tages and shortcomings would be more clearly recognised by all.—Dr. LITTLE (Manchester) said the subject of cataract extraction was a wide one, and he would only refer to a few points. He was one of those who were brought up in the iridectomy school, and followed the teachings of Graefe. He had a large experience in extraction with iridectomy, and had always obtained excellent results, equally good to any statistics hitherto recorded by other operators. He was not therefore disposed to substitute any other operation, unless it was clearly shown that that operation was a better one, and it certainly had not yet been shown that extraction without iridectomy had been attended with better results, if so good. Mr. Teale, in supporting the latter method, had not furnished them with very definite results, neither had Mr. Snell. In Mr. Snell's 300 cases it would be interesting to know the resulting vision, the exact condition of pupil and iris, the prevalence of iritis, and the number of secondary operations. It was true, however, that Dr. Knapp had given them a very accurate record of 200 cases, and though he showed about 70 per cent. of secondary operations (a very large number), yet his results did not seem to be of a higher standard (certainly very little) than by the iridectomy method; besides, he did not agree with Dr. Knapp that secondary operations on the capsule were free from danger. The section Mr. Teale describes was very similar to the one practised by Le Brun and Liebreich many years ago—in 1873-4. Dr. Little said he operated upon a good many cases after this plan with rather indifferent results, and since that time he had always hesitated to adopt similar methods. The last six weeks, however, he had performed fifteen extractions without iridectomy, being desirous of giving that operations a fair trial, and giving the accurate results of a given number of cases at some future time. Of the fifteen cases one was followed by prolapse of iris, five cases showed two or three slight iritic adhesions to capsule, seen after atropine, so that the pupil was not capable of full dilatation; all the others were perfect results. The occurrence of even slight iritis might seriously interfere with the result in the flap operation, but not so with iridectomy.—Mr. Cross said if it was essential to aim at complete removal of the lens iridectomy was indicated, for without it fragments and *débris* tended to slip under the iris fold, where their presence was overlooked, or if recognised their removal was much more difficult than where a coloboma had been made. Moreover, any lens material that might be left behind at the time of the operation tended to be washed out of the wound as the aqueous collected again. This was easily effected if the corneal wound was in direct communication with the capsule; but if, on the other hand, the iris intervened there was a great tendency for it to be worked up against the cornea. Extraction without iridectomy was undoubtedly often followed by anterior synechia; in old weak eyes the incarcerated iris was likely to inflame, and the inflammation to spread inwards, causing irido-cyclitis or capsulitis. A good result without iridectomy was preferable to that when iridectomy had been done, but he thought iridectomy was a safer proceeding, and there was no evidence to show that the former method gave us better visual results than the latter. Despite the free use of eserine at the time of and after the operation, there was always the fear of blockage of the corneal wound by the iris, which could not occur where the iris was cut away. Though anterior synechiæ had been avoided, iritis and secondary capsule seemed very prevalent in the operation without iridectomy, requiring discissions which were not devoid of risk. On the contrary, the non-removal of the iris rendered the operation easy, and healing was more rapid if no complication occurred. The question was not yet settled between the two methods; increasing knowledge would tend to indicate which should be selected in each particular case.—Mr. W. J. CANT (Lincoln) said he was one of those whose mind was not absolutely made up as regarded the question of operating with or without iridectomy; but he wished to say that he had performed the latter operation fifteen times, and the success had been everything that could be wished. It seemed to him that most cataracts could easily be extracted by this method, and his experience was that iritis did not occur more often nor were secondary operations more frequently required than in the operation with iridectomy. The operation was as easy without iridectomy, and the pain less during its performance, and there was no bleeding into the anterior chamber which sometimes occurred with division of the iris. On the whole, he thought it was the operation that would be adopted by most surgeons in the future, as the rule, although it was probable a few exceptional cases would require iridectomy. If any cortical matter

was left after the nucleus was extracted, Mr. Cant used a specially constructed syringe which easily removed it. He had not lost a case, nor had he ever had prolapse of the iris, although on one or two occasions the base of the iris was adherent to the cicatrix; but this was not of any importance. Mr. Cant never used a speculum, and the knife preferred was one similar to Mr. Teale's, but not quite so broad at the base.—The PRESIDENT thought that those ophthalmic surgeons who adhered rigidly to the operation without iridectomy must often find themselves placed at a great disadvantage when they had to deal, as must sometimes be the case, with a cataract which was much less ripe than they had anticipated. In such a case he personally would undoubtedly prefer a peripheral incision of the capsule, so that any lenticular fragments which might remain after the operation should be safely enclosed in the membrane to which the lens was accustomed; but where no iridectomy was performed the operator had no alternative but a central capsular discission, with the very possible result that the soft lens substance might cause traumatic iritis and other kindred troubles. He agreed with Mr. Berry that the operation should be accomplished with the least possible amount of bruising or violent traction, and he inclined towards a rather large incision.

