Clinical Lecture ON SCIATICA.

DELIVERED AT

ST. MARY'S HOSPITAL, JANUARY 26TH, 1861.

BY

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THREE of my patients now under your eyes in the wards are indexed as cases of "sciatica." The term is not a scientific one; for it no more describes the essential nature of the disease than the words "head-ache" or "stomach-ache." Like them it denotes the anatomical locality of the symptom, and is applied to painful affections of the great sciatic nerve, whatever their nature or cause may be.

It will impress upon your minds several points in the pathology and treatment, if I recall to you a few points in the anatomical relations of the part affected. It is the largest nerve in the body; therefore, even slight interference with it may be expected to be severely felt. It is formed by an union of the sacral nerves; which, inside the pelvis (forming the sacral plexus), are covered on the left side by the rectum, and on the right side are in close proximity to the cæcum; hence, it is very liable to be influenced by the condition of either of these portions of the intestinal canal separately. It is covered by a strong fibrous sheath; and may be expected to experience morbid states which attack such membranes. It supplies motion as well as sensation to the limb; and, therefore, loss of power may follow its derangement. Inside the pelvis, branches are sent from the sacral plexus to the bladder and other pelvic viscera; you will, therefore, not be surprised to find occasional paralysis of the bladder. After it passes beyond the border of the pyriformis muscle, it lies nearer the surface than any other great nerve; it goes straight from one of the warmest berths in the body to one of the coldest, so it is easily affected by changes of temperature.

The first case which I shall mention is a good instance of the last-named fact. The affection is strictly local and pretty recent, and is clearly traceable to a local change of temperature acting on this part of the body alone.

CASE I. Henry T., aged 28, a night patrol, of temperate and regular habits, was admitted January 14th. He was quite well six weeks ago, when he got wet in the saddle several days running, and had his buttocks and thighs much chilled. This was followed by cold and shivering, but no particular pains in the limbs. Suddenly, while grooming his horse, he was seized with pain in the hip, which made him lame, but did not quite lay him up. He continued, with the aid of a stick, to walk his beat. One day, and one day only, before Christmas, the pain quite went away; but, with that exception, it became worse and worse. Since Dec. 20th, he had been laid up, unable to stand, so bad was the pain; and he had had croton oil rubbed in externally, mustard poultices, and blisters, without the least relief. On admission, the tongue, pulse, and action of the bowels, were reported natural, the urine clear. The situation of the pain, as indicated by one finger, was the

exit of the sciatic nerve, and pressure on that spot much increased it. He described, also, a pain as situated deep in the pelvis, indicating it as at the back of the groin.

There is clearly here a purely local disease, requiring local remedies. The morbid anatomy of it I cannot describe from any observation of my own; none of us, probably, ever have seen or will see the necropsy of a person who dies during sciatica; it is not itself fatal, nor does it accompany fatal diseases. But Professor Rokitsansky describes the sheath of the nerve as filled with a yellow gelatinous fluid, and as having its blood-vessels injected. This is just what you find in the rheumatic inflammations of other fibrous parts, and what a general knowledge of pathology would teach us to expect; and, therefore, I fully believe it is the unseen state in this and similar cases. It is a local disease, requiring, therefore, local remedies. You will say, it has been so treated, and it has not got well. True; but, however, the remedies were for all that of the right sort; perhaps not quite powerful enough, and moreover, not quite local enough. What does that pain deep-seated in the pelvis mean? It indicates that the sacral plexus is affected, as well as the trunk of the nerve; that the remedies must be applied to that part to have their full effect. Such, I take it, is its meaning. Now, applications to the skin of the hip and thigh are a long way off the sacral plexus, and you would not get much nearer by placing them on the groin. You can, however, get quite close to, indeed, quite on, the seat of action, by remembering how the plexus is overlaid by the rectum. His former treatment, mustard poultices, blisters, and croton oil, would rather puzzle that part certainly; but you can use an allied remedy, turpentine; and you can introduce it to the pelvis either by enema or by the mouth. The former method is, perhaps, the most direct; but I have preferred the latter in this case, for the mutual convenience of nurse and patient. His card records the following treatment:—

Jan. 14th. $\mathcal{R}$ Olei terebinthinæ, olei ricini, mist. acaciæ, aa ʒss; mist. camphoræ ʒj.

