Clinical Lecture

ON

RARE FORMS OF DISEASE CONSEQUENT ON CONSTITUTIONAL SYPHILIS.

Delivered at the London Hospital.

BY

JONATHAN HUTCHINSON, F.R.C.S.,

SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY AT THE MEDICAL SCHOOL.

GENTLEMEN,—I purpose to-day to bring before you three patients, all of whom present very unusual conditions of disease, consequent, remotely, upon syphilitic taint. In one man, the eyeball is thrust forwards from its socket, and its motions are much impeded by some growth or deposit in the tissues behind it. The diagnosis rests between cancer and syphilis; and I need not enlarge upon its great importance to the patient. In the second, we have a man blind, not of one eye, but of the vertical half of each eye, a condition which is much more inconvenient than the entire loss of either one alone. He is totally unable to perceive objects on his right side. This symptom—hemipopia, as it is technically called—is an exceedingly rare one, and is of equal interest in its physiological and in its clinical aspects. In the present instance, I think I shall be able to convince you that it is due to syphilitic disease of one optic tract—that is, behind the commissure. Our third patient is a woman undoubtedly the subject of syphilis, and in whom there are indications of central disease of the nervous system.

In each instance, you will see the patient for yourselves; and I shall state in detail my reasons for attributing the symptoms present to syphilis.

CASE 1. The first patient whom we shall examine is Robert S., a labourer, aged 32, who was sent to me by a surgeon at Blackwall, on account of prominence of the left eyeball. I find that he was my patient ten months ago at the Ophthalmic Hospital on account of a similar state; and he assures me that on that occasion he got quite well again, and that his eyeball receded.

You will observe that he is a sallow, cachectic man; his breath foetid; and his gums in bad condition, as if he had taken much mercury. His left eye is projected forwards very considerably, being fully half an inch from the level of the other. It comes straight forwards, and is not pushed either upwards or downwards. There is no redness or visible swelling of any adjacent part. The upper lid droops, so as nearly to cover the whole front of the eye; but, by a strong effort, he can slowly lift it. The eye is directed outwards, giving him a strong divergent squint and consequent double vision. The drooping eyelid and the squint outwards both suggest paralysis of the third nerve. Let us see how the other branches of this nerve are affected. On being told to look to the right—i. e., to use his internal rectus—he does so slowly, and not to more than half the normal extent; and the same applies to looking either upwards or downwards. As in the case of lifting the lid, he can move the eye in these directions incompletely, and only by a strong effort; yet the muscles are clearly not wholly paralysed. How as to the sphincter of his pupil? The pupil of the prominent eye is the same size as

that of the other, and moves very fairly on exposure to light. He can see fairly with the displaced eye; sufficiently to read large type. He avers that he can see much better at some times than at others; and he has, of course, much difficulty from not being able to direct his eye.

If we attempt to examine the orbit deeply with the finger, we shall find that the eye is not at all fixed, and that the tissues about it are quite soft. No tumour can be felt at any part; but, on pressing deeply above the globe, an indistinct swelling is perceived, and he at once complains of tenderness.

Our diagnosis is, Syphilitic Periostitis of the Orbit. Effusion of lymph, and possibly of pus, has taken place deeply in the apex of the orbit, surrounding the optic nerve, pushing the globe forwards and injuriously compressing its motor nerves. I ought to have previously mentioned that, although his external rectus is more than equal to the internal one, and, in consequence, the eye looks outwards, yet even this muscle does not act with normal speed and power; and we may, therefore, infer that the sixth nerve also is pressed upon. About the fourth nerve, it is much more difficult to decide.

The reasons for thinking the disease syphilitic are several. The man is the subject of syphilitic cachexia. He owns to having had, fifteen years ago, primary sores, followed by constitutional symptoms, for which he took mercury repeatedly to salivation. He has a large hole through his soft palate, evidently of syphilitic origin. He does not appear to have had any symptoms which he considered venereal since the first ones. He has been married for some years; but his wife has had no family. On his scalp are several patches, where the bone is tender and its periosteum thickened; and he complains of "rheumatic pain" in these parts at night. Let us grant, however, that there are no nodes elsewhere, nor any evidence of active syphilis, if we except the disease in his orbit.

