

LECTURE XXXII.

ON THE TREATMENT OF DISEASES OF THE HIP-JOINT.

IN the last lecture I began the subject of the treatment of diseases of the hip-joint, and I explained to you that without reference to what the disease is, there is one kind of treatment applicable to all these cases—I may say, indeed, applicable to all cases of diseased joints—namely, the taking away of the function of the joint, and keeping it in a state of complete immobility. I repeat this observation, at the risk of being tedious, because it is a rule of the first importance. This is the principal improvement in the local treatment of diseased joints made of late years. Formerly, patients were allowed to use their limbs, and now they are not allowed to do so, the bones being kept in a state of repose, with as much care as in a case of fracture.

Then I explained to you that in cases of diseased hip there are different ways of attaining this object; that sometimes you may apply a leathern splint, something like what we apply to the ankle or the knee; that at other times we put on a great quantity of plaster and bandage, in alternate layers; and that in other cases it is quite sufficient to keep the patient lying on his back on one of Mr. Earle's invalid bedsteads.

In cases of inflammation of the synovial membrane, you are to employ that treatment which you would employ in other cases of inflammation. When the inflammation is very intense, it may be necessary to take away blood from the arm; but it is generally sufficient to bleed locally, by cupping on the nates, or by applying leeches to the groin; or you may cup on the nates first, and then apply leeches to the groin afterwards. The patient should have his bowels kept open; and if there be any febrile excitement of the system, he may require antimony or some other diaphoretic medicine. However, in general, inflammation of the synovial membrane of the hip is of a chronic character, not disturbing the constitution, nor requiring remedies of this last-mentioned kind.

As the inflammation recedes, you may apply blisters in the neighbourhood of the joint—on the nates in the groin also. The skin of the groin is nearer to the hip-joint than the skin of the nates, and blisters and other local applications may be made in the groin with very great advantage.

Occasionally other remedies may be employed with advantage. In cases of inflammation of the synovial membrane of the hip, as well as in cases of this disease when it occurs elsewhere, especially in private practice, among the more affluent classes of society, who live luxuriously, and do not take sufficient exercise, or in those who expend their nervous energy in intellectual pursuits, and have not

sufficient left for the physical part of the system, you will find it connected with a gouty diathesis. The patient complains of acid generated in the stomach after his meals; of heartburn; he is flatulent; he rests uncomfortably at night; he has flying pains about him besides those of the hip; the urine which is made three or four hours after dinner is voided clear, but when it cools it deposits a great quantity of sediment; sometimes there is a pink sediment, which stains the chamber utensil, making it look like what is called a *pink saucer*; and sometimes there is a yellow sediment. These sediments are composed chiefly of lithate of ammonia, and they indicate a tendency to acidity in the stomach, and to gout in the system.

When inflammation of the synovial membrane of the hip occurs under these circumstances, in addition to the treatment, which I have already mentioned, you may employ other remedies. Occasionally give an active purgative, and keep the bowels gently open in the meantime. About three or four hours after breakfast, and three or four hours after dinner, let the patient take a dose of magnesia, or potass, or soda, to neutralize the acid which there is then in the stomach. I do not think that medical men, in general, when they prescribe magnesia and the alkalies, are sufficiently careful to tell their patients at what particular times to take them. They are to be taken when there is acid in the stomach to be neutralized. There is none in the morning before breakfast; and these alkalies taken in the morning, at any rate do no good, and probably are injurious. There is the greatest quantity of acid in the stomach about four hours after a meal, and subsequently to that period it has begun to get into the system, and then produces the secretion of lithic acid by the kidneys. Your object is to neutralize the acid before it passes into the circulation, and you must do that when the acid is in the stomach. A patient told me the other day, who had inflammation of the synovial membrane of the knee, accompanied with this pink deposit, that he had observed that if he took the alkali three or four hours after a meal, there was no pink deposit; but that if he took it five or six hours afterwards the deposit appeared as usual. Another remedy, very generally useful in these cases, is *colchicum*. If the pain in the affected joint be very severe, and it is connected with that peculiar state of the system which I have just mentioned, the tongue being at the same time tolerably clean, you may give half a drachm of *vinum colchici* two or three times daily, for a few days, till it begins to create nausea, or to disturb the bowels. But in less urgent cases I prefer giving it in a milder form. You may exhibit two or three grains of *ext. acet. colchici* every night, combined with a small dose of the compound extract of colocynth. This must be taken for ten or twelve successive nights. Sometimes the *colchicum* produces yellow stools, showing that it stops the secretion of bile; and to counteract this tendency you should add one or two grains of blue pill to each of the pills.

