Comparing cerebro-spinal with tuberculous meningitis the infrequency of paralytic squint and optic neuritis, and the comparative frequency of spasmodic squints and dissociated movements are somewhat striking. It is probable also that defect or absence of vision without ophthalmoscopic changes is more common than in the tuberculous form.

With regard to prognosis, it is perhaps impossible to gather reliable data from such a limited series of cases, but the writer would express the opinion that retraction of the eyelids, corneal complications, absence of the pupil reflexes, true nystagmus, lid winking combined with jerky movements of the eyes, and optic neuritis, are among the symptoms of graver significance.

The absence of ocular symptoms does not, of course, justify a favourable prognosis.

In conclusion, the writer desires to express his special obligation to Drs. Macgregor, Connal, and McPhee for their assistance in carrying out these examinations.

REFERENCES.

- ¹ H. Tooth, *BRITISH MEDICAL JOURNAL*, October 21st, 1905. ² J. Canby Robinson, *Bulletin of Ayer Clinical Laboratory*, Philadelphia, 1906. ³ Squires, *Medical Record*, March 26th, 1904.

A Lecture

ON

INFECTIVE CYCLITIS IN RELATION TO PENETRATING WOUNDS OF THE EYEBALL.

DELIVERED AT THE WEST LONDON POST-GRADUATE
COLLEGE.

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EVERY penetrating wound of the eyeball, especially in the ciliary region, was regarded by our forefathers with dread and misgiving. The reason for this was the dire complication affecting the fellow eye which frequently accompanied the injury, to which they gave the name of sympathetic ophthalmia. They thought that when one eye was injured, and the injury was followed by inflammation in the other, the only way of explaining the catastrophe was the sympathy which must of necessity exist between the two eyes. So far, indeed, as their knowledge went the explanation was satisfactory enough. But we are now in the twentieth century, equipped with knowledge beyond that which was within the reach of our forefathers, and it seems, therefore, to be only in accord with the scientific advancement of our age to make some effort to improve a terminology which is obviously out of date, inaccurate, impossible.

Let us first take the word "sympathy." What is the pathology of sympathy? Dictionaries define sympathy as "the quality of feeling affected by the affection of another with corresponding feelings." In plainer language, therefore, when one eye is injured the other eye, out of pure affection for its fellow, is so overwhelmed with grief that it becomes inflamed too. How can an inflammation be due to such a source? Is there anything in modern pathology to explain and endorse such a cause of inflammation as this? Again, let us take the word "ophthalmia," or "ophthalmitis," as its supposed improved variant. The literal meaning of "ophthalmitis" can only be inflammation of the eye as a whole, as is expressed by the word "panophthalmitis." But there is no such general inflammation of the tissues of the eye in so-called sympathetic ophthalmia. The above are facts the self-evidence of which is beyond dispute, so much so that further discussion regarding them is unneeded and wasteful of time.

Seeing, then, that the term "sympathetic ophthalmia" is inaccurate, if not absurd, in a twofold degree, what substituted definition of the disease to which it refers can be made use of? Here we must revert to what is known of the pathology of the disease. Before, however, entering upon the discussion of this part of our subject, let us briefly pass in review some of the special general features of the disease which have an intimate bearing upon the case.

In the first place, we may note three stages in its incidence—(a) the period of infection; (b) the period of incubation; (c) the period of development. With regard to the infection period, there is always some history of injury to the eye, either accidental or operative. The subtlety of the mode of infection is one of the remarkable features of the disease; it has even followed so slight an operative procedure as that of tattooing the cornea.

The next period—that of incubation—is somewhat especially noteworthy in that it does not apparently follow any determinate rule as to limitation of time. Nevertheless, the fact that an incubation period does exist in this disease is proved by the lapse of time which occurs before the disease becomes manifest after an eye has been injured.

