CLINICAL LECTURE ON A CASE OF HYSTERICAL CONTRACTION IN A GIRL, ÅET. 11: THE DIAGNOSIS OF HYSTERIA; THE IMPORTANCE OF EXCLUDING ORGANIC DISEASE; THE PROGNOSIS AND TREATMENT OF HYSTERIA.

By Byrom Bramwell, M.D., F.R.C.P.Ed., Assistant Physician, Royal Infirmary; Lecturer on Medicine, School of Medicine, Edinburgh.

(Plates V. and VI.)

This case is of very considerable interest. The patient was brought to me this morning from the county of Durham. She has been unable to walk for the past two years; she can take a few steps with the aid of crutches, but that is all. When I asked the mother what was the matter with her daughter, she answered that she was unable to walk because of loss of power in the legs, and that she was suffering from pain in the back.

Now, in a girl, ået. 11,¹ caries of the vertebrae with resulting pressure-paraplegia is the condition most likely to produce difficulty in walking (presumably the result of paralysis) and pain in the back. That diagnosis at once occurred to me, and it was evidently the opinion of one of the surgeons to the Durham

¹The method adopted at the Clinique is to ask questions and discuss the opinions suggested by the students. I have for the most part altered the wording so as to make the text read continuously; but the nature of the questions and the answers elicited will be nevertheless readily understood by the reader.
County Hospital, who saw the patient eighteen months ago, for he advised that a jacket-support should be applied to the spine.

Suspecting caries, I immediately had the patient stripped, in order that I might inspect the condition of the back and limbs. When the patient was stripped, I found that she could only stand if supported, and that when supported she stood in a very characteristic manner. We will take her clothes off again, and let you see the position for yourselves. You see that she stands apparently, when supported, securely enough on the right leg. The left thigh is partly flexed on the abdomen; the foot slightly inverted; the toes pointed. There is, you will notice, no projection or unevenness of the spine; no spinal curvature (see Plate V.).

Immediately I saw the position in which the child stands, I came to the conclusion that the loss of power, the paralysis (if there is paralysis) was limited to the one leg. On questioning the mother, I found that this opinion was correct. There is no loss of power, no paralysis—in fact, nothing wrong with the right leg. This, and the absence of any appearance of spinal curvature, undoubtedly seem to show that my first idea, that the paralysis in the leg was due to disease of the spine, is incorrect; and this conclusion was fully confirmed, as we shall presently see, by the subsequent examination of the case.

The position in which the patient holds the left leg, which is said to be paralysed—the thigh slightly flexed, the foot slightly inverted, and the toes pointed—is suggestive of disease of the hip joint. This was the next idea which suggested itself to my mind. But on examining the hip joint I found that that opinion, too, was erroneous. You see that I can strike the trochanter forcibly without causing the patient any pain. Forcible percussion on the heel, when the leg is extended, does not produce any pain in the hip, but the patient says that this procedure causes some pain in the upper part of the back. I can rotate, flex, and extend the hip joint freely. There is no rigidity of the joint; free and forcible movement of the hip does not give rise to any complaint of suffering. These facts (which were demonstrated to the students) conclusively show that the case is not one of morbus coxae. We can, then, definitely exclude disease of the hip joint. The case is a good illustration of the method of diagnosis by negation or exclusion.