There are other cases of inflammation of the synovial membrane of the hip, connected not properly with a gouty tendency but with rheumatism, and where the patient may derive great benefit from

taking some mercurial preparation—Plummer's pill, or calomel and opium, for example: and the latter may be exhibited in severe cases, so as to affect the gums.

Inflammation of the synovial membrane of the hip, when it has any sort of attention paid to it, very seldom goes on to any ill consequences. In a very few rare cases, as I have already explained to you, it terminates in what has been called spontaneous luxation of the hip. It seldom terminates in absolute ankylosis, but very frequently there is a great degree of stiffness of the joint for a considerable time afterwards. Ankylosis, however, occurs occasionally. A patient was admitted into this hospital, who was observed to have something odd in his gait as he walked, but he did not complain of his lower limb at all, and therefore nobody took much notice of it. He had some pneumonic disease, of which he died under the care of the physician; and on examining the body after death, we found that there was complete ankylosis of one hip, but not bony ankylosis. There were the remains of the capsular ligament and synovial membrane closely adhering to the parts below: there was a thin layer of cartilage between the bones, but merely a single layer, as if the cartilage of the head of the femur and acetabulum had become united to each other. I do not know how the circumstances of this case can be explained, except by supposing that it was the result of inflammation of the synovial membrane. Had the ankylosis been the consequence of ulceration of the cartilage, the cartilage would of course have disappeared.

The treatment of those cases, which unfortunately are of such frequent occurrence, of scrofulous disease of the hip-joint in children, having its origin in the bones, and then extending from them to the cartilages and other structures, is very simple. If you are called to a child in the early stage of the disease, when he limps and complains a little of pain, or perhaps does not complain of pain at all, the local treatment should be simply negative. *Keep the hip-joint in a state of perfect immobility*, which you may accomplish by a leather splint, by plaster and bandages, or merely by the invalid bedstead. I repeat that *this is all the local treatment which the disease requires, if you are called to the patient in the first instance*. I remember the time when in these cases we were in the habit of applying leeches, blisters, and issues. I am satisfied from all I have seen of the two kinds of practice, that the abstraction of blood and the application of counter-irritants, not only do no good, but that on the contrary, by weakening and worrying the patient, they sometimes do great harm. In my own practice I have been much more successful since I laid aside all these painful remedies, and relied merely on perfect rest.

Perfect rest will do a great deal towards stopping the progress of the scrofulous disease in the joints; that is, when it has taken place in the bones, it will prevent the ulceration of the cartilages; if the cartilages are ulcerated, it will prevent the ulceration extending further; and if matter is not yet formed, it will retard, or even prevent,

its formation. Yet after all, this negative treatment does not strike at the root of the disease, which is not in the part in which the disease shows itself, but in the patient's constitution. You may well suppose, that mere rest will not correct a scrofulous constitution; and that for this purpose you must have recourse to other means.

To lay down any rule of constitutional treatment, such as will be applicable to all cases, is not possible; you must exercise your discretion in each particular instance, and I can only undertake to give you some general notions as to the plans which you should pursue.

