AN ADDRESS ON CHOROIDITIS DISSEMINATA.

Introduction to a Discussion in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Brighton.

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S.,
Consulting Surgeon to the London Hospital.

MR. HUTCHINSON stated that his wish was to introduce for discussion the symptomatic value of old changes in the choroid. The discovery of patches of absorption and of pigment-accumulations was very easy, and in many instances constituted what might be called a retrospective symptom of great value, revealing at once the fact that the patient had probably suffered from syphilis. The question which he wished to propose was as to the degree of confidence which might be placed in it.

In the earlier days of ophthalmoscopic investigation, and especially in connection with the discovery of the true nature of interstitial keratitis, and the value of malformations of the teeth as signs of inherited syphilis, he had himself been led to think that nearly all choroiditis disseminata was of syphilitic origin. For many years, however, he had entertained doubts on this subject, and had been carefully seeking evidence—first, as to whether there were cases which were not syphilitic, and secondly as to whether, if there were such, it was possible to discriminate them.

In order to clear the ground, he wished to state at once that he had no doubt whatever that syphilis was the cause of a very large majority of the cases of choroiditis disseminata. It was quite impossible, he believed, to draw any distinction between the examples of this disease that were due to inherited and those resulting from acquired syphilis. The disease presented certain varieties, both as to peculiarities in the pathological features and in clinical course; but these varieties were met with equally both in the acquired and the inherited form of the disease. In many cases, perhaps in most, the disease was stationary after the first attack had subsided, and there appeared to be little or no tendency to aggression. In others, however, there was definite liability to recurrence, and slow processes of disorganisation and pigment-accumulation went on for years. He had observed these differences in tendency equally in cases of acquired disease and of inherited, and he had seen them also in a few instances in which no history whatever of taint could be obtained. Having preserved portraits of the fundus in many of his cases he possessed very interesting evidence upon this point, and was in a position to place upon the table at least a dozen excellent representations of the different forms of the disease, and to challenge anyone to select those which had a specific history from those which had not.

It might be well, he said, at once to admit that he was not one of those who thought that the diagnosis of syphilis as a cause ought always to be given up when no history could be obtained, nor even when the facts seemed very strongly negative. As regards interstitial keratitis, for instance, the disease was in itself so peculiar, and the proof of syphilis in a large majority of cases so clear, that he held they were quite justified in accepting it as being proof in itself, whenever the case was well marked, in default of all other evidence.

In keratitis, however, they had the advantage of watching the whole course of the disease, and could study its peculiarities with much greater accuracy, whilst in disseminate choroiditis they but seldom saw anything but the results. In many, the process seemed to be one rather of atrophy than of inflammation. No one who had had much to do with the investigation of the antecedent history of syphilitic patients could have failed to meet with many instances in which the facts seemed strongly negative until suddenly, and perhaps quite unexpectedly, the truth was divulged. Thus in many cases of the acquired disease, the patient really did not know that he had had it, and in cases of inheritance it often happened that, even when it was thought justifiable to put a direct question, the parent's reply, although quite candid, might be misleading. There were such various ways in which syphilis might be obtained, that the fallacies in making out a long retrospective history were very great.

He should be obliged to admit that, in several of the cases which he was about to adduce, whilst the negative evidence seemed very

strong, it was still not conclusive. Thus, in one of these, in which there seemed to be no reason for suspicion, the disease appeared to have been definitely arrested by iodide of potassium. In another, in which the negative history was, if possible, yet stronger, the patient having six brothers and sisters older, and two younger than herself,—all in perfect health—a possible source of fallacy was suggested in the fact that the child's vaccine-vesicles had remained unhealed for two months. Syphilis from vaccination was fortunately exceedingly rare; still it must be admitted that it occurred with sufficient frequency to be a possible cause every now and then of remote manifestations, with a puzzling absence of all history. The same remark applied—though, perhaps, with rather less force—to erratic chancres generally. Making, however, the fullest allowance for all these sources of fallacy, he could not help feeling that the evidence as regards the possible production of choroiditis disseminata, without antecedent syphilis, was very strong. To take, first, a case which he had seen within the previous week, a gentleman, aged 58, had come over from Australia on account of failure of his eyesight, which had been in progress for four years. Both eyes showed the characteristic patches in the choroid, yet the patient was the father of a healthy family, and asserted, in the strongest manner, that he had never been exposed in his life to any risk of venereal disease, and nothing whatever could be discovered to invalidate his assertion.

