent. euphthalmine. The combination was found satisfactory for mydriasis and was easily counteracted by pilocarpine. The effect on accommodation is almost negligible; it is distinctly less than that of euphthalmine, subjects being able to read test type No. 2 at 25 to 30 cm. distance. On the normal eye there is no effect on the intra-ocular pressure, though a case is reported in the literature in which ephedrine precipitated an attack of acute glaucoma.

These findings worked out in a pharmacological laboratory find support on the clinical side in the paper by Campbell Orr. Orr employs solutions of only 1 or 2 per cent. Mydriasis is complete in 15 to 30 minutes, varying with the age of the patient, the state of congestion of the eye, the presence of synechiae and the amount of pigment. It is sometimes of value in iritis in reinforcing atropine to break down synechiae; this is especially the case in post-operative iritis. Of particular interest is Orr's finding that in 50 glaucomatous eyes in which mydriasis was produced by a 2 per cent. solution, no rise of tension was recorded, and in 12 a slight fall was noticed. Ephedrine will produce mydriasis in the glaucomatous eye which is under the influence of eserine, and is in turn overcome by pilocarpine or eserine, miosis being obtained in 5 to 10 minutes.

For ophthalmoscopic examination ephedrine is thus superior to homatropine in not causing a rise in tension and in not affecting accommodation; its superiority over euphthalmine lies in the fact that its effect on accommodation is distinctly less; and finally, unlike cocaine, it does not damage corneal epithelium, or produce corneal anaesthesia.

Arnold Sorsby.


(2) In this paper Marchesani cites 15 cases of interstitial keratitis treated with intravenous injections of Besredka's polyvalent typhus vaccine combined with neosalvarsan in the same
syringe. Simultaneously the usual local treatment of the eye and the mercury cure were employed. The vaccine used is the one put on the market by the Serotherapeutic Institute of Vienna. The injections were given about every third day and in each case an attempt was made to produce 10 reactions in the form of rises of temperature above 39°C. The doses of the vaccine were regulated by the reaction—local and general—of the patient.

By this means Marchesani believes that the slow dragging course of the disease is changed into an acute one leading to rapid vascularisation and clearing of the cornea.

In a footnote Marchesani refers to Wick's favourable report of non-specific therapy in general (Arch. f. Ophthal., Bd. CXVIII, p. 221) and to Kuborn's experience of malaria therapy in particular (Zeitschr. f. Augenheilk., Bd. LXII, p. 168), in interstitial keratitis.

D. V. GIRI.


(3) A treatise on this subject by Professor Aubaret is published by the Société française d'Ophthalomologie for 1929. It is one hundred and twenty-seven pages in length, and includes a considerable bibliography from 1905 to 1929. A history of the condition—anatomical and embryological—and a full aetiology are included. The following abstract covers the treatment recommended.

I. Hygienic or Prophylactic

(1) Local.—Cleanliness of the eyelids, removal of dust, secretion, or crusts. Avoidance of exposure to excessive heat or cold, to smoky or stuffy atmosphere or irritating vapours, to crowded places, cafés, theatres, cabarets, etc. Avoidance of bright light, natural or artificial, and the use of protective tinted glasses—smoked, Fiuezal, umbral, etc. Excessive dryness of the air as from stoves and central heating, should be avoided by frequent airing of rooms. An atmosphere which is moist and cold, as in fogs, often irritates sensitive eyelids. Wind and dust particularly are to be avoided by means of sufficiently closed goggles in motoring. Late evenings at balls and receptions may need to be avoided, and work late into the night if this causes obvious ocular fatigue. Especially is fine work such as drawing, engraving or fine needlework liable to cause irritation and particularly where the lighting is insufficient. For the latter reason errors of refraction should be carefully corrected. Cosmetic pencils
containing lamp black are not particularly irritating, but Kohl and other preparations containing oriental perfumed essences if introduced into the eye cause irritation. Patients affected with chronic conjunctivitis, epiphora, etc., are liable to increase their discomfort by rubbing the eyes with fingers, handkerchiefs or cloths not always clean. In small children this is sometimes only to be avoided by enclosing the elbows in cardboard tubes to prevent the hands from touching the eyes.