The earliest time of development on record is that of ten days—a very exceptional case—inasmuch as from three to six weeks, as recorded cases have shown, is the earliest date at which the disease usually declares itself. On the other hand, the disease has been observed after the lapse of months and many years following accidental injuries to, or operative interference upon, an eye. Do not these facts appear to introduce a paradox into the discussion of this subject?

I think not, for if we seek for some analogy among other diseases, we can readily find one by which the difficulty is at once disposed of. Take traumatic tetanus. In almost every particular this disease bears the closest analogy to so-called "sympathetic ophthalmia." In traumatic tetanus there is first the period of infection, and next that of incubation; in regard to the latter, the same indefiniteness exists as to the time of incubation of *Nicolaier's bacillus* as is the case in so-called sympathetic ophthalmia. Again, in the third stage, that of the period of development, traumatic tetanus exhibits a predilection for certain tissues of the body to which its destructive effects are primarily confined. In traumatic tetanus the fact has been freely demonstrated that one or more nerves in connexion with a wound shows signs of acute inflammation for some distance along its proximal course. Then as the disease progresses the spinal cord becomes involved, leading to the development of those distressing symptoms which in bad cases have invariably a fatal termination. But because the nervous tissue of the body generally in traumatic tetanus undergoes practically the same changes as those observed at the seat of the original infection, it has never been suggested to describe tetanus as a sympathetic disease, or one in which "the quality of feeling affected by the affection of another with corresponding feelings" is illustrative of the definition of sympathy.

Again, let us recall the similarity of the lesions, which, for the most part, are associated with the production of traumatic tetanus on the one hand, and so-called sympathetic ophthalmia on the other. In each instance the most favourable condition for the cultivation of the infection is that of the nature of a punctured wound. What possible incubating medium, for example, could be designed for any pathogenic organism than that which is present in a punctured wound of the ciliary region?

Imbedded in a highly-delicate tissue, mainly composed of blood vessels and nerves, the micro-organism is provided with every luxury—warmth and food supply being in abundance, with the vitreous close at hand in which as a cultivation medium it can simply revel. Nothing could be conceived more directly favourable for the cultivation of a pus organism or any other pathogenic infection than the conditions environing a penetrating wound of the ciliary region. Have not, then, the above facts an extremely important bearing upon the treatment of these serious lesions? Obviously they point to the common-sense conviction that wounds of the ciliary region should be dealt with in accordance with general surgical principles adapted to the necessities of the case.

The ophthalmic surgeon confronted with such an injury suspects at once the possibility of the supervention of so-called "sympathetic ophthalmia." He is, therefore, forewarned. The general surgeon, on the other hand, only rarely finds himself in a similar position, as to the possible development of tetanus. He is, therefore, not forewarned. Should, however, the nature and the position of the wound be such as to cause him to suspect the possible occurrence of tetanus, I apprehend that the

last thing which he would think of doing would be suturing the wound and closing it, with the view of obtaining primary union. Such a procedure would be clearly a case of playing into the hands of the aerobic organism, upon which the disease depends. But so it is, when a patient is attacked by traumatic tetanus, the surgeon, not having been forewarned, proceeds at once to lay the wound open, scrape it, or even excise the tissues surrounding it, simply in order to give effect to an ordinary principle in surgery.

How are we to regard the application of this principle in respect to the practice of suturing the sclerotic and the closing of a wound in the ciliary region? From the obvious circumstances of the case, a ciliary wound which has been followed by so-called sympathetic ophthalmia cannot be scraped, or the tissues in which it is situated excised. Ophthalmic surgeons have, therefore, the only alternative of resorting to enucleation. But seeing that by closing the wound the development of the disease has followed the wrong application of a surgical principle, the ophthalmic surgeon is confronted with a problem of conscience as to whether he has not perpetrated an error in treatment, as the result of which that most serious of all ocular diseases, namely, so-called "sympathetic ophthalmia," has supervened.