In another case, in which the portrait of the fundus was shown, the patient was a woman, in whom the sight first began to fail immediately after a confinement which had placed her life in great peril, first from placenta prævia, and afterwards from puerperal fever. The condition which resulted was a choroido-retinitis, arranged in zones near the periphery, yet there was no history of syphilis in the patient, and she had borne five or six healthy children before her illness, and given birth to at least one after it.

In the case of a young man, in whom the changes were very extensive, and in whom they continued to advance during several years, the diagnosis had, in the first instance, been retinal hæmorrhages; yet the results finally produced, as illustrated by a portrait which was shown, were those of choroiditis disseminata in its most marked form. A tendency to hæmorrhage into the choroid had been throughout a prominent feature of this case. The patient had no concomitant symptoms of syphilis, and although he freely admitted having been exposed to risk, he denied that he had ever had either sore or discharge. He himself attributed his failure of sight to the influence of nocturnal emissions, from which he had suffered greatly.

Mr. Hutchinson was inclined to believe, respecting this case and some others which he mentioned, that they ought to be placed in the same group as those of recurrent hæmorrhage into the vitreous, of which examples had recently been recorded by Mr. Eales, of Birmingham, and himself. These cases always occurred in young men, and appeared to be associated in some instances with a history of inherited gout; in some with nocturnal emissions; and in some with troublesome constipation. Although hæmorrhages were often seen in syphilitic choroiditis, Mr. Hutchinson was inclined to believe that, when they formed a prominent feature of the disease, syphilis had usually nothing to do with it.

Another exceptional case was cited, in which a man, aged 63, had been under observation for upwards of fifteen years. The disorganisation of his choroids was most extensive, and occurred chiefly in the central parts of the fundus. It consisted of most abruptly margined pits and patches, some of them of very large size, and exposing the sclerotic. The patient, who was apparently in excellent health, denied all syphilitic antecedents, and did not appear to have suffered from any suspicious symptoms except those in his eyes. He had a large family of healthy children. In him, the disease had advanced by a succession of recurrences attended by aching of the eyeballs, and there had been some iritis. It was suggested respecting this case that it might possibly be analogous to those grouped under the name "relapsing cyclitis," a disease upon which a discussion, opened by Mr. Anderson Critchett, had already taken place. Relapsing cyclitis, often complicated by iritis, was, Mr. Hutchinson felt sure, in the majority of cases, in no kind of connection with syphilis. It was a constitutional disease, and had to do with a mixed inheritance of gout, scrofula, and that peculiar condition of tissue-tendency which gave proneness to chilblains.

Mr. Hutchinson next adverted to the fact that changes resembling those of choroido-retinitis sometimes occurred after severe concussions of the eyeball. He did not, he said, refer to cases of laceration of the choroid, but to those in which the changes continued to advance long after the injury. In some of these, the final result was quite similar to what we often saw in syphilis; but the diagnosis could be made not only by the history of injury, but by the observation that the dis-

case was absolutely limited to one eye. In syphilitic choroiditis, although one eye might suffer very much more than the other, there would always be found a tendency to symmetry.

Cases in which choroiditis was met with in several members of the same family, that is, amongst brothers and sisters, constituting what was known as a "family disease," in the special sense of the term, were next alluded to. A sketch was shown from the eye of a child, five or six of whose brothers and sisters were similarly affected. In this family many of the children were in perfect health, and most of those who suffered from choroiditis became also paraplegic and imbecile. In another case, two sisters were affected with choroiditis, whilst their brothers escaped, the choroiditis being peculiar in respect to the large extent of the epithelial layer involved, and the very large and almost angular masses of pigment which had accumulated. Neither of these girls showed indications of inherited syphilis; both were of defective intelligence, and their father had died insane.

In concluding his remarks, Mr. Hutchinson said that he thought that they must admit the following propositions:

1. That concussion of the eyeball might produce conditions closely resembling those of other forms of choroiditis, but always limited to the eye injured.

2. That choroiditis disseminata, affecting both eyes, was occasionally met with as a family disease, independently of syphilis, and in association with disorders of the nervous system, especially of the intellect.

3. That there were cases of choroiditis which occurred in fairly healthy persons, which showed a remarkable tendency to recurrence, which were accompanied by iritis, and ought possibly to be grouped with relapsing cyclitis.

4. That young men were liable to a peculiar form of hæmorrhagic choroiditis, which was not dependent upon syphilis, but which produced results not to be distinguished from the syphilitic forms.

5. That there were yet other forms of disseminated choroiditis which could not be assigned to any of the above groups, but which closely resembled, in their final results, what we observed in syphilis, but in which there was still no reason to suspect that disease.