Jan. 16th. Repetatur. 19th. Rep. 21st. Rep. 24th. Rep.

So that, in all, four doses of turpentine have been taken. On the 16th the pain in the hip was much relieved, but he had a little strangury during the action of the turpentine. On the 19th, he said he felt better after each dose, though the pain returned. The strangury was much less than at the first dose. On the 23rd, the pain was not felt during the day, "a third as bad as it was." He could cross one leg over another in sitting, and could walk without pain. But you will have observed he still walked lame, and spoke of a kind of numbness running down the thigh. This is a slight paralysis very usual in sciatica, arising, probably, from the pressure of the swollen sheath upon the nerve. He said the deep-seated pain in the pelvis was gone. You will find this treatment most effectual in removing the local condition of the part affected in sciatica.

To-day (the 26th) he walks quite easily. But, unfortunately, the turpentine, not having sufficient employment in doing good, has taken to doing mischief, and has brought on strangury again. He has had two grains of opium as a suppository, which has relieved it to a certain extent; and, instead of con-

tinuing the turpentine, I have ordered him to be cupped to four ounces on the hip.

CASE II. Francis B., aged 53, has no occupation now, but formerly did a business of £1000 a year, and had a famous constitution. Wealth and health were lost through self-indulgence in eating and drinking. He had gout thrice in one foot, and once in both feet, twenty years ago. Poverty made him temperate; but again, two years ago, he had some money left him, and drank it out, being only stopped by a severe attack of epistaxis. Since then he has not exceeded, but still had a twinge of gout six months ago. After this, he was quite well till six weeks ago, at which period, after having felt for three days pains flying about him, he was attacked, while quietly sitting before the fire, with a stabbing pain in the back and left hip, so bad that he was obliged to go to bed. It has been continuous ever since, and he has generally kept in bed; as, though he can hobble along without actual pain, he is in constant fear of it. All through this illness there has been a difficulty in voiding his urine, and the bowels have been costive. He has been under medical treatment all the time, and has taken bark and quinine in large quantities, and has had blisters on, without being at all relieved. On admission, the tongue and pulse were natural. On examination of the hip, the pain was found to be situated midway between the great trochanter and tuberosity of the ischium; and in this part there was great tenderness on pressure, and fear of its being touched. There was pain also running along the outside of the fibula, but not in any intermediate place.

In this case you have seen a different cause for sciatica; namely, gout. But, whatever the cause, the local condition of the nerve is probably much the same, and is better for local treatment in all cases, indeed, is rarely cured without it. The remedies given have been pretty active; he was admitted on the 11th, and between that date and the 26th he has had five half-ounce doses of turpentine, and has been cupped twice to six ounces. For four nights he was allowed to have fifteen grains of Dover's powder every night, because I thought the turpentine would purge it off safely next morning. It did not make him sleep, or appreciably relieve the pain, so it was left off; for I do not like opiates in sciatica, as a rule. He had less pain on the night after it was left off.

On the 18th he said he had experienced great relief after the second cupping. Take a hint from this—your second cupping will often confer much more marked benefit than the first. "He felt pain in the lower part of the leg, but not in the hip unless it were touched." You will observe that where there is pain in the periphery of a nerve arising from disease in its trunk, the peripheral pain will often last longer than that which is at the real seat of injury. Take care to retain this fact, as it will often prevent your throwing away uselessly on the branches those remedies which should be applied to the trunk.

On admission, the patient accused the bladder of some want of power. I have seen this before in sciatica; and I believe it arises from the vesical branch of the sacral plexus being affected, and therefore shows that the morbid condition has penetrated into the interior of the pelvis. If it really arise from that cause, and not from any old stricture, you need not be afraid of causing strangury by turpentine. You will have seen in this case the drug doing no harm; and, on the contrary, relieving

the symptom which arose from a torpid condition of the bladder.