This brings me to the consideration of what I have been accustomed to describe as the open treatment of wounds of the ciliary region; and here I may preface my remarks thereon by observing that for many years, during which a large number of these injuries have been under my care, both in hospital and private practice, I have never sutured the sclerotic, conjunctiva, or interfered surgically with the wound, even to the extent of replacing any portion of the ciliary body which might happen to have been prolapsed. The above, in categorical terms, expresses the procedure adopted in my cases so far as surgical intervention is concerned. The principle, of course, underlying this method is to put in practice that treatment which would be most calculated to prevent any infective process to which the receipt of the wound would render the eye liable. Thus by leaving the wound, the ciliary processes, and the vitreous exposed to the mechanical and germicidal effect of a useful antiseptic solution, how could we expect the result of this treatment to be different from that which in the ordinary course follows the application of a general surgical principle elsewhere in the body? On the other hand, to close the wound, to run the risk of imprisoning within the eye micro-organisms which will simply revel in the comfort of their surroundings, is merely to court disaster. Clearly, after suturing a ciliary wound, no matter how efficiently the antiseptic treatment of it may have been, there is no certainty that some pathogenic organisms have not been enclosed within the globe, and will not ultimately produce their destructive effects.

Thus it is, and thus only, by the open treatment of ciliary wounds that so-called sympathetic ophthalmia can be averted. In every sense the morbid process is analogous to that of an infective disease. Again, just as the virulence of tetanus depends not upon the bacillus but upon the toxin it creates, so it may be reasonably inferred that the toxin created in cases of so-called "sympathetic ophthalmia" is conveyed by the blood to the healthy eye and exerts its effects mainly upon the nerves of the ciliary region, as the situation of special predilection—precisely as the toxin created by the tetanus bacillus in an infected wound of the soft parts ultimately affects the spinal cord.

So we come to the question of the correct terminology of the disease which has hitherto been known as "sympathetic ophthalmia." Seeing that the signs of inflammation in the infecting eye are those of inflammation of the ciliary region, what other name under the circumstances could be suggested than that of "infective cyclitis"? The micro-organism upon which the disease depends, the reality of which, although it has never been isolated, I apprehend no one is prepared to dispute, creates a toxin which is taken up by the blood, and thus is excited a similar cyclitis of the fellow eye, by virtue of the ciliary region being a special seat of predilection for the evolution of the effects of this particular poison.

But there are other points of similarity between trau-

matic tetanus and that disease which I shall now proceed to call infective cyclitis.

In the first place, tetanus, which in former days constituted a comparatively common sequel of operative surgery, is now never met with in this connexion, while it is also rare as a complication of injuries. Similarly, infective cyclitis, which used to be common, has for many years shown so diminishing an incidence that it may now be regarded as almost an ocular pathological curiosity. This fact I believe I was the first to point out in a lecture which I gave in this College and subsequently published in the *Lancet* in 1898. In each instance this desirable consummation has followed and coincided with the introduction of Listerism.

Obviously, therefore, there can only be one inference—namely, that both diseases being dependent upon an infective origin, their progress and development are checked and prevented by the rigid adherence to the principles of antiseptic surgery.

Again, there is a similarity between traumatic tetanus and infective cyclitis in the degree with which each disease pursues either an acutely virulent or a mild course, the result in this connexion being due to the varying intensity of the primary infection. In the former case acute traumatic tetanus is always fatal, in the latter recovery usually follows. So is it with infective cyclitis so far as the fellow, or infected, eye is concerned. In the septic days of wound treatment both eyes were usually destroyed as the result of infective cyclitis, owing doubtless to the extreme virulence of the infection. Nowadays, on the other hand, a common result when infective cyclitis occurs is not only the preservation of the infected eye, as distinct from the infecting eye, in which the disease originated, but also the recovery of full vision. We may look for the explanation of this in the fact that, while the antiseptic measures resorted to have failed to prevent the onset of the attack of infective cyclitis, yet the virulence of the micro-organism has been so far checked as to render it comparatively harmless. In respect to the question of the degree of virulence of infection, I have for some time taught in my classes that the so-called "sympathetic" irritation, which is usually regarded as a separate and distinct pathological entity, is in all probability the early stage of infective cyclitis, in so mild a form that the degree of infection is insufficient to cause a full development of the disease. We have an exact analogy to this in the fact that trismus—one of the earliest signs of tetanus—has been known to occur and be recovered from after an injury to the soft parts without any other tetanic symptom becoming manifest. Lastly, there is a further similarity between tetanus and infective cyclitis. Cases have been recorded of recovery from tetanus, in which the arrest of the symptoms have followed section of the inflamed nerve communicating with the infected wound. In this regard, what closer analogy between tetanus and infective cyclitis could be shown, inasmuch as in the majority of cases of the latter disease the safety of the infected eye is secured by the enucleation of the infecting one?