(2) General prophylactic treatment. — According to circumstances and the severity of the case, a stay in the country, in the mountains or at the seaside may be advised. Apart from the above, the following are recommended in all cases:—well-aired rooms, physical exercises, out-door games, hydrotherapy, baths, early bed-time and early rising; avoidance of banquets, balls and receptions. In the case of infants, adjustment of the milk diet is necessary, and in older children of the quality and quantity of food and the regularity of mealtimes with the prohibition of food between meals. For adults in addition to a reasonable diet; sufficient mastication and freedom from hurry are desirable, and avoidance of indigestible or rich foods and spices and excess of condiments. Moderation in the use of tea, coffee, alcohol and tobacco should be enjoined.

II. Local Treatment

(1) Therapeutic measures common to all types of blepharitis.

(a) Lotions, compresses. The patient may be instructed to find out for himself the temperature of any lotion at which he finds its use most satisfactory in effect. The following may be used: infusions of camomile, "mélitol," plantain, fennel, elder, mallow, plain boiled water, or boiled water with a few drops of camphorated alcohol, eau de Cologne or tincture of iodine; boric acid, sodium borate or sodium bicarbonate solutions are generally quite free from danger of irritation, as is naturally also normal saline solution. For simple non-infected blepharitis, normal saline or sodium borate lotion are preferable. In infected cases, solutions of permanganate (1 in 4,000), of cyanide of mercury of the same strength, or of resorcin (2 in 500) are used for bathing or compress. In cases in which even mildly antiseptic lotions cause irritation, oily liquids are used for the removal of crusts of dried secretion—sterile liquid paraffin, olive oil, almond oil or cod liver oil. In some such cases poultries of starch or linseed meal are still less irritant, or even antiphlogistine (glycerine, kaolin, boric acid, salicylic acid, oil of gaultheria, of peppermint and of eucalyptus). A dressing is placed between the antiphlogistine and the skin.

(b) Applications, drops and ointments. The application to the
ulcerative form of blepharitis of 1 per cent. silver nitrate solution, of picric acid, colloidal turpentine, 1 per cent. resorcin, or of solution of sulphate of copper or zinc sulphate is often of advantage. Compresses of solution of resorcin (1 in 500) or of ichthyol (1 per cent.), lotions of zinc sulphate (1 in 200) or sodium borate (3 per cent.) may be used frequently by the patient. Drops of 10 per cent. protargol, 5 per cent. argyrol, vitargyl, collargol or electrargol may be applied by means of a tampon of sterile wool to the lid margin with gentle friction. After such vigorous treatment, it is usually necessary either to cover the eyes for a time, or to apply an ointment such as boric vaseline, ointment of zinc oxide or of zinc and ichthyol.

(c) Massage and expression of the sebaceous and serous glands of the eyelids by finger and thumb or by Knapp's roller forceps is of importance for the removal of unhealthy secretion. This procedure, however, cannot completely free the lash follicles of foreign matter or infected material, and recourse must sometimes be had to the next.

(d) Epilation. In cases of folliculitis, one or more lashes should be removed early. In intractable cases of infected blepharitis, removal of all the lashes, after instillation of cocaine or injection of novocaine, is effective by allowing the entrance of solution or ointments into the follicles. Cuénod is quoted as recommending the careful application of a solution of iodine in acetone to the lid margins after total epilation, and then of a glycerine dressing for twenty-four hours.

(e) Physico-therapy. Every method of treatment has been used, with more or less success in some cases, including hydrotherapy, vaporization, steam or hot air baths, diathermy, ionisation, ultra-violet light, X-rays and electrotherapy.

Treatment of Different Types (see tables)