Thus, whilst it was to be freely admitted that, in nine cases out of ten, the discovery of the results of choroiditis disseminata amounted to the discovery of antecedent syphilis, the symptom was yet one which must be received with caution, and could be trusted only when it was supported by other facts.

A portrait was shown, illustrating a form of choroiditis which occurred in a young lady, aged 16, the daughter of a surgeon. She was well-grown, and presented not the slightest indication of inherited syphilis, but her father volunteered the statement that he had suffered from the disease shortly before marriage, and that he had reason to believe his child had inherited it. Had it not been for this information, the case would have passed as one in which there was not the slightest corroboration of a suspicion of syphilis. The changes, which were quite recent when the patient came under care, entirely disappeared under the use of specifics. Mr. Hutchinson stated that he had a double object in showing this portrait. He wished to contrast it, first, with one published in the *Ophthalmic Hospital Reports*, by Messrs. Critchett and Juler, in connection with acquired syphilis, and next, with the portrait showing the conditions present in that peculiar form of choroiditis, first described by Mr. Ware Taylor and himself. Neither in the portraits nor in the patients was it possible to notice any feature upon which to base a differential diagnosis. The history in each case alone afforded the clue to treatment. This form of syphilitic choroiditis differed, it was remarked, much from the more common type, there being present only little raised dots of exudation, with no large patches, and scarcely any disturbance of pigment. The cases afforded a remarkable example of syphilitic imitation, and also proved that the choroiditis of inherited and acquired syphilis, even in their exceptional forms, presented precisely similar features.

Mr. EDGAR BROWNE found it consolatory to learn that no precise ophthalmoscopic symptoms could be relied upon to discriminate syphilitic from non-specific disseminate choroiditis. Choroiditis undoubtedly occurred in patients who were not sufferers from either hereditary or acquired syphilis. A close connection existed between choroid and brain-mischief. He had observed cases of indeterminate cerebral irritation in children accompanied by choroiditis, shown by small atrophic patches or circumscribed pigment spots. The early symptoms were night-terrors, causeless vomiting, inexplicable constipation or diarrhoea. The mischief was generally not referred to the head, but to the stomach; and rhubarb, grey powder, and castor-oil were relied on in the treatment. As the choroidal disturbance took place in the growing period of the eyeball, myopia, or myopic astigmatism, was one of

the results. These children, after second dentition, did not necessarily have notched incisors, and no evidence of hereditary syphilis was readily obtained. As the choroid was the great nutritional tract of the eyeball, it was only reasonable to suppose that, in persons of weakly constitution, the border-line between accelerated nutrition and inflammation was overstepped both in the brain and the choroid. These cases appeared to have occurred in children who had a strumous parentage, or who were themselves of a strumous type. If this were true, it indicated the importance of ophthalmoscopic examination in obscure or slight cerebral mischief.

Mr. CRITCHETT said that he would have been more inclined to attribute nineteen cases in twenty than nine in ten to acquired or inherited syphilis. He deemed it most important that anti-syphilitic treatment should extend over some years.

Mr. VOSE SOLOMON related a case of choroiditis the result of a hard chancre, in which, although the primary chancre and secondary ocular disease were carefully and persistently treated by mercury and iodide of potassium, amblyopia with well-marked ophthalmic signs of diseased choroids remained through life. The subject was a man of excellent health, and bore the mercurial course well.

Dr. HUGHLINGS JACKSON thought that Mr. Hutchinson's researches would be of great value beyond the ophthalmological value. He mentioned a case of Freidreich's disease (in addition to some ordinary tabetic symptoms there were lateral curvature of the spine and nystagmus) in a man, aged 20, who had become rapidly ataxic, and who showed signs of old choroiditis. Treatment was followed by very great improvement in the patient's gait. Later, keratitis of the left side came on, enforcing the diagnosis of inherited syphilis. If the nystagmus were owing to the choroiditis, it was not, in this case, a nervous symptom. He thought that the possibility of syphilis being a factor in the causation of "family" nervous diseases should be considered, and that the ophthalmoscope should be used in all cases.

Mr. HUTCHINSON, in reply, stated that the case to which Dr. Jackson had referred was one of very great interest. The youth had, at the time that Dr. Jackson sought the consultation, shown no indications of having inherited syphilis, excepting such as the patches in his choroid might be deemed to furnish. He was the subject of an obscure nervous disorder, and it was, therefore, of great importance to decide whether or not he was syphilitic. He (Mr. Hutchinson) had been obliged to say that he did not think the state of the choroids was conclusive; but the result proved that Dr. Jackson's inferences were more correct than his own, for the boy subsequently passed through an attack of keratitis, which conclusively proved him to be syphilitic. With regard to the question of symmetry and asymmetry as indicative of local or constitutional origin, he had seen a single notched upper central incisor by the side of one which was well-formed, and he had seen the patient suffer from keratitis on one side only, the eye affected being on the same side as the malformed tooth. Some years afterwards, however, the other eye suffered also.