Attention may now be drawn to another point. How is it possible to explain the delayed evolution of the symptoms which occurs in some cases of infective cyclitis? How is it that the disease may suddenly declare itself after some months, or even years, after the receipt of a penetrating wound of an eye?

I think the explanation is to be found in the theory which I believe is a favourite one with Mr. Jonathan Hutchinson. He affirms that pathogenic micro-organisms may become in certain cases encapsuled in the tissues, and being so encapsuled are prevented from doing immediate harm. Then something happens which disturbs their encapsulation, as the result of which they escape into the surrounding healthy tissues, and at once begin to exert their characteristic virulent effects. He illustrates this by stating that a patient who has suffered from one attack of erysipelas is very liable to a recurrence of the disease, owing to some of the micro-organisms, after having been encapsuled, escaping into the tissues of the part in which the primary attack occurred. I believe that such a theory is quite possible in respect to penetrating wounds of the ciliary region. I may illustrate this conviction by narrating the following case:

Some years ago a woman was admitted into the West London Hospital under my care suffering from acute panophthalmitis of the left eye. Two years previously both eyes had been operated upon for senile cataract elsewhere, unfortunately in each instance with an unfavourable result. The right eye had been removed, and in the left no recovery of vision had ensued. The history given was that about three days before admission, while in her usual health, the left eye had suddenly become very painful and acutely inflamed. She could not recall that the eye had received any blow. As there was no direct history to account for the panophthalmitis, it seemed possible that some pus organisms had become encapsuled at the seat of the extraction wound, and that the sudden onset of the symptoms was due to some change ensuing in the eye by which they escaped into the surrounding ocular tissues. Enucleation was forthwith performed for the relief of her acute suffering.

I now come to the expression of some views upon the question of infective cyclitis which, perhaps, may be regarded as somewhat transcending the limit of our knowledge of the etiology of the disease.

Admitting the close analogy which, as I have endeavoured to show, exists between traumatic tetanus and infective cyclitis, I presume it will be conceded that, so far as prevention is concerned, what applies to one disease must apply to the other. For example, a general surgeon, to whom the catastrophe has happened of a patient developing tetanus after an operation, could not conceal from himself that some failure must have occurred in the practice of his aseptic technique, and the same I believe to be true when infective cyclitis follows any operative procedure undertaken by the ophthalmic surgeon. To define this position more clearly, I would affirm that infective cyclitis is solely the result of the defective practice of the principles of antisepticism.

The question of the nature of the wound, its position, whether it is confined or not to the ciliary region, is, I maintain, entirely secondary as to whether the wound is or is not aseptic. The traditional fear of ciliary wounds is still almost generally as great in the present day as was the case in the days of old, and yet for such dread and misgiving there is no need. The ciliary region, as I have already pointed out, merely consists of highly vascular tissue with an extremely delicate distribution of nerves, and practically the only special feature concerning it is that it forms the most perfect cultivation medium for micro-organisms to be found in the body.