General treatment of blepharitis patients.—These may be grouped into: (1) the scrofulous, anaemic, rheumatic, diabetic and gouty; (2) those with nutritional and endocrine insufficiencies; (3) those requiring specific, antitoxic or vaccine treatment. Various methods of treatment for patients of group (1) are required. Reference may be made to one especial fact, namely that certain cases of blepharitis, as of eczema, show evidence of anaphylaxis or allergy to certain substances. Briefly the methods of desensitisation available are injection of 5 per cent. sodium thiosulphate, 0.9 per cent. sodium chloride or 1 in 30 sodium carbonate solution, or the ingestion of minute quantities of anaphylactic substances or of 0.20 centigrammes of polyvalent peptone. Intradermic injection of 1/10 to 3/10 c.c. of peptone (Witte) may be used.
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<tr>
<td><strong>Remove local causes of irritation</strong> <em>(atropine, etc.)</em></td>
<td><strong>5% hyd. ammon. ointment</strong>&lt;br&gt;Colloidal sulphur&lt;br&gt;Ichthyl 2%&lt;br&gt;Sulphur ppt. 10% in ointment&lt;br&gt;or sulphur ppt. in ung. hyd. ammon.&lt;br&gt;or ung. hyd. ox. flav.</td>
<td><strong>Very rebellious</strong>&lt;br&gt;Irritation as above&lt;br&gt;Ichthyl water or cocaine ointment&lt;br&gt;Desquamation&lt;br&gt;Ichthyl zinc ointment&lt;br&gt;Hyd. ammon. ointment&lt;br&gt;Hyd. ox. flav. ointment&lt;br&gt;or&lt;br&gt;Sulph. ppt.&lt;br&gt;Ox. zinc&lt;br&gt;Ichthyl in vaseline</td>
<td><strong>Expression.</strong>&lt;br&gt;Massage&lt;br&gt;Epilation often necessary&lt;br&gt;<strong>Paint Tr. iodi</strong>&lt;br&gt;or Tr. iodi&lt;br&gt;Glycerin&lt;br&gt;or Tr. iodi&lt;br&gt;Acetone&lt;br&gt;<strong>Rebellious cases</strong>&lt;br&gt;Cu SO₄&lt;br&gt;Ichthyl&lt;br&gt;Vaseline&lt;br&gt;<strong>For use by patient</strong>&lt;br&gt;Ichthyl 0·20&lt;br&gt;Resorcin 0·30&lt;br&gt;Lanoline&lt;br&gt;Cold cream 5'0&lt;br&gt;<strong>Cuenod—Epilation.</strong>&lt;br&gt;Acetone iodine painting&lt;br&gt;Glycerine bandage 24 hours&lt;br&gt;<strong>An ointment containing extracts of cultures of staphylococci and other organisms has been recommended. Used alone they appear ineffective.</strong></td>
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<td><strong>For symptoms—</strong>&lt;br&gt;Adrenalin 30 drops&lt;br&gt;Coc. hydrochl. 0·25 gm.&lt;br&gt;Subnitrate of bismuth 2'00 gm.&lt;br&gt;Vaseline 15'00 gm.</td>
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<td>Zinc sulphate</td>
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<td>Argyroil</td>
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<td>Ung. ichthyl zinc ox.</td>
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<td>Ung. hydrarg. ammon. 1·5%</td>
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<td>Ung. hydrarg. ox. flav. 2·3%</td>
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<td>Ung. hydrarg. ox. flav. 1·5%</td>
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<td><strong>Dry eczema—</strong>&lt;br&gt;Rice or starch powder</td>
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<td><strong>Moist.</strong>&lt;br&gt;Lassar paste modified—&lt;br&gt;Ac. salicyl. 0'5 gm.&lt;br&gt;Ox. zinc. 5'0 gm.&lt;br&gt;Starch 5'0 gm.&lt;br&gt;Vaseline 10'0 gm.</td>
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<td><strong>Itching.</strong>&lt;br&gt;Ichthyl water compress.</td>
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<td><strong>Crusts—</strong>&lt;br&gt;Soften with wet bandage or cold starch poultice. Wash eau d'Alibour then apply olive oil, etc.</td>
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<td>Ulcerating</td>
<td>Impetiginous</td>
<td>Sycosic, furunculous</td>
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<tr>
<td>Result mainly from follicular blepharitis</td>
<td>Wet bandages, compresses or poultices to remove crusts, for lids and affected skin</td>
<td>As for ulcerating and follicular blepharitis. In addition, incision of pustules or abscesses, and epilation</td>
<td>Blepharitis associated with conjunctivitis usually recovers with the treatment of the conjunctivitis. In chronic cases treatment with zinc sulphate and with acetate of lead may be adopted, or with nitrate of silver or copper sulphate</td>
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<td>Application of a well-pointed silver stick to the ulcers or of 2% AgNO₃, or massage with protargol ointment, or of aristol or iodoform</td>
<td>Ichthyol, zinc or hydrarg. am. ointment. Later Lassar’s paste</td>
<td>In general precipitated sulphur or resorcin ointment, with use of antiseptic compresses e.g.</td>
<td>Lacrymal obstruction should be treated when present</td>
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<td>Cleaning completed by wool moistened with eau d’Alibour</td>
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<td>Precipitated sulph.</td>
<td>In spasmodic rhinitis, a nasal vaporization of cocaine relieves the condition—</td>
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<td>Resorcin</td>
<td>Coc. hydrochlor. 5</td>
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<td>Base</td>
<td>Adrenalin 1/50 3</td>
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<td>or</td>
<td>Liq. paraff. 100</td>
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<td>Sulph. precipit.</td>
<td>In children blepharitis is sometimes associated with enlarged tonsils and adenoids. In such cases these require treatment</td>
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<td>Occasionally lupus vulgaris or syphilis of the nasal mucous membrane is a cause and requires treatment</td>
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<td>Benzoated lard</td>
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<td>Zinc oxide</td>
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<td>Liq. paraffin</td>
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<td>Vaccines or agents for local immunisation</td>
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III.—OPERATIVE SURGERY