Well, having satisfied myself that the condition of the leg was not due to disease of the hip, and that it was in all probability not the result of caries of the vertebrae, I had no difficulty, after examining the affected limb more carefully, in making up my mind as to the nature of the condition. One can hardly perhaps expect you to form such a rapid and definite conclusion as I formed, for my opinion is based on the experience of former cases of the same sort and on a large practical experience and knowledge of nervous disease.
I will give you some further information, which will perhaps guide you in forming an opinion. The patient says that there is loss of power in the left leg. She is unable to stand unless supported; she says that she cannot lean any weight on the left leg. The position of the foot and toes is highly characteristic. The foot is rigidly extended at the ankle joint; while the big toe is strongly flexed into the sole, the other toes are pointed; there is, in short, a condition of rigid spasm affecting the muscles which extend the foot on the ankle, and which flex the toes on the sole (see Plate VI.). It is easy to see that the condition is one of spasm and contracture rather than of paralysis. Well, this condition at once showed me the true nature of the case. But before telling you my diagnosis—for I am always anxious, as you know, to let you work out these diagnostic problems in your own minds—I will describe to you the condition of sensa-
tion in the affected limb. Having formed a provisional opinion as to the nature of the case, I proceeded at once to examine the condition of sensation, for I strongly suspected, if the opinion which I had formed was correct, that the sensory functions would in all probability be altered; and such, in fact, proved to be the case. On testing the sensibility of the affected part, I find that the patient is unable, or professes to be unable, to perceive tactile, painful, and thermal impressions in the left leg; the sensibility in the right leg and other parts of the body to all forms of stimuli appears to be perfectly normal. When the left leg is pinched, the patient evinces no sign of suffering. When a test tube filled with hot water is applied to the left leg, the patient says that she feels a sensation in the upper part of the back. She is able to tell whether the test tube is hot or cold; but she professes to feel the sensation of heat or cold, not in the leg but in the back. A pinch of the leg is said to produce pain in the back, but not in the leg itself. Tactile impressions (produced by gently striking the leg and foot with the blunt end of a tuning-fork) are said not to be felt at all. Now, these alterations of sensibility are peculiar; they fully confirm the diagnosis at which I had in my own mind previously arrived, immediately I saw the spasmodic rigidity and contracture, and after I had excluded pressure paraplegia and hip-joint disease.

Now, observe that the loss of motor power and the anæsthesia are both limited to the same (the left) leg. Could such a condition be produced by disease of the spinal cord? Or, to put it in another way, suppose you had a unilateral lesion in the substance of the spinal cord, what would be the distribution of the sensory and motor paralysis? The motor power would be lost on the same side as the lesion, and the sensation would be lost on the opposite side to the lesion. We may exclude, then, a unilateral lesion of the spinal cord. But it is possible that a lesion—I mean an organic lesion—might pro-
duce such a combination of symptoms. Where would you place the lesion? A lesion in the posterior part of the internal capsule (one of the students suggested the internal capsule) might certainly affect the motor fibres going to the opposite leg, and produce anaesthesia on the opposite (paralysed) side of the body, but it would not be likely to produce the condition of spasm and contracture which is present in this case, and it would not be likely to produce a condition of anaesthesia limited to the leg alone. The anaesthesia due to such a lesion would in all probability be much more extensive—a condition of hemianesthesia, involving the face and arm as well as the leg. For these reasons, I think we may exclude an organic lesion of the internal capsule in this case; and the previous history of the case, which I have not yet communicated to you, confirms this opinion. It is certain, I think, that the condition does not depend upon an organic lesion of the posterior part of the internal capsule. It is possible that a functional disturbance in this part of the nervous system might produce such a distribution of the symptoms. It has been supposed that in hysterical hemianesthesia the function of the fibres of the internal capsule is deranged. I merely mention this view. For my own part, I am disposed to think that the seat of the functional disturbance in hysteria is probably cortical.

Having thus excluded a lesion of the internal capsule, the question still remains, Is it possible that an organic lesion in any other part of the nervous system could produce loss of power and loss of sensation in one leg alone? A lesion of the peripheral nerves might do so. Further, it is quite possible that a lesion on the surface of the spinal cord, which implicated the posterior and anterior nerve roots on one side only, might produce the same state of matters. But there is no reason to suppose that either of these very rare lesions is present in this case. In this case, the pain in the back is referred to the upper dorsal region, between the scapula. Pressure on the anterior and posterior nerve roots in that situation, even if it happened to be limited to one side (and that is a very rare condition), would not produce loss of power and anaesthesia in the left leg; the motor and sensory paralysis due to a unilateral lesion of nerve roots in the upper dorsal region would be distributed round the trunk.