But so prevent any pathogenic organisms from reaching its environment, or deal with any, by skilled treatment, which may have reached it, and the tissues of the ciliary region become just as ordinary in their behaviour after injury as those of the body generally. A prolapse of the ciliary body which has become adherent to the edges of a ciliary wound is not, *per se*, a source of danger to an eye. The prolapse soon becomes covered with conjunctival tissue in the course of the natural repair of the wound. There is nothing to show that the natural processes of repair of any tissue in the body is accompanied by signs of irritation. Does the peritoneum become inflamed after having been stitched to the edges of an aseptic abdominal wound, or does it show signs of irritation when contraction takes place during the later stages of cicatrization? A prolapse of the ciliary body has gained a notorious reputation for evil doing, but not because of the prolapse *per se*, but rather because of the failure of the measures to which resort is made of keeping it aseptic. The ciliary body is just as tolerant of injury or disturbance of its integrity as any other tissue of the body, provided a condition of perfect asepticity is maintained. On the other hand, should any signs of irritation or inflammation occur, under any circumstances in which it has been injured, the obvious conclusion is that such signs of reaction are pathogenic in origin. And so it is that I have come to regard wounds of the ciliary region as being only of secondary significance so far as they may become the source of an infective cyclitis. So long as the tradition of the past respecting the dread of these wounds is still allowed to sway the ophthalmic surgeon's mind, there can never be any advancement in regard to their more perfect treatment. In thus being always trepidant of the evolution of infective cyclitis, the surgeon is apt to pay less regard to, and lose sight of, the only means by which the disease can be prevented.

The next point which claims attention is that of the question of enucleation in respect to a serious penetrating wound of an eye involving the ciliary region. What

are the difficulties which are supposed to confront the ophthalmic surgeon in arriving at a decision in this regard? I need not here delay to discuss them, forasmuch as from my point of view no such difficulties exist. Personally, when I am called upon to treat a wound of this description I ask myself three questions:

1. Is there any evidence of the retention within the eye of a foreign body?
2. Is the injury of too extensive a nature to preclude the eye from recovering under any circumstances?
3. Recovery being possible, what are the prospects of useful vision being ultimately obtained?

Here it will be noted that no question is raised as to the supervention of infective cyclitis, and for the reasons already given, under the circumstances named, I do not deem it necessary ever to take the matter into consideration. My practice always is never to resort to immediate enucleation, no matter how severe the injury may happen to be. By allowing a few days to pass over, we are enabled to glean some indication of what Nature intends to do in the case. But if after the expiration thereof no attempt at repair is evident, enucleation is carried out, as some of you may have seen was the case some weeks ago in the young girl whose left eye was severely lacerated by the bursting of a soda-water bottle. The prospect of the ultimate result being good so far as vision is concerned depends upon the condition of the cornea, iris, and the lens. If the central, or pupillary, area of the cornea be intact, the iris and the lens sound, whatever the nature of the wound otherwise, the duty of the surgeon is to attempt to save the eye.

In the open treatment of ciliary wounds, I find that the rule is for recovery to take place without any ciliary reaction. Can this be so, it may be asked, in those cases in which there is prolapse of some portion of the ciliary body, with escape of the vitreous? Unquestionably this is the fact, when the cases are dealt with in accordance with the precise aseptic and antiseptic details which observation and experience have enabled me to elaborate. Inflammation of the ciliary region, following ciliary wounds, can only be due to septic infection; but when from first to last the wounds heal without any signs of inflammation, just as aseptic wounds in the soft parts heal, there is no need to fear untoward consequences resulting from pathogenic organisms, productive on the one hand of suppuration, and on the other of infective cyclitis.

Perhaps, however, it might be urged that inasmuch as these ciliary wounds are usually more or less gaping, it is only in accordance with ordinary surgical principles to bring the edges together by means of a suture. But the obvious answer to this is that the gaping of the wound is rather a favourable feature than otherwise in the treatment of the case. For example, it ensures a more certain application of the aseptic measures to the deepest recesses of the lesion. Moreover, a suture is unnecessary, even from the point of view of providing the wound with support to resist the intraocular tension, for, as a matter of fact, the tension remains minus for many weeks, and long before the natural tension is restored the wound has soundly healed.