(1) Bourguet, J. (Paris).—Puncture of the hypophysis by the method of Simons-Hirschmann and by that of the author. (La Ponction hypophysaire, d'après le procédé de Simons-Hirschmann et d'après le notre.) Arch. d'Ophtal., November, 1929.

(1) The illustrations form so essential a part of this paper that it ought to be read in the original. A brief unillustrated abstract, however, will be of some value to those interested.

Puncture of the hypophysis has been employed to determine the presence or absence of an intra-sellar neoplasm and to establish a diagnosis between this and an extra-sellar tumour.

Simons and Hirschmann (Nervenarzt, 1928) advocate and have utilised a pathway through the frontal lobe of the brain, entering the needle through an opening in the frontal bone, close to the left frontal eminence, and endeavouring to impinge on the sphenoid close to the optic tubercle of the same side, from which point it is passed backwards into the cavity of the sella turcica.

Bourguet criticizes this procedure on the grounds that it is difficult, sometimes dangerous, and uncertain. He is strongly in favour of an endo-nasal route to the sella. After dissection of the mucous membrane of the septum and resection of this latter, the blades of a long speculum are used to separate the structures and thus expose the anterior wall of the sphenoidal sinus. This is in turn resected and the cavity of the sinus opened. On the upper wall of the sinus the prominence due to the sella is seen; removal of a piece of the bony wall exposes the dura mater through which the needle can be pushed into the hypophysis. By the action of a syringe attached to the needle a portion of tissue is removed for microscopic examination.

The obvious advantages of Bourguet's procedure are (1) that by the aid of a mirror the needle is visible in the whole of its course, and (2) that the pathway followed is entirely below important structures, and does not traverse cerebral tissue.

J. B. Lawford.


(2) Scarlett's case was one of ptosis in one eye in which a previous Hess's operation had failed to relieve the condition. The technique was as follows:—The upper lid was everted and superior rectus isolated, a double armed suture being passed through the
middle third of its tendon from within outwards. A horizontal 
incision was then made from the skin through the entire thickness 
of the lid at the upper border of the tarsus. The ends of the suture 
were drawn through this wound, being made to pass through the 
middle third of the upper portion of the tarsus, the orbicularis 
muscle and the skin, where they were tied over a small piece of 
rubber tubing. The knot was tightened according to the amount 
of correction desired. Over-correction was aimed at at first, and 
the ultimate result was entirely satisfactory.

F. A. W.-N.

(3) Majewski, K. W. (Cracow).—Epicorneal syndesmoplasty to 
permit the use of an epiprosthesis. (Syndesmoplastie 
épicornéenne à l'usage de l'épiprothèse.) Arch. d'Ophthal., 
November, 1928.

(3) The procedure to which the above title has been given by 
Majewski, has been devised and practised by him in cases in which 
it is possible to utilise an atrophic eyeball as the support for an 
artificial eye. When the eye, though atrophic, retains a sensitive 
cornea it cannot tolerate the pressure of an artificial eye. In such 
cases Majewski covers the cornea with conjunctiva, by dissecting 
this membrane from the eyeball above and below the cornea and 
suturing the cut edges together. In his first case the conjunctiva 
slipped back to its original position when the stitches were removed. 
In subsequent cases Majewski scraped away the corneal epithelium 
with a curette and scarified the corneal tissue with a small knife 
before suturing the conjunctiva. This procedure was successful. 
The stitches can be removed on the sixth day. The cosmetic result 
with a suitable prosthesis has proved very satisfactory as is shown 
by photographs of several patients so treated.

