

Society of Arts on February 24, with Mr. J. Herbert Parsons in the Chair. We are indebted to the courtesy of the Illuminating Engineering Society for permission not only to reproduce in full the communications of Dr. Lister Llewellyn and Mr. Elworthy, but also to publish abstracts of the remarks of other speakers. The full report will appear in the *Illuminating Engineer*. In spite of some divergence of opinion on details there is a consensus in favour of the view put forward by Sir Josiah Court, and so ably supported by scientific evidence by Dr. Llewellyn, that the prime factor in the production of the disease is deficient illumination. The problem of overcoming this defect in mines cannot be insuperable, and there is reason to think that the Government authorities are convinced as to the imperative necessity for solving the problem at the earliest date. Ophthalmologists will willingly participate to the best of their ability in bringing about so desirable a result.

ABSTRACTS

REMEDIES

- (1) **Weeks, John E. (New York).**—Tuberculin in diseases of the eye. *Trans. Amer. Ophthalm. Soc.* Vol. XVI. (1918), p. 114.

(1) **Weeks's** paper was written chiefly for the purpose of exciting a discussion upon tuberculin in diseases of the eye, and, apart from its intrinsic value, it succeeded admirably in its object. As regards the diagnosis of a tuberculous process in the eye, Weeks has found the best method to be by injecting subcutaneously $\frac{1}{2}$ mg. in children and 1 mg. in adults. The injection is repeated, if no local reaction is obtained, 48 to 72 hours later, provided the patient's temperature has remained below normal for the preceding 24 hours. Two mg. are employed for the second injection, and 3 mg. for a third injection if a satisfactory reaction has not been obtained from the smaller dose. In some circumstances it may be justifiable to use a larger dose. The author has no experience of cases where the condition of the eye was made worse by the diagnostic injection of tuberculin. On the contrary, the condition of the eye after the reaction has subsided is better than before tuberculin was injected. In many cases it is desirable to make the

diagnostic tests for syphilis as well as for tuberculosis, and, when both yield positive results, to institute treatment for both diseases at the same time. *In what cases of eye lesion should tuberculin be given?* First, all cases where a local reaction is excited by the injection of test doses of tuberculin, and, secondly, suspected tuberculosis in which (a) a general reaction to tubercle has been obtained, or (b) benefit has accrued from therapeutic doses of tuberculin. *What kind of tuberculin can be used to the greatest advantage in diagnosis and treatment?* Weeks employs the old tuberculin as supplied by the New York Board of Health in almost all cases, but when improvement ceases he resorts to the use of one of the other preparations, sometimes T.R., sometimes B.E. *In what dose and for how long should tuberculin be used in treating tuberculosis of the eye?* A dose is employed just short of that sufficient to produce a systemic reaction, and is repeated every four or five days. The time over which the treatment should extend can be fixed only approximately. Weeks continues the injections for at least two months after all signs of activity of the tuberculous process have subsided, and recommences if any sign of relapse is found.

In the discussion, **Risley** (Philadelphia) mentioned a case of gumma of the orbit, in which mercurial treatment had done no good. Tuberculin (which gave a positive reaction) seemed to have cured the condition. **A. E. Davis** (New York City) preferred old tuberculin for therapeutic purposes. **Woods** (Baltimore) spoke of cases where tuberculin seemed to have done harm by starting fresh mischief in the fundus. **Byers** (Montreal) regarded 1 mg. of T.O. as too high for an initial dose. His own preference had always been for a freshly prepared bacillary emulsion. **Jackson** (Denver) preferred the old tuberculin for treatment as well as for diagnosis. A dose should not be given oftener than once a week. He had seen fresh intraocular haemorrhage on three separate occasions follow tuberculin. **Ziegler** (Philadelphia) used small doses of old tuberculin. **Verhoeff** (Boston) had now entirely given up tuberculin as a therapeutic agent. He depended on simple hygienic measures.

S. S.

- (2) **Guibert**.—The treatment of corneal ulcers. (*Traitement des ulcères de la cornée.*) *La Clin. Ophthal.*, June, 1919.
- (3) **Guibert**.—Subcutaneous injection of cow's milk. (*Injections sous-cutanées du lait de vache.*) *La Clin. Ophthal.*, June, 1918.

(2 and 3) In these two articles **Guibert** deals with various forms of paraspecific serum therapy as concerns corneal ulcer; and with

the general good effect of subcutaneous injections of cows' milk, which act after the same fashion as paraspecific serum therapy.

ERNEST THOMSON.

- (4) **Dor, L. (Lyon).—The medical treatment of cataract. (La traitement medical de la cataracte).** *La Clin. Ophthal.*, June, 1919.

(4) Dor, in treating cataract by medical means has settled down to the use of a mixture of chloride of calcium and iodide of sodium. He puts more faith in the calcium than in the sodium; but as a matter of fact the mixture results in iodide of calcium, at any rate, to a certain extent. The formula is:

Crystalized chloride of calcium	4 grammes
Desiccated iodide of sodium	4 grammes
Distilled water	500 grammes

The patient is instructed to bathe the eyes for twenty minutes every day for three months, then for two months out of three, then for one month out of three, and so on for one month out of three or four for the remainder of life. Put shortly, the theory of the treatment is dehydration of the lens, since in some cases, at any rate, cataract is caused by absorption of water by the lens. Dor apologizes, as it were, for not giving his notes of cases, but records it as his opinion that "the evolution of cataract treated as thus advised is undoubtedly retarded in a very large number of cases, and often for a very long time." In addition to the treatment, it is necessary to say that Dor advises the patient to pay very particular attention to his stomach and teeth, and in particular not to retain upper molars affected by periostitis.