Mackenzie mentions that he never saw in his day infective cyclitis follow any of the operations for cataract. That is not surprising, for in the septic days of old it was only rarely that cataract operations had any other result than that of suppuration of the globe, and panophthalmitis has never been known to be followed by infective cyclitis.

In 1883 the Ophthalmological Society made an inquiry into the subject of so called "sympathetic ophthalmitis," in the course of which various questions were asked to which replies were desired. These questions were ten in number, the bulk of which do not call for special notice, since they mainly refer to statistical evidence. There are, however, two out of the number with which I propose to deal. The first is, Can any operation on the exciting eye, other than excision, influence the "sympathetic" inflammation after it has begun? Before proceeding to comment thereupon I may draw attention to the report of the Committee, in which the details referring to the cases are discussed. The cases were 8 in number, in which an operation had been performed upon the "exciting" eye with the hope of arresting the "sympathetic" inflammation which had lately set in in the other,

The operation was iridectomy in 5, and section across the wound scar in 1 of the cases; in 2, the operation was optico ciliary neurotomy. With regard to the iridectomy and section cases the significant fact is that the eyes made a good recovery—that is to say, iridectomy in one instance was performed upon both eyes, and in three cases upon the infecting eye only, with the result that in all of these the symptoms were arrested and the disease cured. The same also was the case in the patient in whom the section operation was performed.

There can only be one inference to be drawn from these facts—namely, that the operation in each instance arrested the disease by opening up the infecting wound and thus allowing the infection to be destroyed by more perfect antiseptic treatment. Thus the axiom may be evolved that in all cases of infective cyclitis in which reasons are present for preserving the infecting eye, the treatment should consist in making a section through the wound scar, laying it open, and exposing it to the efficient action of thorough antiseptic douching—a method which is merely illustrative of a general surgical principle. The point is one of extreme interest. It seems to suggest the solution to the effective arrest of an attack of infective cyclitis—a disease which, owing to the introduction and practice of Listerism, has now become of so rare occurrence.

The second question contained in the Committee's report, to which I shall now allude, is as follows: "When the exciting eye, retaining useful vision, is not excised, what is its final state?" The terms of this query might have been differently expressed. They presuppose that every case of infective cyclitis is of the same intensity, which is far from being the fact. In these cases, just as in tetanus, the infection may be of a mild or very virulent type. It is impossible to comprehend how useful vision could be long retained in an eye in which a virulent attack of infective cyclitis has supervened. Hence we find from the report above mentioned that in the 36 cases in which the "exciting eye, not being disorganized by the immediate result of the injury, was allowed, for one reason or another, to remain," complete recovery occurred in 9, partial in 17, and in 10 cases the eyes were lost. We may, therefore, assume that the result in each instance was merely dependent upon the intensity of the attack. In the mild attacks the eyes suffered but little, and made complete or partial recoveries; in the bad cases the globes were destroyed.

I will now refer to 3 cases out of the large number which have been under my care, not because they all made good recoveries, but because the injuries which they received were of so severe a nature, that any attempt to save the eyes appeared at first to be practically impossible. Of these cases, 2 were under treatment in the hospital, and the third was seen in private.

The latter was that of a little boy of 12 years of age, brought to me by Dr. J. Herbert Menzies three years ago. The history given was as follows: On the evening previous to the visit, the boy with some companions was ascending the staircase at one of the metropolitan railway stations. The boy in front of him was swinging his umbrella, in the course of which the ferule struck the left eye of my patient, inflicting a lacerated wound of the globe. He was brought to me on the following morning. The globe was partially collapsed; the wound involved the corneo-scleral junction on the outer side, and extended from the horizontal meridian upwards and outwards for 7 mm.; there was prolapse of the iris, the lens was injured, and the anterior chamber was half-full of blood. Having regard to the weapon with which the injury was caused, nothing more septic could be conceived than the ferule of an umbrella, and from the extent and nature of the injury, there did not appear to be any chance of saving the eye. On further inquiry, however, two notable features of good augury were elicited. First, that the boy to whom the umbrella belonged had just had it repaired with a new ferule, which had never been soiled with mud; the second, that the injured eye was thoroughly douched with warm boracic lotion shortly after the accident, when the boy reached his home. The case was treated entirely on the principles to which I have alluded, and the eye recovered perfectly without any bad symptom. The traumatic cataract was gradually absorbed, leaving only a small tag of opaque capsule in the pupillary area. The last time that I saw the patient, about a year ago, the wound scar was hardly perceptible and the vision was good— $\frac{2}{5}$ with correction. The other eye was quite normal.