J. B. Lawford.

(4) Eber, Carl T. (St. Louis).—The conjunctival bridge in 

(4) The principal objection to the use of a conjunctival bridge 
in cataract extraction is the restriction it brings about in gaping of 
the wound. This results in more lens matter being left behind 
after expression. Eber gets over this difficulty by making his 
bridge 10-12 mm. long and by passing a pair of forceps under it 
while expressing the lens, so as to make counter pressure on the 
scleral lip of the wound. The forceps are of a special pattern: 
illustrated in the text, and bear teeth on the opposed surfaces of 
their blades, the teeth being used to grasp the lens as it emerges 
from the wound.

F. A. W.-N.

Seefelder reports unsatisfactory results in a case treated by Denig’s suggestion of employing a mucous membrane graft in advanced cases of trachoma (Zentralbl. f. Augenheilk., Bd. XXV, S. 278, 1911). In a woman aged 67 years with very severe trachoma with pannus of the right eye, a piece of labial mucous membrane was transplanted following the technique advised by Denig. The graft took well, but very shortly after, it became infiltrated with characteristic trachomatous tissue. The pannus, meantime, continued to progress unchecked. Microscopical examination of the grafted tissue demonstrated without doubt the infection of the new tissue: typical follicles and trachomatous infiltration were present, as also were Prowazek inclusion bodies. Seefelder’s observations suggest that the claims made by Denig for the procedure have been stated too highly.

W. S. Duke-Elder.


The difficulties of opening an anterior chamber without causing outward damage with the usual Graefe knife in cases of glaucoma when it is more than usually shallow have led Elschnig to introduce the following technique. It is based on that of Gazet (1884). The superficial parts of the eyeball are anaesthetised (using 1 c.c. of 2 per cent. cocaine hydrochloride with 1:10 epinephrine), and a retrobulbar injection of the same substance is made. A conjunctival incision is made 4 to 5 mm. above the limbus extending almost one third of centre of the cornea. The conjunctival incision is made with a scalpel, and the conjunctiva is dissected down to the limbus with scissors, bleeding being stopped with epinephrine. An incision is then made with the scalpel through the limbus into the anterior chamber, the dissection being carried out slowly to check all bleeding with epinephrine. When the anterior chamber is entered the aqueous is allowed to flow out slowly, and then the wound is enlarged to the desired size. The iris is then seized, drawn out, and an iridectomy done in the usual manner, the conjunctiva placed in position, and the eye closed.

The advantages claimed are:

1. The dissection proceeds in layers and during the process haemostasis can be ensured.
2. The slow evacuation of the anterior chamber avoids intra-
ocular haemorrhage, it also lessens the danger of protrusion of the vitreous through rupture of the zonule.
3. The iris remains entirely uninjured throughout the incision.
4. The lens, therefore, runs no risk of being wounded with the risk of a traumatic cataract. Even if the knife goes too far, it is the zonule, not the lens, which is injured.
5. A total iridectomy, extending up to the root of the iris, is always ensured.

Elschnig recommends the procedure also for an optical iridectomy when the anterior chamber is shallow, or in the extraction of foreign bodies, and in excision of tumours and cysts of the iris.

W. S. DUKE-ELDER.


(7) O'Brien’s paper opens with a short review of various methods which have been used to secure akinesis of the lids during intra-ocular operations. Injections of the lids have the disadvantage of producing local swelling which makes the operation more difficult, while injection of the trunk of the facial nerve in the region of the stylo-mastoid foramen is a complicated procedure which may result in a prolonged paralysis. The method suggested by O’Brien is remarkably simple and has been used with satisfactory results in more than 200 cases of cataract extraction. It consists in blocking the temporo-facial branch of the seventh nerve. This branch is responsible for supplying the muscles associated with forced closure of the lids and passes over the condyle of the lower jaw. All one has to do, therefore, is to locate the condyle, pass the needle of the syringe down on to it and inject 1 c.c. of a 2 per cent. solution of procaine hydrochloride, injecting another c.c. as the needle is slowly withdrawn. The full effect is evident in five minutes.

F. A. W.-N.

IV.—ORBIT

(1) Charamis, J. S. (Athens).—A case of hydatid cyst of the orbit. (Un Cas de Kyste hydatique de l’Orbite.)