In the first place, then, you should take care that the digestive organs are properly attended to: if the bowels are confined, purgatives should be administered according to circumstances. If there be a deficiency of bile in the evacuations, a little mercury should be carefully exhibited, to correct the faulty secretion. The child will then require some kind of tonic. Various tonics may be employed with advantage, some in one case, some in another; but the remedy in which my experience leads me to place the greatest confidence is some preparation of iron; and in children I find nothing answers better than steel wine. I do not mean the modern steel wine, which contains scarcely any steel, but the old wine, made according to the old Pharmacopœia, and which is almost of a black colour. There is no occasion for giving it in large doses. To children of three or four years of age, give a drachm twice daily; if the child be a little older, give two drachms; and to one approaching the age of puberty, you may give three or four drachms for a dose. It is not important in these cases that the steel should be taken in a large quantity, but it is important that it should be continued, with occasional intermissions, for a great length of time. The best cures that I have seen, not only in cases where the hip-joint was affected with the scrofulous disease, but also where the disease was situated in the knee and other joints, and even in the spine, have been in those cases in which steel has been given, off and on, for a great length of time—for three or four years or even longer. I give it for a month, then stop it for ten days; I then give it for another month, then stop it for ten days again, and so on, combining purgatives with it, according to circumstances. This system, in four cases out of five, agrees with the child exceedingly well. You will not see any marked improvement at the end of the first month, but you will at the expiration of six or twelve months. I could tell you of families where the most delicate of the children have by the long-continued use of steel, in this manner become the strongest of the whole set. I do not think that steel in these cases is, under ordinary circumstances, given to a sufficient extent. The parents get impatient of giving the child medicine every day, as well as of the expense of medical or surgical attendance, and the medical man himself naturally becomes tired of his attendance under these circumstances. There is no perceptible improvement from day to day, and it is difficult to command confidence where the change is not visible perhaps for six months, and to induce the patient or the parents to persevere in the use of this, or any other remedy for so long a time.

But such perseverance is really what is required, and it is necessary to explain it to the parents in the first instance. Of course I am now supposing that steel agrees with the child; but there are some who cannot take it except in small doses; and there are others who cannot take it at all without its producing headache, making them costive, heated, and feverish. Other tonics may then be exhibited, such as quinine, some of the bitters, or what, perhaps, is better still, the alkaline infusion of sarsaparilla. The latter is a very excellent and useful preparation, and I will give you a formula for preparing it, as it is not in the Pharmacopœia:—To make a pint of the infusion, you take two ounces of the root of Jamaica sarsaparilla, cut and bruised; then you add two drachms of liquorice root, to cover the taste of the sarsaparilla; to this you add two drachms of the *liquor potassæ*, and about eighteen ounces of boiling distilled water; macerate the whole in a close vessel for about twenty hours; strain off the liquor, and you may give the patient, according to his age, from four to six or eight ounces of this infusion daily.

But there is still another method of improving the child's constitution: let him live in the fresh air as much as possible. All that I have seen leads me to believe that nothing tends more than this to strengthen a delicate constitution: of course I mean, not that the child should be exposed to cold, or wet, or night air, but that he should pass his time out of doors in fine and temperate weather. In the summer his couch may be placed in the garden, and he may remain there during a great part of the day; if it can be managed that he should reside at the sea-side, it would be so much the better;—I say *reside*, for as to his being taken for a month or six weeks to a sea-bathing place, the benefit which he will derive from it is not such as to compensate for the mischief which may arise from the journey, especially if it be to a distant place.

The period during which it is necessary to keep the patient in the recumbent posture, must vary very much in different cases; in some cases three or six months may be all that is wanting; in others, the patient must perhaps be kept lying down for twelve months; and where the joint has been destroyed by an abscess, and the bones have become displaced, even a much longer period may be necessary: but I shall speak of these last cases presently.

The treatment of those cases in which the cartilage of the hip ulcerates, independently of that scrofulous disease of the bones which I have just described, and which we call, by way of distinction, cases of primary ulceration of the cartilage, (though it may sometimes be originally disease of the surface of the bone, and sometimes of the cartilage itself—two orders of cases which I cannot pretend to distinguish in practice,) in many respects resembles the treatment of scrofulous affection of the hip-joint. The patient must be kept in the same state of perfect immobility; but he does not in general require the same treatment otherwise. Very often he will derive much benefit from a course of sarsaparilla; at other times he will derive still greater benefit from being put for a certain time under the influence of mercury. In many of these cases he will derive