We must be very careful, in judging as to symmetry, that our observations extended over a sufficiently long period; for, in many cases of constitutional disease in which symmetry was the final result, the interval between the attacks on the two sides might be a long one. In the case of interstitial keratitis, he had known frequently the second eye suffer several years after the first one had got well. Again, it must be borne in mind that it was not necessary for the full significance of symmetry, as a symptom, that the disease should be of equal severity on the two sides. It was, indeed, almost exceptional that it should be so. In the case of syphilitic choroiditis, he thought that he had scarcely ever seen a case in which there was not, sooner or later, an attempt at symmetry; but in many instances the disease was severe in one eye and slight in the other.

He had been much interested in what Mr. Edgar Browne had said as to the frequency of choroiditis disseminata in children without any syphilitic history, and in connection with debility and nervous exhaustion. He could not say that he was himself familiar with the class of cases to which Mr. Browne referred, and he hoped that they would soon be made the subject of a detailed report. He believed that the conditions under which choroiditis occurred, apart from syphilis, were well worthy of investigation, and they had as yet received no detailed consideration. He had been asked a question respecting the cases of hæmorrhagic choroiditis, of which young men were the subjects, and which were supposed to be analogous to the cases of hæmorrhage into the vitreous. It was not himself, but Mr. Eales, of Birmingham, who, in his able report on this subject, had stated that constipation appeared to be constantly present in those who were liable to recurrent hæmorrhages into the vitreous. For himself, he felt no doubt that the constipation, when present, was but an indication of the general nerve-disturbance incident to the ado-

lescent period. As had been remarked, constipation was far more common in the female than in the male sex, yet the subjects of vitreous hemorrhages, hemorrhagic choroiditis, and, he might add, of recurrent and severe epistaxis, were almost invariably males. The explanation of this was, he thought, tolerably obvious. Both sexes at the adolescent period were liable to peculiar disturbances of the nervous and vascular systems, and in both probably something of periodicity was observed. In the female sex, however, menstruation afforded the necessary relief, and hence males only for the most part were liable to hemorrhages in abnormal positions.

The inheritance of gout, he believed, took its share in these cases by leading to weakness in the walls of the blood-vessels. It was well known that a history of gout was almost always a strongly marked feature in the families of those who suffered from the hemorrhagic diathesis. As regards the indications for treatment in cases of choroiditis in which the diagnosis was doubtful, he could not feel the least hesitation that the patient ought to have the benefit of the doubt and take mercury. He should be very sorry if anything that he had said in support of the belief that choroiditis disseminata was not invariably syphilitic should lead to feeble practice. In cases of acute choroiditis, such as that referred to by Mr. Vose Solomon, he should be in favour of making the patient keep in bed, and pushing the remedy by repeated small doses until pyalism was induced. If this was done vigorously, he believed there were very few cases in which the result would not be satisfactory. In chronic cases a milder treatment of the same kind should invariably be used.

In thanking those who had taken part in the discussion, he wished to express a hope that the subject would receive much more attention within the next few years, and that we should soon be able to speak with much more confidence as to the symptomatic value of traces of by-gone choroiditis, and also as to the causes and clinical history of those forms of disease which were not due to syphilis.

REMARKS

ON

THE VALUE OF INDIAN HEMP IN THE TREATMENT OF A CERTAIN TYPE OF HEADACHE.

By STEPHEN MACKENZIE, M.D., F.R.C.P.,

Physician to, and Lecturer on Medicine at, the London Hospital, etc.

I must premise my remarks by at once stating that I have no novelty to bring forward. Indian hemp is well known as a sedative, and enjoys a considerable reputation—not so large, however, as it deserves—in the treatment of headache. Whilst its efficacy is considerable in most forms of headache, if given in sufficient doses, its value has scarcely been insisted on or widely recognised in a particular class of headaches to which I shall presently allude. At least, that is the impression I have gained from my reading, from conversations with professional brethren, and my experience in regard to many patients who have sought my advice for this complaint, and who have not been treated with this remedy. Dr. Sydney Ringer is an exception, and has advocated its use in the kind of case I mean (*Handbook of Therapeutics*, eleventh edition, p. 562). It is probable that many more are in the habit of using the remedy for such cases as I shall describe, but it is quite possible there are others who have not tried it, and who will be glad to be informed of a mode of treatment generally effecting the cure of a malady which, though not dangerous, is annoying or distressing, and which is often most rebellious to treatment.

