

unattached to hospitals. They collapsed during the war, but now have resumed their activity. A section of ophthalmology was organised in January, 1922. Dr. Walter E. Lambert was elected chairman, Dr. Edgar S. Thomson vice-chairman, and Dr. Conrad Berens secretary. At the several meetings of the section consideration was given to various topics, such as (1) lack of professional standards; (2) paucity of equipment; (3) overcrowding in all clinics, especially for refraction; (4) abuse of clinic by patients able to pay; (5) failure of patients to procure glasses when prescribed; (6) unsatisfactory financial arrangements with opticians; (7) lack of uniformity of fees charged for admission, drugs, laboratory examinations and glasses; (8) lack of provision for research; (9) incompleteness of records and inadequacy of filing system.

The section decided that no official pronouncement on these matters would carry weight unless sufficient facts were gathered upon which to base recommendations. The executive committee therefore outlined the research which was considered necessary, and the following studies were made:—Conrad Berens, junior, with Dr. R. R. Losey, made a study of professional methods, equipments, records, teaching, and research in nine institutions. Studies of the admission, procedure, fee systems and the provision of glasses were made in four special eye clinics and eight eye clinics in general dispensaries by Dr. Gertrude E. Sturges.

A summary of the findings of the studies, together with the conclusions and recommendations arrived at by the committee as the result of these findings, will be presented in the report of the section, which will be available in the autumn.

ABSTRACTS

I.—TUBERCULOSIS OF THE LACRYMAL PASSAGES

Rollet and Bussy (Lyons).—The clinical forms of tuberculosis of the lacrymal passages. (*Les formes cliniques de la tuberculose des voies lacrymales.*) *Revue Générale d'Ophthalmologie*, May, 1920.

This article, based on the extirpation and subsequent histological and bacteriological examination of about 800 sacs, is of great interest. It is essentially a classification, and as simple a one as possible. It admits that between each clinical type there are transition forms and does not seek to subclassify these. A brief résumé may perhaps be of interest.

I—Pure or primary forms.

(1) Tuberculous atresia of the lacrymal passages. This occurs in those the subject of tuberculosis of the lung, etc.

There is simple lacrymation without ectasia of the sac and without reflux of mucus or pus from it. There is a pure sclerosis of the sac.

(2) Lacrymal white swelling. Round or oval tumour with false fluctuation. Skin normal coloured and not adherent. Irreducible. Painless. Due to thickening of the sac and invasion of its cavity by granulation tissue (*fongosités*).

(3) Lacrymal cold abscess. Results from the evolution of the foregoing.

(4) Lacrymal tuberculous fibroma. This is a rare form of which an excellent description (with illustrations in the text) is given. There are no granulations and no pus. There is simply a slow development of total conjunctival hyperplasia of the sac. II—Forms which are secondary to tuberculosis in the neighbourhood.

(1) Lupus of the lacrymal passages.

(2) Lacrymal tuberculosis of conjunctival origin. A rare complication of a rare condition.

(3) Lacrymal tuberculosis of osteo-periosteal origin. The authors have never met with this, and hardly believe in its occurrence. In 800 ablations of the sac, including chronic forms and those which have lasted for years, they have never come across tuberculous osteoperiosteal lesions.

III—Complicated forms.

(1) Lacrymal white swelling or cold abscess “*rechauffés*.” That is, tuberculosis of the sac modified by inoculation of a common pus organism; especially the pneumococcus. The affection simulates an ordinary dacryocystitis with empyema of the sac.

(2) Tuberculous prelacrymal tumour. Granulation tissue is formed in front of the sac which is itself clinically intact. No evident communication with the sac. Scraping of the prelacrymal masses results in cure without touching the lacrymal passages. The condition is due to passage of the bacillus through the walls of the sac without leaving any clinical trace.

(3) “Ganglionic” form of lacrymal tuberculosis. Occurs principally in children and is characterized by minimal changes in the lacrymal passages with maximal affection of the submaxillary gland. The type is interesting because it shows the necessity of exploring, in the adenitis so common in children, not only the mucous territories of the mouth, throat and nose, but also the lacrymal passages.

(4) Tuberculous lacrymal fistula.

(5) Tuberculous lacrymal caries. This has been mentioned already under heading II, No. 3, as a form which does not really occur.

ERNEST THOMSON.

II.—DEVELOPMENT OF THE CANALICULI UNDER NORMAL AND ABNORMAL CONDITIONS

Ask, Fritz (Lund) and van der Hoeve, J. (Leyden). A contribution to the knowledge of the development of the canaliculi under normal conditions and in cases of open oblique fissure in the face. (*Beiträge zur Kenntnis der Entwicklung der Thränenröhrchen unter normalen und abnormen Verhältnissen, letzteres an Fällen von offener schräger Gesichtsspalte.*) *Arch. f. Ophthalm.*, Vol. CV., 1921.

Ask was able to confirm the conclusions at which he had previously arrived as to the normal development of the canaliculi, viz., that they spring by a process of budding about the end of the fourth week of foetal life from the upper end of the primary epithelial rudiment of the lacrymal passages, which has become completely separated from the ectoderm in the region of the nasolacrymal cleft.

The epithelial outgrowths forming the canaliculi effect a junction with the epithelium of the lid margin in the middle of the third month, that of the lower canaliculus being situated farther away from the inner canthus than the upper. Contrary to opinions previously held on this point, the fact was established that the epithelium of the lid margin takes no active part in the formation of the canaliculi.