It is possible that, instead of syphilitic deposit, there may be a new growth—soft cancer, for example—in the apex of the orbit. The effects of the two, as regards prominence of globe and paralysis of muscles, might be closely similar. It is not very uncommon for cancer to begin in the cellular tissue of the orbit. Against the supposition of its presence in this instance, we have, however, the man's statement that his eye was thrust forwards ten months ago, and receded under treatment; a fact strongly in support of the syphilitic hypothesis. The kind of cachexia is more like that of syphilis than of cancer; but we must be on our guard, for it is very possible that cancer may occur in a syphilitic patient.

We are using full doses of iodide of potassium, eight grains three times a day; and you will have an opportunity of seeing whether the results obtained verify the diagnosis.

As to the imperfection of sight from which the eye suffers, that, of course, is easily explained by the stretching of the optic nerve; and we can also easily conjecture how it is that he sometimes sees fairly and at others not at all. The nerve being on the stretch, and being also surrounded by a more or less fluid medium, it is easy to suppose that, when the muscles act, they may so compress the deposit as to cause pressure on the nerve, and stop the circulation in the arteria centralis.

Let me ask you to keep in mind that it is *fifteen years since this man had primary syphilis*; and that

during the last fourteen he has considered himself quite well.*

In the next case which we shall examine, the interval of latency (*i.e.*, that between the secondary outbreak and his present tertiary symptoms) has been no less than thirty years.

CASE II. *Well-marked Hemiopia in a Robust Man; Nodes on the Skull, and Eruption on the Forehead; History of Syphilis Thirty-two Years ago.* Thomas H., aged 55, a big, muscular labourer, now the keeper of a beer-house at Woolwich, has been accustomed to drink and smoke heavily, and has had many blows on his head. He has always had good health until the last year or two; "has been failing about his head like." He explains the latter phrase to mean that he has often felt "a giddiness and confusion in his head, stiff in the back of his neck, with lumps on the skull, and much pain." The pain has been usually bad at nights; much worse than during the day. These symptoms have been present only for the last eight to twelve months. He showed me "a lump on his skull", an undoubted node of considerable size; and during the last year, he had, he said, had many such, which would come and then go away again. Over his left brow, was a patch of serpiginous rash, of very suspicious appearance.

History of Syphilis. At the age of 18, he had a "black chancre with buboes". The latter did not break, but "passed off in blotches all over him." He was profusely salivated, and got well. He thinks it hung about him a full year before he was free of it; and he was treated by many surgeons. He married at the age of 23; and his wife lived until about a year ago, but never conceived. He suffered from "clap" about two years ago; but it was soon well, and he had no sores. He gives a full and perfectly candid account of these events; and I think it is clear that he has not suffered from true syphilis since the attack above mentioned. He appears, indeed, with the exception of an occasional sore on the tongue, to have been quite free from constitutional symptoms until lately. About six months ago, he was under care on account of "a great lump on his breast bone", which went away under treatment. He has lost flesh latterly, but is still a large muscular man. His memory has not failed materially; but he thinks that his temper has been irritable.

This man came to me at the Ophthalmic Hospital, complaining that he could not see on his right side. About three months ago, after having felt giddy, he found that he could not see well with the right eye. I found that his condition was that of true vertical hemiopia. I made him look at a candle about six feet in front of him. A second candle, held to the right of the first, could not be seen in the least until I carried it behind and across the first to the left of it, when it became visible at once. All to the right of the first candle was, he said, absolute darkness; and, after careful experiment, there seemed no reason to doubt his statement. He said that he could not go out in the street alone on account of his being unable to see to the right. To the left, he could see well—as well as ever. He can see fairly with either eye to the left; but not quite so well with the right as with the left eye. He has had no pain in the eyes. Before the right he has had a black cloud floating; sometimes it would be coloured blue or different colours. This he has noticed for six months. Not being able to read, his accuracy of sight could not be tested with much nicety;

but there was no doubt that he could see large print very fairly. At a distance of ten feet, he can make out letters of No. 20 with either eye, and nearly as well with the right as with the left.