We may then, I think, definitely exclude an organic lesion. This being so, we must fall back upon a functional disturbance—I mean a functional disturbance such as we find associated with hysteria. I have no doubt in my own mind that the case is one of hysterical contracture. I do not as yet absolutely commit myself to the opinion that hysteria is the only element in the case, although I think it is almost certain that this is so. The patient complains of pain in the back. A skilled medical man,
surgeon to a large county hospital, who saw the case several months ago, evidently came to the conclusion that the patient was suffering from caries of the spine. Some weight must be attached to his opinion. Although I feel quite clear that the condition of the leg is hysterical, I am not prepared, without further and more careful examination, to say absolutely that there is no other disease. It is possible, although I think it very unlikely, that there may be some caries of the vertebrae. You must remember that organic and hysterical conditions are very often combined. I will return to this point again presently. But, before doing so, let me refer in a little more detail to the facts which support the hysterical diagnosis.

There is very marked spasm and contracture of the left leg. The patient says that she is unable to stand on this leg, to lean any weight upon it; she professes to have lost the power in it. If her statements are to be relied upon, there is anaesthesia to all forms of sensory impression in the left leg; but the sensory condition is, you will observe, peculiar; stimulation of the left leg is said to produce a sensation in the upper part of the back. These facts are highly suggestive of hysteria. The history of the case, which is very interesting, entirely confirms this diagnosis. The mother tells me that the girl has always been a nervous child. When attending school, between the age of 7 and 8, she used often to faint away; in these faints she was never quite insensible, but she was frequently sent home from school on account of the fainting. Some two years ago she suddenly lost the power in the left leg. She has never been able to stand or walk since. She has once or twice taken a few steps across the floor unaided; but, practically speaking, for the last twenty-seven or twenty-eight months, she has been a helpless cripple. She was supposed to be paralysed during the whole of this time. For the first nine months of her illness she was entirely confined to bed. During this time she complained of pain in the back. She was then taken to the Durham County Hospital and examined both by the house-surgeon and by one of the surgeons. As I have already told you, they evidently came to the conclusion that she was suffering from caries of the spine, for they ordered a jacket-support. This was obtained, but she was never able to wear it. After this she got worse, and she was confined to bed for many months. Both arms and both legs were now affected. She was unable to use either her arms or legs. For some time the left arm was twisted behind the back, evidently as the result of spasm and contracture. During this stage of her illness she lost her sight for a fortnight, her hearing for a week, and her speech for a day. The loss of sight, hearing, and speech did not occur at the same but at different times. The loss of sight occurred suddenly, and the power of sight was regained suddenly. The loss of hearing and the loss of speech also developed suddenly,
and were regained suddenly. Since her illness commenced, twenty-eight months ago, her general health and state of nutrition have remained good, but her appetite has been peculiar; for the last eighteen months she has lived entirely on milk and fruit; she has refused to eat other food.