In the second case the patient was a labourer, aged 50, who was brought to the hospital two hours after having been accidentally struck in the right eye with a pickaxe by a fellow workman.

I saw him on admission. There was a perforating wound of

the lower lid, which communicated with a large lacerated perforation of the globe, involving the corneo-scleral junction, at the lower and inner quadrant; the iris was torn from its ciliary attachment, the lens was absent, and a large quantity of vitreous had escaped, leaving the globe collapsed. The nature of the wound and the septic body which had caused it seemed to suggest that any attempt to save the eye would be followed by panophthalmitis. In two days' time, however, the eye was beginning to do well, and in a month's time it had made an excellent recovery. The vitreous cleared, and the fundus was everywhere plainly visible, but the man, when seen last about six months ago, maintained that, even with correction, he could not see with the eye.*

The last case was that of a little boy aged 5, who was admitted under my care on October 7th, 1906, with the history of having been shot in the left eye with a ramrod fired from a toy gun.

When first seen there was a lacerated punctured wound of the globe involving the ciliary region on the inner side. The iris, cornea, and lens were intact; the wound was discharging vitreous freely, and was partially filled by prolapse of the ciliary body. The anterior chamber was almost full of blood. Here, apparently, everything was favourable for septic infection of the eye, either by means of pus organisms or by those to which infective cyclitis may be attributed. Nevertheless, the eye made a perfect recovery in about six weeks' time, with the retention of full vision, and when last seen, about two months ago, both eyes were perfectly well.

A few words of comment only are called for in regard to these cases. Let us suppose that in each instance the wounds had been closed, in accordance with the common practice pertaining to such injuries—would the results have been the same? I feel certain that they would not have been, for the reasons which I have already explained. But of the precise details which were followed in the treatment of these cases, and the special measures which I adopt in the treatment of all similar cases which come under my care, I must defer a description to another lecture.

An Address

ON

MEDICINE IN ANCIENT GREECE:

THE METHODS OF HIPPOCRATES AND
WORK ACCOMPLISHED BY HIM.

DELIVERED AT THE ANNUAL MEETING OF THE MIDLAND
BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

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THE origin of Greek medicine is involved in obscurity. There is no reason to believe that medical knowledge, any more than philosophy, was introduced into Greece from Egypt, though Greek physicians may subsequently have become acquainted with the state of knowledge which had been reached in Egypt, as well as with Egyptian methods.

The earliest allusion to the healing art is found in the writings of Homer, who claims for it a divine origin. The sons of Æsculapius are mentioned, not as priests, but as warriors in the Greek army, having special skill in the treatment of wounds. The first recorded instance of surgical treatment is that of the wounded Menelaus by Machaon.¹ There are other allusions to physicians in Homer; they are always referred to with regard and veneration, and it would seem that, in the state of society then described, there were physicians distinct from the priesthood. But in later times we know that medicine was cultivated by the Asclepiadae, the doctor-priests of the temples of Æsculapius. The asclepeia, or temples of Æsculapius, were erected in healthy sites, near thermal springs, and the sick and maimed resorted to them to seek the aid of the god of health. In some respects they resembled modern hospitals, but a health resort like Buxton in the fourteenth century was a typical asclepeion, for there the sick and maimed resorted to drink and bathe in the waters of St. Ann and to worship in her chapel and to invoke her healing aid.

Votive tablets recorded the symptoms of those healed,

* On inquiry a week ago I was informed that this patient had emigrated to Canada.