Ophthalmoscope. No morbid condition is to be detected in either eye. The media are clear; the blood supply is good. There are no apoplexies.

To explain the symptom of one-sided blindness presented in this case, we must have recourse to the anatomical fact, that the fibres of the optic tracts decussate at the commissure in such a manner, that one-half of each eye is supplied by each tract. Thus syphilitic deposit in one tract would cause loss of perception of impressions received by the outer half of one retina and the inner half of the other. This is exactly what our patient suffers from; and as he presents no general symptoms of cerebral disease, it is in a high degree probable that the diagnosis suggested by anatomy is the correct one.

CASE III. Our third patient is Mrs. P., aged 37, a very cachectic woman, who applied on account of loss of power in her arms, more especially in the left arm. On her right forehead, is an ulcerated node; both her pupils are partially occluded, and very irregular, from the results of iritis.

Her statement is that she had enjoyed good health until two years ago, when she had, at the same time, inflammation of both eyes and a rash. A discharge also occurred; but she is not aware that she had any sores. More than one surgeon who has seen her has put questions as to venereal disease. She is married; and denies that she ever had reason to suspect the disease in question.

Her left arm is very weak, so that she cannot dress herself or pick up objects. She can move the fingers well, and feel perfectly; but the weakness is chiefly in the arm and shoulder. Her deltoid and infra- and supra-spinalis muscles are atrophied, so that they present a very marked contrast with those of the other limbs. She has no loss of sensation in the overlying skin. There is much tenderness, and some slight periosteal enlargement in the left humerus above the insertion of the deltoid.

Her right upper arm is in better condition than her left; the muscles are not materially atrophied; but she complains that the right hand is very useless, somewhat numb, and liable to "pins and needles." She considers that her arms have been more or less affected for two years.

She says she does not sleep at all on account of severe pain in the top of the head, temple, and left arm. There is nothing amiss with the legs. She has great irritability of the bladder, almost amounting to incontinence of urine. She considers that the right side of her scalp is numb, and the right forehead and cheek also. The right temporal muscle is not nearly so large as the opposite one.

Probably she is wrong in the date assigned to the commencement of her ailments, and that a much longer period has elapsed since the primary disease. She has three healthy children; the youngest is 14 years old.

She was salivated when she had iritis; but she does not think that she has taken much mercury since.

In this case we shall prescribe iodide of potassium, and with great confidence that our patient will be benefited.

The knowledge of the fact that the symptoms of central disease of the nervous system, when coming on gradually and without other obvious cause, are frequently connected with syphilis, is highly important, and will often enable us to relieve patients

* This man remained under treatment about six weeks, taking the iodide of potassium all the time. He greatly improved in health, and his eye receded to its former level. He was strongly urged to attend as an out-patient, and to continue the treatment some months longer.

otherwise incurable. I may venture the hint further, that in cases of this kind in which you cannot arrive at a positive diagnosis, it is a very justifiable practice to try the effects of an efficient course of iodide of potassium. It rarely does harm, and may chance to do much good. It is not by any means always that we can arrive at a satisfactory conclusion as to the cause of our patient's malady, whereas we must always try to do something for his benefit.

Symptoms of disease of the nervous system may be produced by syphilis in two different modes. Either syphilitic inflammation of the nerve-structure itself may occur; or the nerve may be involved secondarily by disease beginning in the periosteum or bone adjacent to it. In both of these, either a nervous centre or a nerve trunk may chance to be the part involved. Cases of syphilitic inflammation of nerve-structure itself are very much more rare than are those in which nerves are irritated or pressed upon by syphilitic effusions from adjacent structures. That they do sometimes happen, however, there is not the least doubt. Large masses of syphilitic induration have been found in the brain itself, and on the trunks of nerves swellings constituting syphilitic neuromata are occasionally seen. Let it be noted that these are amongst the latest of the tertiary symptoms of this disease. They hardly ever occur within the first two years of the disease, and more frequently after a much longer period. A similar remark applies to cases in which the nervous structures are injured by periostitis of adjacent bones. All the various forms of node are tertiary symptoms, and usually late in their occurrence.