This history is, you will observe, very striking. It is conclusive of the hysterical nature of the case. I feel absolutely certain that the case is one of hysterical contracture and anaesthesia. I do not believe that there is any disease of the spinal column, any caries of the vertebrae; but before absolutely committing myself to this opinion I wish to examine the patient carefully in bed, for in rare cases of spinal caries there is no projection or distortion of the spinal column—no spinal curvature. In cases of that kind (caries without deformity) the back is usually kept stiff, and one can almost invariably elicit some complaint of pain or suffering on percussing or forcibly rotating the spine—by doing something, in short, which makes the diseased bones grate one upon the other. In many cases, too, of this kind the patient complains of shooting pains round the trunk, the result of pressure on the nerve roots. (Subsequent examination of the back showed that there was no caries.) Now, I want you to particularly observe this important point in diagnosis, namely, that the mere presence of hysterical symptoms does not show that hysteria is the only condition which is present. Hysterical symptoms may be, and often are, associated with organic disease. You can readily enough understand that organic disease, which lowers the nerve tone and self-control, favours the production of hysteria. The point which I wish to emphasise is, that you should never commit yourself to the diagnosis of hysteria alone until you have carefully examined into the condition of all the systems and organs, and until you have excluded the presence of organic disease, especially organic disease of the brain. I have myself seen more than one case of cerebral tumour in which, owing to the presence of hysterical symptoms, a diagnosis of hysteria (I mean hysteria alone) had been made. I have also seen more than one case of poliomyelitis anterior acuta, in which the paralysis was thought, because of the presence of hysterical symptoms, to be functional. A still more frequent error is to mistake cases of disseminated (cerebro-spinal) sclerosis for hysteria. I might give you other illustrations, but these will suffice. This point in diagnosis is, as I have just said, a most important one. If you commit yourself to the view that the symptoms are merely indicative of hysteria, and if the case ultimately turns out to be one of serious organic disease, you will not only commit a grave error in diagnosis, but you will almost certainly lose the confidence of your patient. Patients seldom like to be told that they are hysterical. If you tell the patient that she is suffering from mere hysteria alone, and if you fail to detect a grave organic lesion.
which is associated with the hysterical condition—which underlies and is perhaps the cause of the hysterical symptoms—the patient and the patient’s friends will almost certainly “round upon” you when the true nature of the case becomes apparent. Further, it is of the utmost importance, for the purposes of prognosis and treatment, to determine, in cases in which hysterical symptoms are prominent, whether the hysteria is the only element in the case or not. If the case is merely one of hysteria, the prognosis is of course much more favourable than if the hysterical symptoms are associated with and dependent upon organic disease. It is marvellous the rapidity with which, in some cases, hysterical symptoms (hysterical contractures, for example) disappear. This is not of course always so. In some cases hysterical symptoms persist most obstinately for years; but, in my experience, a cure can usually be obtained without much difficulty in the case of young subjects.

I expect that this is a case of hysteria, and of hysteria alone. Now, if this opinion is correct, it is highly probable, I think, that the contracture will rapidly disappear. It may very probably have disappeared before we meet again next Saturday. It is quite possible that I may be able to bring the patient before your notice next Saturday in an altogether different condition. I do not like to promise this, for, as I have already said, there is just a possibility that I may be mistaken in my diagnosis, and that there may, in addition to the hysteria, be caries of the vertebra. And even if the case is one of hysteria pure and simple, it does not do to predict the course which the symptoms will go through. That is a matter of uncertainty; but, as I have already said, in young subjects hysteria is, as a rule, more amenable to treatment than in older patients. In young subjects the will is more easily dominated by a stronger will than in older patients. The first and perhaps most important point in dealing with cases of hysteria is to obtain a mastery over the patient’s will.

In the treatment of hysteria it is essential to convince the patient that there is nothing seriously wrong with her, that the symptoms do not depend upon any organic disease, and that you can and will cure her. If you can only succeed in impressing this opinion upon the patient, more than half the cure is already effected. But in order to impress the patient with this belief, it is essential that you should be sure of your diagnosis. Unless you can speak positively and certainly as to the absence of organic disease, you cannot hope to convince the patient. For my own part, unless I feel confident that there is no organic disease, I cannot speak confidently to the patient. Some men are differently constituted. Some people seem to be able to give positive opinions when they have no opinion whatever of their own; or, at all events, when they are quite unable to explain the grounds
on which the diagnostic opinions which they give are based. That is not the way that I like to deal with patients.

Well, if this is, as I suppose, a case of hysteria, and hysteria alone, how should we treat the patient? By the Weir Mitchell plan of treatment — isolation, forcible feeding, massage, and electricity. Well, that is very much the line of treatment which I propose to adopt (provided that after more careful and detailed examination I feel sure that there is no organic disease). In this case, it is unnecessary to carry out the Weir Mitchell treatment in the strict way that one has to carry it out in some hysterical cases. In cases of this kind, the first essential is to remove the patient from her friends and home surroundings; and it is not without interest to note that a large party of relatives and friends (father, mother, little sister, a female relative, and a female friend) accompanied the patient to the Hospital this morning. They evidently regard her case as a very serious one and as somewhat of a medical curiosity.