ERNEST THOMSON.

- (5) **Terrien, F. (Paris).—Radio-diagnosis and radiotherapy in ophthalmology. (Radio-diagnostic et radiothérapie en ophtalmologie.)** *Arch. d'Ophthal.*, May-June, 1919.

(5) At a meeting of the *Société française d'Ophthalmologie* in May, 1919, Terrien presented a report on the "Employment of Radium and X rays in Ophthalmology." He had as a collaborator on the technical side M. Ledoux-Lebard. The present paper is supplementary to the report and is written in order to give more precise and detailed information on some of the points referred to in the report and concerning which there was some discussion by the members.

In this paper Terrien deals systematically and at considerable length with the radiography of the normal and pathological skull, the cranio-cerebral topography, the diagnostic and prognostic value of alterations in the sella Turcica and adjoining parts, and the use and method of application of radium and X rays in tumours in the

pituitary region. Even a brief synopsis of this would occupy much space and would be unsatisfying. He makes remarks on the "action of X rays and radium on the normal eye," which are important and worthy of quotation: "In spite of somewhat contradictory statements which have been published, X rays and radium appear to exert but little injurious effect upon the normal eye. The only lesion clearly attributable to them is conjunctivitis which may follow too prolonged exposure; it is an affection of the mucous membrane corresponding to the radio-dermatitis occasionally met with. In contradistinction to the recorded observations of Birch-Hirschfeld we have never seen lesions of the cornea, the crystalline lens, or the retina in numerous experiments conducted in association with three other observers. The only instances in which conjunctival lesions resulted occurred when unfiltered rays were used. We may feel confident that the rays are generally well tolerated, with the exception of rays of low penetrating power. They do not induce any change in the transparent media, and the sclera will stand intense and prolonged irradiation without injury. Even the delicate retinal tissue appears resistant, and it would seem that the dangers of radio-therapy to the normal eye have been exaggerated."

J. B. LAWFORD.

- (6) **Sauvigneau.**—**Antigonococcic vaccine and the complications of blennorrhagia.** (Le vaccin antigonococcique et les complications de la blennorrhagie.) *La Clin. Ophthal.*, August, 1919.

(6) **Sauvigneau's** remarks are based on one case, but this case is a very striking one in which a young man suffered from gonorrhoeal conjunctivitis complicated with articular troubles of a severe type. In the course of treatment by the family physician the conjunctivitis was hanging fire, the cornea was becoming affected, and the joints were threatened with ankylosis. Sauvigneau advised the employment of the Nicol and Blaizot vaccine (Dmégon)*, with the practically immediate result that the whole infection was subdued with *restitutio ad integrum* of the articulations.

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- (7) **Darier, A. (Paris)**—**Biological methods of treatment.** (Les médications biologiques.) *La Clin. Ophthal.*, October, 1919.

(7) **Darier** is indefatigable in his insistence on the value and benefit to be derived from the use of sera and vaccines, more especially by means of their paraspecific action. In this article he keeps us up to date in a review of these and also of the modern methods of injections of peptones, albumoses, and cow's milk in infective

* For an abstract concerning these vaccines, see *British Journal of Ophthalmology*, 1919, p. 182.

conditions. Darier has all along been a strong supporter of the paraspecific action of antidiphtheritic serum, and, while giving due weight to other methods, he seems to have the greatest faith in this. The following sentences may be transcribed as appearing to give the author's crystallization of his experience :

"It cannot be too often repeated that an injection of antidiphtheritic or plurivalent serum has on general infections a therapeutic action as powerful as that of peptones, milk, and colloidal metals, and without any appreciable rise of temperature. Here, as always, it is a question of the kind of case we are dealing with. Such and such a one of these agents will have a more marked action, perhaps even a specific action, in certain individuals under certain conditions. Clinical observation must assist us in each case which agent to choose. Further, most of these agents, far from being irreconcilable rivals, can by their combination or alternation give excellent therapeutic results." Again, says the author: "In all infections, whether influenzal or otherwise, the exact nature of which has not been determined and while waiting for a bacteriological diagnosis, one may be able by the administration of a draught containing 20 cc. of antidiphtheritic or plurivalent serum accompanied by an injection of milk, to cause rapid abortion of the infective processes."

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- (8) **Pauly, Raymond.**—The serum therapy of influenza. (Sérothérapie de la grippe.) *La Clin. Ophtal.*, October, 1919, from *Lyon Medical*, March, 1919.

(8) This article has nothing whatever specially to do with ophthalmology, but is interesting, nevertheless, in association with the article by Darier in the same number of *La Clin. Ophtal.*, **Pauly**, like Darier, has come to recognize that the administration of a serum by the mouth has the advantage of simplicity combined with freedom from serum "accidents." He usually gave 10 cc. of a plurivalent serum in cold sweetened water, renewing the dose six hours afterwards. Often the improvement was manifest the next day when, however, he gave another 10 cc. Usually this was sufficient. While this was the method of choice, Pauly still employed subcutaneous injection in bad cases, or where vomiting was a prominent symptom. The author concludes with these words: "We have never seen any inconvenience from the employment of plurivalent serum, and the results obtained have made us believe in its real efficacy in the treatment of influenza, at any rate in the form of that disease existing at present."

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