A CASE OF SYMPATHETIC NEURO-RETINITIS WITH CONSECUTIVE SEROUS IRITIS.

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The so-called sympathetic diseases of the eye still hold a first place in the interest of ophthalmic surgeons, not only because of their intrinsic importance, but also because of the doubt which still hangs over their pathogeny. It is not my present purpose to attempt a full discussion of the important questions involved in the study of these affections of the hitherto sound eye, clinically related to pathological processes in the injured eye; but to relate briefly the history of a case which seems to call in question the correctness of the opinion which regards the consecutive affection as always of sympathetic origin.

Injury to Ciliary Region. Neuro-Retinitis in Un-injured Eye; Consecutive Serous Iritis.—John D., æt. 14. Dec. 26, 1882, was struck in the left eye by the arrow from a boy's gun. The propelling force was a rubber band, the projectile a wooden arrow, 1 cm. in diameter, $8\frac{1}{2}$ cm. in length, tipped with a brass ferule, from which projected a metal point 1 cm. long and 3 mm. in diameter, with sharpened extremity. This metal extremity penetrated the eye at the corneo-sclerotic junction, in the lower and inner quadrant, making a horizontal wound nearly linear, part in ciliary region of sclera, partly in the cornea. The iris was found projecting from the wound, and behind it a grape-like mass, bluish-black, probably the ciliary body. Ineffectual effort was made by gentle manipulation, and pressure with lower eye-lid to replace the protruding mass. The projecting iris was incised, leaving a nearly typical coloboma of the iris. The ciliary body was then gently replaced within the wound by the horn spoon, when a button of vitreous presented in its stead. Atropia was instilled, the eye bandaged and subsequently treated as after a cataract extraction. The boy had suffered much shock from the injury. There was violent reaction which was, however, promptly and successfully met by local depletion and aconite.

The wound closed with cystoid scar, but the eye notwithstanding this rapidly lost its redness. On January 22d, less than one month from the receipt of the injury, he visited the office still wearing a Liebreich bandage. The following conditions were noted: O. S. still some ciliary injection, anterior chamber normal, wound flat, no adherence of iris or ciliary body, lower and inner periphery of lens opaque, blood clot still in vitreous chamber and prevents further ophthalmoscopic study. O. D. v. = $\frac{20}{xx}$ fac.¹ Jr., 1 p.p. 10 cm. eye white and ophthalmoscope revealed a typically healthy, young eye, with H. = 1, 5 D. On January 31, the patient was attacked with coryza attended with slight catarrh of the conjunctiva in the right eye, for which he was treated with a slightly astringent wash. The attack was attended and fol-

lowed by some undue sensitiveness to light and inability to use the eye. On February 3, v. = $\frac{20}{xxv}$ and Jr. 1 p.p. 17 cm. Ophth. shows simply undue opacity of surface of optic disk. On February 13 the nerve end was as red as the surrounding choroid, and its margins blurred by the hazy retina; veins full and tortuous, no hemorrhages, media transparent, iris dilates *ad max.* under atropia; conjunctival and ciliary injection remains, and there is increased lachrymation and some dread of light. February 19, v. had sunk to $\frac{20}{xi}$ and the ophthalmoscopic symptoms had progressed. On the 26th, improvement is noted, while v. is not recorded, but media are distinctly noted as transparent. On March 2, only hazy view of the eye ground could be had, owing to diffuse opacity of the media, and there was seen with convex glass numerous dust-like particles in the anterior part of the vitreous body. The retina was striated, circulation as before, and there were now numerous yellowish-white splotches throughout the fundus, v. $\frac{20}{cxvii}$. Examination with 2" lens shows a few punctate opacities on membrane of Descemet in its lower half. The potas. iod. and bromide which he had been taking steadily since the first appearance of the neuritis was continued and the mercurial bandage was prescribed in addition, with 4 gr. sol. of sulphate of atropia locally.

Under this treatment the eye slowly but steadily improved, until on the 18th of April v. rose to $\frac{20}{xx}$; ciliary injection gone and p.p. for Jr. 1 was 15 cm., the atropia solution having been suspended for ten days. On the 5th of May, it was noted: eye white, corneal deposits have disappeared, no retinal haze, margins of nerve fringed, retina striated above and below the nerve, considerable absorption of pigment epithelium throughout the entire eye ground.

On June 1, v. $\frac{20}{xx} +$, p. p. Jr. 1, 13, cm. o. s. v. $\frac{20}{cc}$. On Apr. 30, 1884, v. $\frac{20}{xx}$ fac. Is going to school; eyes are not troublesome. In o. s. counts fingers with difficulty. In o. oph. shows conus at outer side of nerve—and nerve itself grayish-green—margins fringed.

The points in this case which to the reporter seem of sufficient interest to justify its publication are, first, the complete recovery of the secondarily affected eye without the removal of the injured ball; second, the insidious onset of a descending optic neuritis, followed by choroiditis, cloudy vitreous, and finally all the phenomena of serous iritis. Had attention not been directed to the eye by the conjunctival catarrh attending on the coryza, it is probable that the conditions of the optic nerve and retina would have been entirely overlooked until the inflammation of the choroidal tract had so obscured the media as to prevent an accurate study of the retina and nerve.