Believing that the condition is hysterical, I have already laid it down as a sine qua non that the patient should be admitted to the Hospital, and that she should remain here for some time. The father tells me that he is going home to-night; he suggests that the mother should stay in Edinburgh and look after the child; I have told him that this is not only quite unnecessary, but inadvisable. It is much better that the mother should go home; she has consequently arranged to go home at the beginning of the week, after she sees her daughter fairly settled. Strict isolation is, I think, in this case unnecessary. The admission of the patient into Hospital is, I expect, all that will be necessary. Further, I do not see that there is any necessity to employ forcible feeding; the patient will be made to eat the ordinary diet of the Hospital. She is well nourished. It is in the thin hysterical cases in which massage and electrical exercise of the muscles are required; and it is especially in those cases in which the patient has been in the habit of taking very little food, and in which hysterical vomiting is a prominent symptom, that forcible feeding is chiefly advisable. In this case, gentle massage will probably be beneficial, and the application of electricity will certainly be of great importance. And here let me ask what form of electricity it will be advisable to employ? (One of the students answered, The continuous current.) I am sorry to differ from that opinion. In hysterical cases the faradic current is far more effective than the continuous current; it is one of the most important means of treating hysterical paralysis. The psychical effect which the vivid sensation produced by a faradic current produces, is, I consider, a most important part of the treatment; and in a young patient like this it should always be employed. I have, in several cases, seen the symptoms, paralysis or contracture, rapidly disappear after one or two applications of the faradic current.
In all hysterical cases, it is, I consider, a most important point to prescribe some medicine. It does not matter very much, perhaps, what the medicine is; coloured water, in many cases, does quite as well as anything else. The object is to produce a powerful impression upon the mind of the patient—to impress her with the idea and belief that she is taking something which will certainly do her good. In cases of this kind I am usually in the habit of prescribing dilute hydrobromic acid, or dilute hydrobromic acid with strychnine or nux vomica. Of course, if the patient is anaemic, or if there is any other obvious condition requiring special drug treatment, I prescribe iron, or any other special remedy which seems to be indicated. If the pain in the spine continues, granting of course that it is a mere hysterical phenomenon, and that there is no caries of the vertebrae, the application of a blister over the position of the pain will probably be advisable and beneficial.

What I propose to do, then, in this case is, in the first place, to place the patient in bed, and to make a careful examination of the spinal column with the object of determining whether there is or is not any caries of the vertebrae. In the second place, if, as in all probability will be the case, I satisfy myself that the condition is one of pure hysteria, I will forcibly impress the patient with the belief that there is nothing seriously wrong with her, that she will be able to walk in the course of a few days, and that before long she will be perfectly well. In the third place, I will prescribe some medicine, and impress her with the necessity of taking it regularly. In the fourth place, she will be told that she must eat the ordinary diet of the Hospital. And, in the fifth place, the faradic current will be applied both to the affected limb and to the back once daily. It is highly probable, I think, that under this treatment the contracture and the other symptoms will rapidly disappear; but I will take the opportunity of telling you what has been the result of the treatment at our meeting next Saturday.

The same case a week afterwards, July 7th.—Last Saturday, you will remember that I brought before you a very interesting case of hysteria in a girl, æt. 11. Well, after the lecture I carefully examined the spine, and satisfied myself that there were absolutely no indications of caries or of any other organic disease. I then took care to photograph the patient (see Plates V. and VI.), for I know by experience that in cases of hysterical contracture the rigidity and spasm not infrequently disappear with great rapidity. I thought it probable that, under appropriate treatment, that might be the course of events in this case, notwithstanding the fact that the contracture and difficulty in walking had persisted more or less continuously for twenty-eight months. The patient was told that in the course of a few days
she would be able to walk, and that she must make up her mind to run round the long ward before to-day. The result has been eminently satisfactory. On Monday (two days after you saw the case) the spasm was very much less marked. On Tuesday it had completely disappeared, and the patient was able to walk, without any support, half-way down the ward. She limped a little and dragged the leg, but she was told that this would disappear in the course of a day or two. On Wednesday she was walking freely; on Thursday she ran round the ward; and on Friday she ran twice round the ward with the greatest freedom. The result is a remarkable success. I will now bring the patient in, and let you see her for yourselves.