On the 23rd, he bore pressure on the sciatic nerve, and walked and moved the limb without fear, but with a certain loss of power. He had remarked several times, that though the pain was relieved after each cupping and dose of turpentine, yet it returned before the next. The cause of the disease, the gouty crisis, remains, and must be treated, or he will have his sciatica back again. He is therefore ordered—

R Vini colchici mxx; potassii iodidi gr. iv; mist. camphoræ ʒj. M. fiat haustus ter die sumendus.

CASE III. Sarah B., aged 19, an anæmic maid of all work and sempstress, with her face and shoulders covered with black-heads (*acne*), was admitted January 11th. She has had occasional pain in her hip three years. It came on first when she was out of place, and had been frequently wet in her feet. She has had pains flying about in her limbs often, but has never been laid up with any distinct attack of rheumatism in her hands or feet. She has been always pale, and liable to cough. Her bowels are costive, and her appetite bad. She is very subject to pain in the epigastrium at night and after food. She became lame from sciatica a few days before Christmas, and took to her bed during the last few days of the year, because the pain got so much worse. She has been an out-patient at the hospital, but does not appear to have attended; so that Dr. Sieveking, under whose care she nominally was, sent for her to come in. On admission, her tongue was clean; the pulse 92, and weak; the urine pale. The catamenia were stated to be always regular, except for three months when she was first ill, three years ago. She has occasional leucorrhœa. The seat of the pain was clearly indicated by the finger to be the sciatic nerve, and not the hip-joint. The heart and lungs seemed quite normal.

Here is a cause for sciatica the very opposite of the last; that was from eating and drinking too much—this, from eating and drinking too little. Indeed, in a further page of the report, she says that "the pain sometimes entirely goes away, especially after a good dinner; but always comes back again, especially at night." But though deficient diet has been the cause of her illness, yet good diet alone would not restore health. In point of fact, however much she swallows, she cannot really eat, that is digest, enough. This is shown by the want of appetite and peculiar dyspepsia; which she describes as causing weight at the epigastrium, and inability to lie on the left side. The local disease required treatment first; she was cupped once to four ounces; was purged with turpentine; and had four grains of iodide of potassium three times a day. Five days after admission, it is reported that "the pain in the thigh is less than it was, and she is improved in every way."

On the 23rd, she expressed herself as still better, and was walking about the ward. She was put on quinine and iodide of potassium.

The last-named drug I intend to act locally, when I give it in sciatica. I intend it to promote absorption of the yellow gelatinous fluid which is effused in the sheath of the nerve, and which keeps up lameness by pressing upon it, just as you numb your finger by pressing the ulnar nerve. I do not suppose there is any syphilitic taint in this case to be benefited by the iodide. Nor, though I give her quinine, do I think that the disease is of malarious

origin. Yet syphilis and malaria do sometimes produce sciatica. The syphilitic form is of the same nature as periosteal nodes, and is undistinguishable in local effects from rheumatic, gouty, or anæmic sciatica. The malarious form is purely neuralgic, and I do not think it can ever be accompanied by effusion. It is distinguishable by its complete intermittence, and, as far as my experience goes, is rare. The patients usually have some other development of the ague-poison, which will help you to a diagnosis.

Sometimes there is a dull kind of pain running down the course of the sciatic nerve in persons with sluggish costive bowels, which, unlike the forms I have been describing, is not worse at night, but in the day has no paroxysms of agony, and is not so much aggravated by local pressure. This kind of sciatica depends, not on the state of the nerve or its sheath, but on an unhealthy sluggish condition of the lower bowels. When on the right side, it is due, usually, to accumulation of fæces in the cæcum; when on the left, to piles in the rectum, and the consequently congested state of the blood-vessels. It is not made worse by exercise; indeed, I think it gets well sooner when the patient is obliged to move about. And for this reason you do not see examples of it in the wards, for it is better treated in the out-patient department; whereas, in the cases with which I have been illustrating the subject, absolute rest is essential.