NOTE.—Since the presentation of the above report the patient has had two attacks of convulsions, the first preceded by blindness. The convulsions were epileptiform, attended by complete unconsciousness and followed by violent headache. The first occurred in the latter part of June. The patient was seen in consultation with the family physician, Dr. O'Hara, of Philadelphia. The ophthalmoscope re-

¹With facility.

vealed a fresh onset of the optic neuritis. The mercurial bandage was once more employed, and was again followed by a speedy subsidence of all the symptoms. The second attack occurred Nov. 1, 1884; was similar to the attack above described. The neuritis was once more well marked. The same treatment was once more advised, but the patient drifted into the hands of an irregular practitioner, probably in consequence of a dreaded enucleation of the injured eye.

MEDICAL PROGRESS.

MATERIA MEDICA AND THERAPEUTICS.

THE USE OF COCAINE IN THROAT AFFECTIONS.—

As an additional proof of the wonderful effects of this drug which is exciting so much attention in this country, we give a brief of the paper read by Dr. Jelinek before the Society of Physicians of Vienna, and taken from the *Wiener Medicinische Wochenschrift* by the *Medical Times*:

Dr. Jelinek first briefly reviews the various methods hitherto employed to diminish the sensibility of the pharynx and larynx, viz., the painting with sulphate of morphia, the ether spray, tannin, bromide of potassium. The use of sulphate of morphia was very commonly used. The pharynx and larynx were painted twelve times with chloroform, and after the lapse of an hour an equal number of times with a concentrated solution of morphia. This was done in the evening preceding the day of operation. The next morning the sensibility of the larynx was found so diminished that operation could be performed without distress. The disadvantages of this method were obvious. The preparation lasted twelve hours, and the patient had to be watched during the whole night, as there was a possibility of narcotism. Hydrochlorate of cocaine seemed to have been long known to French physicians, but its practical employment as an anæsthetic and anodyne had hitherto been unknown. He used dilute alcoholic solutions of ten per cent. and twenty per cent., which were at first clear, but which after some days became turbid, owing to the alcohol evaporating, and some of the cocaine being precipitated. It then became necessary to add a few drops of alcohol. Hydrochloric acid should not be used in preparing the solution, and it should not be filtered. In slight operations, where little reflex action and only moderate pain were present, the ten per cent. solution sufficed; but where the larynx had to be rendered anæsthetic for more serious operations, the twenty per cent. solution must be employed. To the pharynx the solution should be applied by means of a little mop; to the larynx by means of a thick, soft camel's hair pencil. The application must be repeated every minute and a half, if necessary. The anæsthesia lasted ordinarily from ten to fifteen minutes, and disappeared totally after twenty minutes. All those parts with which an instrument might come into contact—the margin, the lingual and laryngeal surface of the epiglottis, the palliculæ, and so on, must be

painted, as reflexes might occur whenever a part had remained untouched by the solution. He then mentioned some cases in which polypi and papillomata had been removed from the larynx with considerable success. As an anodyne in cases of tuberculous perichondritis, in which delutition was so painful that the patients refused food, and were in danger of perishing from inanition, it rendered good service; the diminution of pain sometimes lasted for three hours; it was necessary to seek out all the implicated spots, and to paint them thoroughly. In these cases only aqueous solutions had been used. He further pointed out that cocaine diminished the swelling of a mucous membrane where present, lessened its secretions, and, according to Fannel, tightened the vocal cords. No local or general disturbance had been observed after its employment.

In the course of his remarks Dr. Jelinek gave one striking case somewhat in detail of a man, 45 years of age, suffering from tubercle with extensive swelling and strong infiltration of the epiglottis, but only moderate dullness and slight crepitation were discoverable at the apex of the right lung. He affirmed that for close upon two months he had only been able to swallow milk in the minutest quantities. He was extremely wasted, incapable of work, scarcely even able to walk, and tortured by continuous pain and thirst. Before applying the cocaine solution Dr. Jelinek made him drink some water. He had hardly swallowed a few drops before he started up in the greatest pain, while the water returned through his mouth and nose. Dr. Jelinek then carefully painted the lingual and part of the laryngeal surface of the epiglottis, and the palliculæ, with a ten per cent. solution of cocaine, and a minute afterwards told the patient to drink again. The man anxiously took a small mouthful, for a moment looked around in astonishment, and then, to the surprise of all, greedily swallowed the whole glassful at a single draught. On reaching home he made an excellent meal (the first he had for two months), but soon after the pain re-appeared, and three hours later was as bad as ever.

Professor V. Schrötter stated that he had succeeded in preparing patients by this method, of preparation in from three to eight days, so that they became quite indifferent to endolaryngeal manipulations.

TANNATE INJECTIONS IN CHOLERA.—Professor Cantani, of Naples, has obtained excellent results by the early treatment of cholera with enemata of warm solutions of tannic acid. (*Centralblatt für die Medicinischen Wissenschaften. Med. Times.*) He used the solution in strength of 5 to 10 grammes of the acid to 2 m. of boiling water, with a little mucilage and laudanum. To insure success he generally made the injection as high up in the bowel as possible, but found that even with an ordinary syringe the treatment was valuable in the early stages of the disease. It was especially effective during the period of premonitory diarrhœa, which was at times completely checked even after a single injection, a period of rest following of from eight to ten hours, and further attacks being cut short in a similar way. The tan-