NOTES OF A CASE OF SCLEROTITIS, APPARENTLY OF DENTAL ORIGIN.

Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

By JOHN HERN, M.D. EDIN., M.R.C.S. ENG.,
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IT was with considerable reluctance that I decided to bring a single case before the members of this Section, but ultimately resolved to do so, thinking it probable that other cases of the kind have been met with, though, so far as I can ascertain, not published. My attention was drawn to the dental organs as a reflex cause of ophthalmic affections by an excellent paper read before the Odontological Society¹ (and published in its reports), by Mr. Power; but it is evident from it that scleritis has not been noticed by him as one of the affections of probable dental origin.

Mrs. Y., aged 38, a healthy, well-developed woman, the mother of three healthy children; no history or other signs or symptoms of syphilis or rheumatism, or any other morbid constitutional tendency. The husband and relations are also well known to me, and have no particular constitutional tendency to disease.

On March 27th, 1888, Mrs. Y. consulted me for a severe pain referred to the point of emergence of the left infra-orbital branch of the superior maxillary division of the fifth, and shooting up over the left nasal bone; this pain came on in paroxysms several times during the day, and, as the patient described it, "inflamed her eye." On examining the left eye, tension seemed slightly above the normal, but, on comparing it with the right, they were found to be as nearly as possible the same; the eye was not tender to the touch, but at the upper margin of the cornea, about two lines external to the vertical meridian, a distinct patch of scleritis was observed, the contiguous corneal substance being quite hazy in its superficial layers. The patch at this time was about the size of the flat surface of a split pea. Although six-grain doses of quinine several times a day relieved the pain, the patch gradually spread outwards and downwards along the corneal margin, involving its superficial layers almost to the pupillary margin. I noticed the patch spread and enlarged most on those days when the patient complained of most pain referred to the infra-orbital region.

In August, 1888, my notes of the case read as follows: "Scleritic patch has spread from the vertical meridian above to four lines internal to vertical meridian below, and has also extended two lines nearer the posterior pole than when first seen five months ago. Tension plus $\frac{1}{2}$ to 1 L. Pain now referred to all three divisions of the fifth (supra-orbital, infra-orbital, and the mental branch of the inferior dental); also pain in the upper and lower teeth of left side, especially the former. Patient complains that on taking anything, either hot or cold, into the mouth, the teeth ache (especially the left uppers), and that pains shoot up into the left eye."

The condition of the eye became gradually worse until late in

¹ Odontological Society's *Transactions*, vol. xvi, page 11.

the following month (September). There being an increase in the pain referred to the teeth, I asked my brother, William Hern, who was spending his holiday with me, to see the case, which he accordingly did, and discovered an exposed nerve in the second left upper bicuspid, and at once advised its removal, considering it the probable cause of the pain. The vision of the left eye was carefully tested late in September, and found to be $\frac{3}{8}$ L. Tension +1 L.

On October 5th the tooth was extracted, and sent direct to my brother for a report on its *post-mortem* condition, which I will give in his own words: "Upper second bicuspid of left side affected with a very large and deep carious cavity on its anterior surface, involving the pulp chamber, and a smaller and shallower one on its posterior surface. On splitting, the pulp was found to have been alive, its free surface ulcerating and covered with thin greenish pus, its deeper parts intensely red and injected; the pulp tissue altogether being in a state of great irritation, and a potential cause of much pain, both local and reflex." He also says: "I have seen several cases amongst my patients at the Dental and Middlesex Hospitals of undoubted reflex ophthalmic disturbance due to dental caries, in which the lesion was less clearly marked than in this case. In a few cases which have been sent me from Moorfields or from the out-patient ophthalmic department of my own hospital, an exposed pulp in some lurking position has most commonly been found to be the irritating cause."

As to the progress of the case after the extraction of the tooth, the pain disappeared immediately and did not recur. For a fortnight the condition of the eye appeared to remain absolutely stationary, and then gradually the lesion gave in, and disappeared in from six to eight weeks, leaving a slight haziness of the cornea, with the usual thinning of the sclerotic, giving the blue coloration of the choroidal pigment over the seat of the sclerotic patch. Tension in L. became equal to that of the R., and sight returned to the extent of $\frac{3}{8}$.

Having given a fair trial to all the recognised methods of treatment before the extraction of the tooth, I at that time ceased to administer all internal remedies, and simply applied a solution of boracic acid locally. Although the *post quod ergo propter quod* is not a safe method of reasoning, yet the gradual spreading of the patch up to the time of the extraction of the tooth, the sudden check produced thereby, the gradual diminution, dating from a fortnight after the extraction, and, finally, the gradual return of the eye to its normal condition, point, I think, to the probability that in this case, at any rate, we have an example of an irritative lesion reflexly produced, in which the afferent nerve is the superior maxillary, or second division of the fifth nerve, and the efferent the first division of the fifth and probably its nasal branch.

INFANTILE OPTHALMIA (BLENNORRHOEA NEONATORUM) AND ITS PREVENTION.

Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

By KARL GROSSMANN, M.D.,

Ophthalmic Surgeon to the Stanley Hospital, Liverpool.

THE matter which I propose bringing before this meeting to-day is not a new one, neither do I expect to meet with any serious opposition to the remarks with which I shall conclude.

The efforts of therapeutics at the present time are directed pre-eminently towards prevention rather than towards cure. We have come to this position by degrees, and I need only mention the names of Pasteur, Lister, and Koch to characterise at once the wholesome movement in the midst of which the present generation has the good fortune to find itself. If some men have been going too far in attributing almost every complaint to the invasion of a micro-organism, we have on the other hand gained an invaluable treasure in the knowledge that one of the most important rules of treatment is the most scrupulous cleanliness. Dirt is, surgically speaking, matter in the wrong place, and therefore obnoxious, at least as a mere intruder if not as an actual offender. Exclusion of all obnoxious matter is the great principle which has led to such astonishing success in recent surgery; and in medicine it has given the impulse to the rapid develop-

ment of hygiene, the branch which sees in the prevention of diseases the best remedy.

Even in ophthalmology, where we have for a long time been accustomed to results unparalleled in general surgery, we have adopted, every one of us I trust, the antiseptic *régime*, modified of course to our special requirements. Is it not therefore time that we should try to stamp out a disease which not only can be cured completely if treated in time, but which also, as we now know, can be easily prevented altogether? Is it comprehensible that this disease, which causes the blindness of about one-third of all the inmates of our blind asylums, makes its ravages, now as in years gone by, to maintain the population of these institutions?

It is not difficult to find out the cause of this gloomy state of affairs. Let us take a typical case from our hospital practice. A woman, confined about two or three weeks ago, brings her child to us. Before she says anything, a glance at the eyelids swollen and glued together, probably with some creamy discharge oozing out, is usually eloquent enough, and with a sigh, "probably too late again," do we examine the poor little creature. Alas, too often our anticipations are realised. Sometimes one, usually both corneae have been perforated, the iris has prolapsed, and the mischief is done for life. Maybe we can hold out a hope to restore some sight by an artificial pupil later on, but that entirely depends on the seat and the extent of the injuries.

And how did this come about when we know it could have been prevented if taken in time? The same sad old tale: "Three or four days after birth baby caught a cold." The mother either did nothing to it, or if she did anything at all it usually was a bread and milk poultice or something similar.

The near connection of infantile blennorrhoea with gonorrhoeal discharge has been conclusively demonstrated for a great number of cases by the presence of that peculiar micro-organism to which the name of "gonococcus" or "diplococcus pyogenes" is given. It occurs in agglomerations of two, which form the shape of an 8; hence the latter name. Whether this diplococcus, which is so constant in gonorrhoeal discharges, is also to be made answerable for all cases of purulent ophthalmia in the newborn is a question which is at present still an open one. I have repeatedly failed to discover it in discharges from the conjunctiva; and my observations in this direction are not uncorroborated. At the fifty-seventh meeting of the German Medical Association, Dr. Kroner of Breslau gives the result of his examinations of ninety-two cases of blennorrhoea. He was unable to discover the gonococcus in twenty-nine cases, in spite of the most careful examinations; in sixty-three cases, however, the micro-organism was readily detected. This led him to the conclusion that the ophthalmoblenorrhoea may be produced not only by the gonorrhoeal secretion of the maternal vagina, but also by other vaginal discharges of a less specific nature.

Be that as it may, the fact remains that the ophthalmoblenorrhoea of the newborn admits of a cure—I should almost like to say, in the words of the label on the *Ofen bitter water*, "speedy, sure, and gentle." We know it is far more profitable to cure quickly purulent ophthalmia in a child than in an adult. Evidently the infantile cornea is better supplied with nutrition, and chemosis does not occur so easily; and whereas in the adult we have to fear destructive processes in the cornea sometimes within a few hours, which we cannot always keep off, the eye of the newborn shows much greater tolerance, and usually only gives way after a few days of irrational treatment, such as poulticing and other domestic remedies.

I have tried different remedies—nitrate of silver, corrosive sublimate, liquor chlori, iodoform, sulphate of copper, carbolic acid, peroxide of hydrogen—and I must say they all give good results, either alone or in combination. I have done this in order to convince myself that there is no special remedy particularly to be recommended as a specific; they all answer admirably, although I have chiefly relied upon nitrate of silver until lately, when I have used β -naphthol with great advantage. It does not matter much which of these remedies we apply on the whole, iodoform being rather objectionable on account of its odour, and I mention them only in order to show that as far as treatment is concerned we have ample means to cope with it successfully and quickly. But the little patients are brought to us usually when the gravest harm is already done.

To have shown where the root of this deleterious disease lies, and how we can readily get at it, is the great merit of Dr. Credé, of Leipzig. He pointed out that it was far more within the range of the obstetrician than of the oculist to prevent ophthalmia