(1) In a paper published in 1927, on “Hydatid Cysts of the Orbit,” Teulières referred to 141 recorded cases; since that date
some 6 or 6 additional examples have been reported. The two
cases observed by Charamis and Adamantiades, one a man aged
50 years, the other a girl aged 11 years, do not present any very
unusual features, except that in the latter's patient perforation of
the orbital wall occurred and the cyst escaped through the nostril.
This occurred after an exploratory operation on the orbit, a pro-
visional diagnosis of tumour having been made. In Charamis's
case the cyst was removed through an incision across the upper
lid immediately beneath the eyebrow.

In both instances examination of the blood revealed notable
eosinophilia. In both cases, also, pain was entirely absent: it has
been described by former writers as one of the three cardinal symp-
toms of this form of orbital disease.

J. B. LAWFORD

(2) MacCallan, A. F., and Others.—Discussion on the diagnosis
and treatment of inflammatory affections of the orbit. Trans.

(2) MacCallan delivered the introduction to the opening paper
of the Annual Congress of the Ophthalmological Society of the
United Kingdom on the diagnosis and treatment of inflammatory
infections of the orbit. He classified inflammatory affections of the
orbit as follows:—

(i) Injuries.
(ii) Primary osteomyelitis.
(iii) Acute dacryo-adenitis.
(iv) Spread of inflammation from neighbouring parts. e.g.,
panophthalmitis: cavernous sinus thrombosis: infected wounds
of the face and eyelids: erysipelas: acute pharyngitis: acute
periostitis: maxillary periostitis: infections of accessory
sinuses: tuberculous meningitis: and acute dacryocystitis.
(v) Septicaemic conditions.
(vi) Syphilis. Tuberculosis. Actinomycosis.
(vii) Orbital myiasis. Aspergileosis.

He described six cases of suppuration in the orbit; one case due
to a spread of infection from the anterior ethmoidal air cells and
the sphenoid, two from the antrum, one following cavernous sinus
thrombosis, and one case where adhesions following meningitis
obstructed the outflow of lymph from the orbit.

Mr. Norman Patterson said that the majority of cases where
orbital inflammation occurred secondary to nasal sinusitis were in
children. Birch-Hirschfeld confirms this and states that 59·8 per
cent. of the cases are children. Mr. Patterson believes that the
antrum and sphenoidal sinus are rarely responsible. The symp-
toms are headache and nasal obstruction, but pain may be absent.
By the time that the orbit is infected the sinuitis and nose trouble may have cleared up.

Where infection of a nasal sinus is suspected the patient should be examined by transillumination, radiography, and exploratory puncture in the case of the antrum. The urine should be investigated for albumen, sugar, and blood, a leucocyte count done, and a blood culture made in patients suffering from septicaemia and pyaemia.

The complications that may occur are fixation of the globe, cavernous sinus thrombosis, extradural abscess, meningitis, cerebral abscess, and pyaemic abscesses.

The general treatment is rest in bed in an even temperature and to lie on the sound side. A purge is recommended, and aspirin or opiates to relieve the discomfort.

In some cases it is impossible to be certain that pus is present in the orbit. For these patients a waiting policy is advocated. The nose should be treated once a day by steam inhalations of tincture benzoinae co. and menthol, with plugging the nose for 15-30 minutes with cotton wool pledgets soaked in 5-10 per cent. solution of cocaine hydrochloride, and inserted in the region of the middle turbinate bone. This relieves the congestion and assists drainage. The patient must be warned against blowing the nose forcibly. Scarification and amputation of part of the middle turbinate are fraught with some danger during the acute stages and may lead to dissemination of the infection.

The treatment of any underlying nasal cause such as removal of polypi, hypertrophied mucous membrane, opening of diseased sinuses, resection of deflected septum and removal of a septal spur gives relief to the orbital symptoms.

With regard to the orbit, fomentations are good in the early stages, and in older patients many cases will clear up without incision. In children it is advisable not to delay the external incision too long as there is a danger of meningitis occurring.

If the swelling and pain increase the patient must undergo an operation. An incision is made below the inner third of the eyebrow and down to the periosteum. Retractors are inserted and the periosteum incised along the lower border of the supra-orbital margin and then separated from the medial wall of the orbit in a downward and backward direction.