benefit from the employment of what we call *counter-irritation*. Although I do *not* recommend the employment of blisters and caustic issues in other cases of disease of the hip-joint, yet I *do* recommend them here. You may apply a blister to the nates, or to the groin, or you may make a caustic issue behind the trochanter large enough to hold twelve or fifteen peas. Usually, however, I keep the issue open, not by peas, but by rubbing the surface of it about once in a week with the caustic potass, dressing it in the meantime with the savine cerate. You may distinguish where you ought and where you ought not to employ these means with sufficient accuracy; thus, if the disease has not been marked by much pain previous to the formation of matter—if there has been limping for a long time with scarcely any suffering—you may conclude that the case is one of scrofulous disease, and that counter-irritations are unnecessary; but if the disease has throughout its whole course been accompanied by pain, becoming gradually more severe, then you may conclude that it is not one of these scrofulous cases, and that counter-irritation will be beneficial. I speak of pain, observe, previously to the formation of matter; for when matter is formed in the joint, there is severe pain in all cases. Where the pain is very severe, and is not relieved by a caustic issue behind the great trochanter, you will sometimes afford great relief by making a seton in the groin, in the fore part of the joint. I suppose that the pain in part depends on irritation communicated to the anterior crural and obturator nerves, and that this will explain the relief obtained from a seton made in their vicinity.

I have hitherto said nothing regarding the treatment of abscess connected with the hip-joint, having reserved my observations on this subject to the last, because the treatment of abscess of the hip is pretty much the same under all circumstances—whether the disease has begun in the synovial membrane, the bones, or the cartilages. Whenever you find that the patient complains of a great aggravation of his former symptoms, when the pain becomes intolerable, the limb starting at night, and the pulse becoming increased in frequency, you may always suspect that matter is forming in the joint, and that the acetabulum is becoming filled up with matter and lymph. You may, under these circumstances, employ fomentations, which may help the patient a little, but not much. If the pain be excessive, you must give opium, though I am not desirous of giving it without ample reason for doing so, on account of the ill effect which it produces afterwards on the digestive organs. By and by the abscess presents itself externally, and this is almost invariably followed by a shortening of the limb, produced in one or other of the ways which I mentioned formerly.

When the abscess presents itself, you will feel it, and you may even see it; but if it is yet deep-seated, I would not advise you to open it, because, first (especially in the cases of very delicate children), there may be a loss of blood which the patient cannot afford, and, secondly, because under these circumstances the wound will heal directly, and the matter will become pent up as it was before. An exception, however, to this rule may be made in those cases in

which you find an abscess burrowing under the fascia, instead of coming forward to the surface, and then it may be right to make an opening through the fascia to prevent the destruction of the parts below.

Different methods have been recommended for opening these abscesses; but I shall not occupy your time by a critical discussion as to their respective merits. Some have advised an oblique or valvular opening, others a direct opening; some have advised us to keep the orifice open, and others to heal it; some have advocated the use of the lancet, others of the caustic potass. I shall merely tell you what, according to my experience, is the best mode of managing these cases. The patient having been kept for a considerable time in the recumbent posture, when the time arrives at which you think proper to open the abscess, do it with an abscess lancet, or double-edged scalpel, and make a large opening, so that the matter may run out freely of itself; and that there may be no obstruction to its discharge from the opening becoming blocked by curdly matter or flakes of lymph. But having done this, be satisfied that you have done all you ought to do. *Never squeeze and compress the parts to force out the matter; never move the limb for the same purpose, nor allow others to do so.* If you attempt to squeeze out the matter you bring on inflammation in the cyst of the abscess,—you induce bleeding from the small vessels on its inner surface—the blood collected in the cyst of the abscess mixes with the pus, and becoming putrid, produces great constitutional disturbance, taking on the character of typhus fever. It is said that bad symptoms often come on, on opening an abscess; but I believe that for the most part it is not the opening of the abscess, but the rough hand of the surgeon in trying to squeeze out all the contents of the abscess, that does the mischief.