The headache to which I wish to draw attention is of a dull, continuous, or subcontinuous character, attended sometimes with paroxysmal exacerbations. What is especially characteristic of it is its constancy. Patients will tell you that they rise with it in the morning, are troubled with it all day, and carry it to bed with them at night. If by chance they awake in the night, they find their head is aching. The headache may in some cases become aggravated as the day advances, but sometimes the opposite condition obtains, and the headache is worse at the early part of the day. The situation of the headache varies; it may be frontal, temporal, or occipital, or, more rarely, vertical. Usually, however, it is diffused. It is not as a

rule attended with local soreness or tenderness. Nausea may be present, but is not constant; vomiting is usually absent. In some cases, distinct exacerbations, sometimes of great severity, occur. As these subside, they give place to the dull continuous headache that preceded their advent. As a rule, the ocular phenomena characteristic of migraine are absent, and the headaches are not usually hemispherical. Constipation is present in a certain number of cases, but removal of the constipation does not cure the headache. In some cases, it is associated with disorders of digestion, but the same remark applies to these as to constipation.

Headaches of this type may last for weeks, months, or even years. They occur in persons of different ages, but are, perhaps, most common in the middle period of life, and in young adults. Several of my best marked cases have been in medical students. Patients so suffering are usually able to pursue their usual avocations, except, perhaps, during paroxysmal exacerbations, especially when their work is of an active rather than of a sedentary and intellectual character. Thus medical students have been able to attend to their dressing and other duties at the hospital, but when they have attempted to read they have found it impossible; the headache prevented the full engagement of their attention.

As to the nature of these continuous or chronic headaches, I do not intend to offer a decided opinion, but I hope further experience will reveal it. All I can safely affirm is that they are not due to peripheral irritation or anaemia. They do not seem to be of the nature of migraine—at least in the majority of cases. I have thought they may be due to some dyscrasia or diathesis. In a few cases it has seemed a slight malarial taint might be present; in others, gout or rheumatism appeared a possible cause. These, however, are conjectures only, unsupported by sufficient positive evidence to warrant definite conclusions.

For the relief of headaches of the class I have described, I have found Indian hemp of the greatest service. In the majority of cases, it cures the complaint. The one element of the headache which, in my experience, indicates the probable success of the remedy, is its continuous character.

The preparation of Indian hemp I always employ is the extract. I begin by giving one third or more (usually half a grain) night and morning, or occasionally three times a day. If at the end of a week some amelioration of the headache has been procured, I advise its continued use in the same doses; but if little or no improvement has taken place, I increase the dose to one grain at night and half a grain in the morning. If this is insufficient, I increase the dose so as to make it one grain night and morning; this failing, I increase it by half grain doses, giving the maximum dose at night, until two grains at night and one and a half grains in the morning are reached. I have scarcely ever had occasion to exceed these doses. There are two points I wish to urge:—1. The gradually increasing dose. 2. Steady perseverance in its employment. The treatment must be as obstinate as the disease.

Given in these doses, usually no inconvenience is experienced by those taking cannabis indica; but a few patients have complained of a feeling of slight confusion or giddiness, not in any way so annoying as the condition for which it was administered.

The length of time over which treatment has to be continued varies in different cases; usually, it extends over several weeks, but rebellious cases may require a treatment of two or three months. As the malady recedes, the dose should be reduced, and it is advisable to continue the administration of the remedy for a week or two after the headache has disappeared.

In the majority of cases, the Indian hemp may be given alone, with compound glycerhiza powder, powdered valerian, or extract of gentian, as excipients. My largest experience has been gained in many years out-patient practice, where, for therapeutic testing and teaching purposes, simplicity has been studied. It by no means follows, however, that because our patient has a headache, we are not to attempt to relieve his other sufferings. Thus, when constipation is present, as it is in a fair number of cases, some aperient may conveniently be combined with the hemp; aloes and myrrh pill, compound rhubarb pill, in small doses, may be added to the cannabis indica. Where flatulence troubles the patient, compound assafetida pill, carbolic acid, or quinine, separately or combined, may be given with the Indian hemp in a pill.

I have, however, had the most striking results with the Indian hemp alone. My experience in hospital practice is difficult to collate, but I append a few cases from my case-book of private patients, which illustrate most of the points to which I have directed attention, and indicate various combinations of drugs with the Indian hemp to meet the requirements of particular cases.

¹ Read at the Section of Therapeutics and Pharmacology at the Annual Meeting of the British Medical Association at Brighton.