If an abscess is encountered there are often air bubbles in the pus. Haemorrhage is controlled by swabbing and a suction apparatus. The medial wall of the orbit is inspected and any carious or necrotic particles of bone removed. A large opening should be made into the nose. It is advisable to do as little as possible.
In the case of frontal sinusitis with orbital suppuration, the same incision should be employed. The treatment depends on the findings, and it is often best just to incise and drain and leave other treatment till a later date.

Post-operative treatment consists in draining the affected part as long as it is necessary to do so, using nasal sprays, and the avoidance of blowing the nose forcibly, swimming, and diving.

Mr. Patrick Watson-Williams took part in the discussion and gave an account of the orbito-ocular signs which suggested a rhinogenous source of infection. Where infection extended to the orbit from a frontal sinusitis a swelling occurred above the inner canthus, from the ethmoid above and below the medial palpebral ligament, and from the antrum a swelling was present in the lower lid just above the inferior orbital margin. There is chemosis of the conjunctiva on the nasal side. The globe is displaced outward and either upwards or downwards, and there is tenderness and resistance on pressure.

Mr. Watson-Williams spoke of the advantages of endorhinoscopy in detecting latent infection in the ethmoidal and sphenoidal air sinuses. A streak of pus is seen in the vicinity of these sinuses which is often missed by anterior and posterior rhinoscopy.

He advised the examination of the eyes by an expert before operating on the nasal sinuses. Optic atrophy, irido-cyclitis, and retrobulbar neuritis are sometimes present at the time of operation, and unless this has been observed and noted the surgeon is apt to be blamed should the vision deteriorate at a subsequent date.

Mr. Somerville Hastings described a number of cases of inflammatory swelling of the orbit due to syphilis. He related two cases in particular, which resembled mucocele and both cleared up under anti-syphilitic treatment.

Mr. Edward D. D. Davis gave an account of the statistics of 33 patients who suffered from oedema or swelling of the orbital contents and had been sent to him by ophthalmic surgeons for examination of the nose. He emphasised the importance of draining both the orbital collection of pus and the affected sinus.

Where the pus was situated beneath the orbital periosteum great care must be taken not to injure the periosteum. He advocated an intra-nasal operation, and does not use packing or drainage tubes for the orbital incision where such has been made.

Mr. Harrison Butler pointed out the importance of locating the pus accurately. He related a case where there was a collection of pus in the muscle "pyramid," and that after excision of the eye and subsequent drainage the patient recovered. Pus is also found beneath the periosteum of the medial wall of the orbit and in Tenon's capsule.
Mr. Harrison Butler emphasised the necessity for doing a radical operation and advised the co-operation of the ophthalmic surgeon and rhinologist.

Col. A. E. J. Lister gave an account of a girl, aged 14 years, who suffered from a swelling at the outer side of the orbit, of an inflammatory nature, and in which the movements of the eye were little interfered with. The swelling was a suppurating hydatid cyst.

Mr. George Mackay spoke of the importance of blood examination in cases of orbital suppuration. He described two cases where anthrax was the cause of orbital cellulitis.

Mr. A. L. Whitehead emphasised the importance of radiography as a diagnostic agent. Orbital cellulitis in young persons where there was no obvious cause, and not much proptosis, cleared up with rest and fomentations only.

Mr. Jameson Evans described a case of orbital cellulitis following forceps delivery. There was a granulomatous mass on the lid covering the opening of a sinus which passed through the lid and crossed the orbit. At the distal end of the sinus was a sequestrum.

Mr. A. W. Ormond said that the failure of vision in these cases was probably due to interference with the central retinal vessels and pressure on the central artery.

Mr. MacCallan and Mr. Norman Patterson responded and expressed their interest in the opinions that had been given and the accounts of the various cases.

H. B. Stallard.

BOOK NOTICES


Mrs. Ladd-Franklin has been a frequent writer and an ardent fighter about colour vision. The present volume will be welcomed by those interested in the subject; and the more so because it is not a new work, but a collection of all her previous communications. No one can read the earlier papers without recognizing that Mrs. Ladd-Franklin was a pioneer who did first class original work. One has only to remember that she was the first to lay stress upon the night-blindness of the fovea—a fact already well known empirically to astronomers; and that she made the very important discovery, soon confirmed by Ebbinghaus, that the complementary whites formed by red and blue-green and yellow and blue respectively, if of equal brightness to the light adapted