Then, are you to bring the edges of the wound together, and heal it, or not? My own practice is to apply a poultice, and to leave the wound to take its own course. On the whole, I would rather that the wound did not heal; but I do not usually endeavour to prevent it healing by introducing lint into it, lest this irritate the inner surface of the abscess, and excite a mischievous inflammation in it. If it does not heal, it is so much the better; the matter continues to flow out, and the cyst of the abscess gradually contracts. If the wound does heal, the matter will of course be again collected, and you must make another opening. If the abscess should present itself in two or three different places, do not be satisfied with one opening, but make an opening wherever it presents itself, as otherwise there can be no proper evacuation of its contents.

In the majority of cases in which abscess has formed, the cartilage is destroyed, the bones are carious, the synovial membrane and ligaments have in great measure disappeared, so that there is really no joint left. The case may now be compared to one of compound fracture, and you are to treat it just in the same manner, by keeping the limb in a state of perfect immobility, and taking care that the matter should flow out as fast as it is generated; but it may take a

long time for this abscess to heal—months always, and even years in some cases. But ankylosis will be going on all the time, though the period of its completion varies. In the scrofulous disease of the bone, it takes a longer time for bony ankylosis to be effected. If you examine the limb many years afterwards, you will often find that the ankylosis is not by bone, but by a sort of ligament. But when the cartilages are ulcerated independently of the scrofulous disease of the bones, the bones being in a tolerably healthy state, bony ankylosis takes place at a much earlier period.

As soon as you find that the thigh and the pelvis move completely together, there being no perceptible motion of the joint, you may be satisfied that there is sufficient ankylosis to enable you to allow the patient to begin to take exercise on crutches.

In all cases the patient experiences great pain at the time that the head of the thigh-bone is being pushed out of the socket, or if the head is destroyed, when the neck of the femur is drawn up and lodged above the acetabulum: and this pulling up of the head or neck of the thigh-bone is always followed by great and permanent distortion of the limb. Can you do anything to prevent those sufferings, and the subsequent distortion? The patient suffers because the head or the neck of the femur is leaving its own place, and getting into new parts which are not intended to have the rough bone in contact with them. I have in some instances endeavoured to prevent this by mechanical means,—that is, by the application of an extending force to counteract the action of the muscles: and a very slight force is sufficient for this purpose. It is astonishing what comfort I have known this to give the patient in some instances. As soon as you have reason to think that the limb has begun to shorten, you may begin to make a gentle extension below, so as to counteract the action of the muscles above; and experience shows that this may be done with the most perfect safety.

As to the mode of accomplishing this object, it is sufficiently simple. The patient is to be placed on his back, on the treble-inclined plane of an invalid bedstead, with his shoulders and his thighs a little elevated. An upright piece of wood is fixed to the foot of the bed, and in this upright piece of wood there is a pulley, which pulley is just in a line with the thigh-bone. There is a bandage round the patient's thigh above the knee, a string extends from each side of the bandage, and joins another string which passes over the pulley. At the further extremity of this last string there is a very light weight attached—a few ounces of shot or some copper penny pieces put into a basket are sufficient in the case of a child. You often require a great extending force to counteract the powerful action of the muscles in reducing a dislocation, but a very slight force, constantly acting, is sufficient to counteract the weak action of the muscles in these cases. My experience of this practice leads me to believe that by the adoption of it you may prevent a great deal of pain and suffering belonging to these cases, while at the same time this method has a tendency to lessen very much the ultimate distortion of the limb.

I have spoken to you in these lectures of the ordinary diseases of the hip-joint; and it is not my intention to enter into the history of the diseases of more rare occurrence. I have known instances of scirrhus disease and fungous hæmatodes of the hip; and then there are hysterical affections which simulate the symptoms of other diseases. A knowledge of these hysterical affections is of great importance, in order that you may not be in danger of confounding them in practice with cases of actual local disease.

LECTURE XXXIII.

ON TIC DOULOUREUX OR FACIAL NEURALGIA.