(The patient was then introduced, and made to run quickly across the floor of the theatre.)

The case shows very forcibly the extraordinary rapidity with which long-continued hysterical symptoms will in some cases disappear. This girl, you remember, had not been able to walk for twenty-eight months. During the greater part of that long period she had been confined to bed; the most she had done during the whole of that time was to limp a few steps across the floor, and to trail herself about for a short distance with the help of crutches. Well, in the course of three or four days, the paralysis from which she was supposed to be suffering had entirely disappeared; in less than a week she was able to run as actively and freely and quickly as any girl of her age could be expected to do.

As I told you in the last lecture, the first point in the treatment of a case of this kind is to impress the patient with the certainty that you can and will cure her. Immediately I had definitely made up my mind as to the diagnosis, I told both the patient and the mother that the crutches must be entirely discarded, and that the girl would walk in the course of a few days.

Cases of hysteria are not very common at this age, but every now and again typical examples occur both in boys and girls. In this case the chief symptoms were hysterical contracture and hysterical anaesthesia. We do not see many cases of hysterical contracture in this country; they are far more common in Paris, where all forms of aggravated hysteria seem to abound. I have, however, met with several well-marked examples.

You will remember that I brought before your notice a case of the same kind a few months ago. The patient was a boy, ret. 12. He was sent into the Infirmary, under my care, supposed to be suffering from cerebral meningitis. The chief symptoms were persistent headache and intolerance of light and noise. After observing the case for a few days, I came to the conclusion that the condition was hysterical. The patient was treated accordingly, and in a few days was sent home quite well. A month or two afterwards he was brought back to the Infirmary suffering
from a most marked contracture, which affected the right arm and the left side of the tongue. I advised that the patient should be again admitted to the Hospital, under the care of one of my colleagues—he was too big for my female ward, and I consequently had to send him elsewhere. I understand that in the course of twenty-four hours the contracture entirely disappeared, and that in a short time he was again sent home apparently quite well. The next thing I heard of him was that he had been readmitted under the care of one of the surgeons, suffering, it was supposed, from caries of the cervical vertebrae. On this occasion he complained of pain, tenderness and rigidity in the upper part of the neck. Under the belief that spinal caries was present, he was placed in a plaster-jacket. Dr. Douglas (my assistant) happened to hear of the case from the house-surgeon. This was a fortunate circumstance, for he was able to give the surgeons the benefit of our previous experience of the patient. I need not say that it threw a new light upon the nature of the case. The poroplastic jacket was, I understand, at once discarded, a blister was applied to the neck, and in the course of a short time the boy was again discharged, apparently quite well.

I might say a great deal about hysteria, but this case has already occupied more than its due share of time. I shall have to defer my remarks until some other hysterical case comes under observation. Before long we shall no doubt have other cases, and I will then take the opportunity of entering into more detail with regard to the pathology and nature of the condition. I may merely say that the condition which we term hysteria is a most interesting one. The variety of symptoms which different cases of hysteria present is almost endless. Every known form of organic disease may be simulated by hysterical functional conditions, and the simulation is so perfect in many cases "as to deceive the very elect," as Osler wittily puts it. The functional changes in the nervous system, which are the pathological substratum of hysteria, seem particularly and primarily to affect the higher cortical and psychical centres; the changes in the cerebral centres react upon the lower part of the nervous system.

The points which I especially wish to impress upon you in connection with the treatment of these hysterical cases are:

1. The importance of exact diagnosis—the necessity of excluding organic disease before committing oneself to a diagnosis of mere hysteria alone.

2. The importance, from a therapeutic point of view, of impressing the patient with the belief that there is no serious organic disease, and that, in the course of a short time, she will, under the treatment which is recommended, rapidly improve and get quite well. Provided that you can succeed in convincing the patient of this, the cure, as I have more than once remarked, is already half effected.
From a photograph of the case of Hysterical Spasm and Contracture described in the text, showing the attitude in the erect position.
From a photograph of the case of Hysterical Spasm and Contracture described in the text, showing the condition of the affected leg in the recumbent position.