It is shown that the presence of the punctum and canaliculus on the temporal side of a coloboma of the lid or an oblique fissure is not necessarily proof that the canaliculus springs from the epithelium of the lid margin.

In man the caruncle takes its origin entirely from the lower lid as a mass of rudimentary cilia and meibomian glands that are cut off from the inner end of the row in the lower lid by the insertion of the lower canaliculus in the lid, and so isolated in the inner canthus. In agreement with this explanation one of the cases examined shows an absence of the caruncle where the lower canaliculus had not reached the lower lid margin.

From an observation of the condition of the various parts of the lacrymal apparatus and the presence or absence of the caruncle we get data from which can be calculated with approximate accuracy the time in foetal life at which many forms of oblique fissure or coloboma of the lid are formed, or rather, the time at which the formation of the fissure has progressed so far as to arrest the full development of the canaliculi or caruncle.

Open oblique fissure in the face in the majority of cases appears to be of a secondary nature; the fissure is brought about by the pressure of the amniotic membranes when the parts are already formed, thereby cutting through the canaliculi, together with the neighbouring tissues.

THOS. SNOWBALL.

III.—REMEDIES

- (1) Elewaut, Dr.—Dmégon in the treatment of gonococcal conjunctivitis. (*Le Dmégon dans le traitement de la conjonctivite gonococcique.*) *Arch. Méd. belges*, Nov., 1921.

(1) Dmégon is the commercial designation of a "polymicrobial stable atoxic vaccine," the preparation of which is not given by Elewaut. He has employed it in four cases of gonococcal conjunctivitis with satisfactory results, and sums up his conclusions thus:—

While not claiming for Dmégon a therapeutic effect equal to that of antiphtheritic serum, we maintain, nevertheless, that its action in the treatment of gonococcal conjunctivitis is undoubtedly beneficial. The inflammatory signs diminish rapidly and after the third injection oedema of the lids and conjunctiva disappear. The discharge quickly changes from purulent to serous. The analgesic action of the drug is much appreciated by the patient. The duration of the attack is noticeably shortened; in our fourth case, which was the least favourable of the series, the gonococcus could not be detected after 15 days of treatment. We think, but our limited experience does not enable us to affirm, that Dmégon prevents corneal complications; none of our cases suffered in this way. We are unable to say what effect the drug would exert on corneal lesions already established. In our opinion this vaccine, by its effect on the inflammatory signs and on the discharge, is deserving of trial in the treatment of blenorrhoeic conjunctivitis.

The dose for an adult is 0.5 cc. repeated every day or every second day. In three of the author's cases four injections were given; in the fourth case five injections. The other measures employed consisted in frequent irrigation with boiled water, and in one case argyrol drops four times daily.

J. B. LAW FORD.

- (2) Wright, R. E., Major I.M.S. (Madras).—*Rhinosporidium kinealyi* of the conjunctiva cured by tartarated antimony (tartar emetic), and notes on a case in which the lacrymal sac was affected by this sporozoon. *Indian Medical Gazette*, March, 1922.

(By the same author and in the same issue of *Indian Medical Gazette*, *Rhinosporidium kinealyi* of the conjunctiva.)

(2) These two papers deal with three cases of the disease confined to the conjunctiva, and one case affecting the lacrymal sac and nasal mucous membrane. This disease was first found in the conjunctiva by Kirkpatrick in 1909, and the only other case known to have

involved the lacrymal sac was reported by the same surgeon in 1916 (*The Ophthalmoscope*, p. 447). Involvement of the nasal mucous membrane is not rare in Madras.

The lacrymal affection formed a tense red swelling the size of a filbert, with a small sinus from which thin purulent material escaped. The sac on extirpation was found filled with polypoid projections. The adjacent bony parts were hollowed out from pressure. On examination of the nose large rhinosporidial polypi were seen springing from the middle and inferior turbinates.

The conjunctival affection was found in three Eurasian boys who had lived in an orphan asylum in Madras, which accommodated over 90 boys and 60 girls. The occurrence of the first case of the disease gave rise to an examination of all the children, and thus the second and third cases were found; they had produced no symptoms. No instance of *rhinosporidium kinealyi* has yet been seen in a female in the Madras Presidency. The children all used a large swimming bath frequently, the water of which was changed only once in two or three weeks. In none of the cases was there injection of the eye or lacrymation or photophobia. The first boy had two small flattened pedunculated growths, one from the upper and the other from the lower palpebral conjunctiva, not visible till the lids were partly everted. In colour and consistence they resembled spleen or liver substance, but on close examination the thin edges were yellowish from the presence of minute round white or yellowish granules.

In the second case there was a single flattened pedicled growth springing from the upper tarsal conjunctiva. This growth was not removed, but was treated successfully by instillations of 2 per cent. tartarated antimony solution continued for three months. Quinine hydrochloride solution used in the same way previously had failed to control the growth, whereas under the influence of the antimonial drops the small tumour gradually shrank and finally disappeared. It is suggested that similar treatment may prove useful against other harmful protozoa.

The third case was in an earlier stage. There was a small round fleshy plaque on the bulbar conjunctiva, freely movable with the conjunctiva. It was 2.5 mm. in diameter, of minimal elevation. Minute white seed-like bodies could be seen in it with the naked eye.

Excision of the growths in the first and third cases was not followed by recurrence.

H. HERBERT.