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. WATERS, M.D.,
Physician to the Hospital.

[Continued from page 607 of vol. II, for 1862.]

CASE XXIII. *Pericarditis: Recovery.* Thomas D., a seaman, aged 37, was admitted into the hospital on December 1st, 1862. He was a stout muscular man. He said he had suffered from rheumatic fever twelve years before the date of his admission, but had had no subsequent illness. Six days before he was brought to the hospital, he was seized with a sharp pain in the epigastrium, with dyspnoea and a sensation of constriction across the chest.

When seen on December 2nd, he complained of pain, increased on pressure, in the epigastric region, of a jumping sensation about the heart, and of pain in the limbs. There was no tenderness over the heart, nor any increased dulness; the cardiac sounds were free from murmur, but faint. The pulse was 94, and regular; there was an anxious expression of countenance. He was ordered some Dover's powder at bed-time, an ether mixture to be taken during the day, and for food, beef-tea.

On December 3rd, the pulse was 88, and dicrotic in the right arm. The patient had been delirious

during the night, and the pain and anxious expression remained. Friction-sound was audible at the lower part of the right pleura in front. There was no friction-sound over the heart. He was ordered a grain of opium every six hours, and a linseed-meal poultice to the chest.

On December 4th, the pulse was 84. He had passed a better night, and had perspired a good deal. Friction-sound was audible in the right pleura and in the pericardium, both at the base and apex of the heart. He was ordered twenty grains of bicarbonate of potash every six hours, and to continue the opium.

On December 5th, the pulse was 112, feeble and very irregular. He had slept well during the night; but about 5 A.M. had had a severe attack of pain and dyspnoea. He was perspiring profusely. The right hand was swollen and painful. Friction-sound was audible all over the heart. He was ordered an ounce of port wine every four hours, and the following draught every three hours: Potassæ bicarbon. gr. xx; tincturæ opii mxxv; spiritus ætheris sulp. comp. mxxv; aquæ 3j.

On December 6th, the pulse had fallen to 96, and was regular. He had slept well. There was less anxiety of countenance, and the appetite was better. Friction-sound was audible over the middle and base of the heart. There was no increased dulness.

On December 7th, the pulse was 80, and pain was complained of in all the joints. Friction-sound was still heard in the pericardium and right pleura. He was ordered to take the draught every four hours; and on the 8th, it was given every six hours. The wine was continued.

On December 9th, the friction-sound was less marked and more circumscribed. The urine was neutral; the pulse 80. He was ordered a roast slice.

On December 11th, the friction-sound could not be heard. He continued the potash and laudanum up to the 16th, when the latter was omitted. From this date, with the exception of a slight return of pain in the limbs, he progressed satisfactorily to recovery. The wine was stopped on the 22nd, and the potash on the 27th. He subsequently took quinine; and was discharged well on January 27th, 1863.

CASE XXIV. *Pericarditis, with Extensive Effusion: Recovery.* James W., a bar-tender, aged 23, was admitted into the hospital on February 24th, 1863. He had been ill for three weeks before admission, and had been confined to his bed for one week. His symptoms had been pain in the chest and dyspnoea. He had been attended by a surgeon, and was under the influence of mercury.

On admission, he complained of pain in the chest, hands, and feet. He said he had been much purged. The pulse was 120, very feeble, but regular; the skin was hot, and there was profuse perspiration; the tongue was dry, brown, and furred. There was an anxious expression of countenance, and pain on pressure over the heart. A loud friction-sound was extensively heard in the cardiac region. He was ordered six ounces of port wine, a linseed-meal poultice to the chest, and the following mixture.

℞ Potassæ bicarb. ʒij; potassæ acetatis ʒij; tincturæ opii, mxxx; aquæ ad ʒviij. One ounce to be taken every four hours.

On the 25th, he had not slept, and had been purged several times. The pulse was 124. He had had opium and brandy to check the diarrhoea. He was ordered to take ten minims of laudanum every hour; and to continue the alkaline mixture without the acetate of potash. He was purged six times during the afternoon; and in the evening, was very prostrate. He was ordered an ounce of brandy every three hours, in addition to the wine, beef-tea, etc. The alkaline