I do not like in clinical lectures to speak of the treatment of forms of disease not at the time under your notice, and, therefore, I will not say more about malarious, syphilitic, and costive sciatica. But I think it will be useful, in reference to the three cases you have been watching, to notice a few remedies which might have been given without glaring malpraxis, but yet which I did not think the best under the circumstances. In the first place, sedatives might have been considered desirable; and you will find in books a long list, commencing with opium, of those which have been administered in sciatica. The very length of the list shows that people have been disappointed with the action of one after another; and my own experience is that the benefit from their use is temporary, fallacious, and obstructive to the final cure. The only one thoroughly unobjectionable is the external application of chloroform. Blisters and acupuncture are remedies of similar intention to those which I have prescribed; not quite so powerful, but equally rational and proper. Plasters are of no use during the acute stage, but when the patient is getting about again, they are an useful defence against the cold. Let them be spread upon stout soft leather; for it is the leather, not the emplastrum, that does good, and any kind that will stick tight answers equally well. Of electricity and baths I have no favourable experience to tell. I have never seen them of use to the local disease after those which I have mentioned have failed; though I dare say they may relieve some mild cases, like numerous other expedients, with which I will not detain you.

HYDATIDS OF THE LIVER. Mr. Boinet presented before the Academy of Medicine, at Paris, a young man cured of a hydatid cyst of the liver by puncture, after Recamier's method, followed by injections of iodine, and which had previously been treated in vain by frequent capillary punctures.

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.R.C.P.

[Reported by F. P. PHELPS, Esq., junior House-Surgeon.]

(Continued from p. 558 of volume for 1860.)

CASE VIII. Extensive Effusion into the Left Pleural Cavity of several Months standing: Recovery. Antonio Flora, aged 23, a man of colour, sailor, was admitted into the Hospital on June 18th, 1860. In February last he was laid up in hospital at Mobile with severe pain in the side and fever, which lasted for about three weeks. He remained in hospital for two months, and then sailed for this country, where he arrived about a fortnight before the date of admission mentioned above. During the first part of his voyage, he was able partially to do his work, but subsequently he was compelled to give it up. When admitted, he complained of pain and dyspnoea in the left side on inspiration. On examination, the left side of the chest was found universally dull both in front and behind, except in the supra-clavicular region. The dullness did not pass the median line in front. There was scarcely any perceptible movement of the left side during respiration; the side was full, but there was no particular prominence of the intercostal spaces. Over the left lung no respiratory murmur could be heard, except at the upper and anterior part, where it was faint; vocal fremitus was also absent, and egophony could be distinctly heard both laterally and behind. The pulse was 84, and small. He was ordered two grains of iodide of potassium, with tincture of squills and juniper water, four times a day, and a croton oil liniment for the chest; ordinary diet and porter. On the 30th, the symptoms were about the same. Tincture of iodine was ordered to be painted over the outside of the chest daily. On July 3rd, the respiratory murmur could be faintly heard at the apex of the lung behind. On the 11th, the following was substituted for the tincture of iodine:—iodine ℥iiss; iodide of potassium 3ij; water ℥iij. He improved rapidly from the time this was freely applied to the chest. On the 14th, the respiratory murmur could be distinctly heard at the upper part of the chest both in front and behind. On the 17th, it was faintly heard at the lower part of the lungs and in the axilla, whilst the resonance was returning at the upper part. His health was excellent.

Further details are unnecessary; the patient improved daily. The external use of iodine was continued, and he took iodide of potassium internally in bitter infusion. The following are the notes on August 1st:—Respiratory murmur heard all over the left lung; resonance natural, except at the extreme base, where there is slight dullness, and where the breath-sounds are somewhat faint.

He was discharged on August 3rd.

CASE IX. Pleuro-Pneumonia of the Left Side, with Effusion: Recovery. Michael Lappin, aged 35, a corn-porter, of intemperate habits, was admitted into the Hospital on July 17th, 1860. Ten days before admission, he had slept in the open air on the grass; and when he awoke, he felt great pain on the left side; and this was followed by rigors and cough, which troubled him more or less up to the time of admission. He