"JOSHUA KINGETT, forty-eight years of age, was admitted into the hospital on the 14th Oct., 1835. On his admission he stated that for the last ten months he had been suffering the most severe pain, which was entirely confined to the left side of the face; that this pain at first had an intermittent character; but that latterly it had become constant; and at times was so acute that, to use his own language, he would have rejoiced if any one had knocked him on the head. At these times he seemed almost to lose the sight of his left eye, and very often suffered from toothache. At the time of his admission the pain was chiefly confined to the cheek and nostril, which were puffy, and tender to the touch. There was no disease to be observed on looking into the nostril. The bowels were always torpid, and the tongue was covered with a whitish-brown fur. He was directed to apply the veratrine ointment, in the proportion of a scruple of the veratrine to an ounce of lard. A portion of this was to be rubbed in twice a day, and he was to take five grains of blue pill every night, with a draught containing five drachms of infusion of senna, five drachms of compound infusion of gentian, a drachm of tincture of senna, and a drachm of sulphate of magnesia every morning.

"On the 23d, having pursued this plan for about a week, he thought that he was a little better. A bad tooth was discovered in the upper jaw, which was extracted. The tongue was a little cleaner. He was directed to take infusion of rhubarb and columbo, of each six drachms, with a drachm of compound tincture of cardamoms, and half a scruple of carbonate of potass, three times daily. He was to go on taking the blue pill."

On the 29th the report runs thus:—"He has improved rapidly: the pain is now very tolerable; the bowels are open twice daily; the tongue is nearly clean."

On the 7th November it is said, "The pain, which had almost left him, returned with great severity two days ago. He has had no sleep since, in consequence of it. The tongue is again white and

furred. The medicine was not sufficient to act on the bowels, which have been confined for the last two days. He was directed to take five grains of blue pill every night, and a dose of compound infusion of senna with sulphate of magnesia every other morning."

On the 15th it is said that "he had been again relieved as soon as the bowels were well opened."

"On the 17th November I placed him on the following plan of treatment. He was to take five grains of blue pill, five grains of compound extract of colocynth, with three grains of extract of lettuce, every night. This medicine acted well on his bowels; he has been purged ever since he took it, two or three times daily. He has continued to take it up to the present time. The tongue is now quite clean. He is entirely free from anything that deserves the name of pain, although he has still some feeling of uneasiness in the face."

A violent pain in the face attacking the patient at intervals,—a pain so violent that the patient wishes that somebody would destroy him, and yet there being no disease perceptible in the parts to which the disease is referred: it is to a pain of this kind that we commonly apply the name of *tic douloureux*, or, as some call it, with more propriety, *facial neuralgia*. We must regard this case, then, as one of tic douloureux, or, if you please, facial neuralgia.

You will observe, that besides other classifications which you may make of the pains that occur in disease, you may divide them under these two heads. There are cases in which the pain is felt where the disease exists, as there may be inflammation in the knee, and pain in the knee in consequence; carcinoma in the breast, and pain in the breast in consequence; disease in the liver, and pain therefore in the hepatic region. Then there are other cases in which the pain is referred to parts which are not actually the seat of disease. Thus, there may be pain in the knee while the real disease is in the hip; there may be pain in the shoulder while the real disease is in the liver; there may be pain in the breast, while the real disease is an hysterical state of the constitution generally.

Tic douloureux, or facial neuralgia, belongs to this last class of pains. The pain which is felt is referred to some part or other of the face, or to the whole of one side of the face, and yet there is no disease there. You are not to suppose that the cause of the pain in this complaint is always the same: the fact is, the pain is but a symptom and it may depend upon different causes; so that in those patients who are said to be affected with tic douloureux, the real nature of the disease varies very much in different cases. You may have half a dozen persons with tic douloureux in the face, the symptoms in all of them being the same, or very nearly the same, and the real disease may be different in every one of them. The pain, as I have said, has the same character in all these cases, and it differs from the pain of most other nervous affections. You will observe that the branches of the fifth pair are all under particular anatomical circumstances; that they all proceed from that remarkable plexus which is bathed, as it were, in the blood of the cavernous sinus, and that the branches of it all run through