

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

bony structures; the second and third branches especially being enveloped in bone to a great extent; and probably it is from one or other of these anatomical circumstances, or from both of them combined, that the pain derives its peculiar character.

The pain in all these cases, whatever may be the cause of it, generally comes on gradually. At first it is a pain which, though severe, may be borne; but at last it becomes quite intolerable,—so intense that the patient always says he would rather die than bear it. At first he complains of an odd twinge every now and then in the face; and it generally begins in the cheek where the second branch of the fifth pair of nerves is distributed. The twinge becomes more severe, and recurs more frequently. At first it recurs only two or three times daily, and lasts for an instant; then the twinge becomes more severe, of longer duration, recurring several times in the twenty-four hours; and so it goes on increasing. When the disease is at its height, the patient is in as wretched a condition as you can well imagine a human creature to be in. The pain attacks him every quarter or half hour, sometimes oftener, coming suddenly and unexpectedly on him at uncertain intervals. He states that at first there is a sensation of spasm, which is followed by a violent and continued pain, accompanied in some cases with a sense of pressure acting from above. You see the patient acting with all the muscles of the trunk, as if it were necessary that he should make this effort in order to support himself under a heavy weight that was forcing him to the ground. This will last perhaps for two or three minutes, and then the pain goes off, and he is quite well again till the attack returns. The recurrence of the pain is always readily induced by the patient's attention being directed to it. If you ask him how his face is to-day, the attack comes on directly; but if you hold him in earnest conversation upon any other subject, it may stay away for half an hour. The patient often cannot get to sleep on account of the pain; but having once fallen asleep, he may continue so without the pain recurring for several hours. I have known this to happen even in the very worst cases.

When the pain comes on there is often violent spasmodic contraction of the muscles of the face; and perhaps it is this which causes the face, on the side on which the disease exists, to become swollen and puffy. The conjunctiva of the eye on that side looks red and blood-shot. The pain, I say, generally begins in the cheek; and often it is altogether confined to the parts to which the second branch of the fifth pair of nerves is distributed; but in extreme cases it will sometimes extend to the forehead, that is, to the parts supplied by the first branch of the fifth pair of nerves; and to those supplied by the third branch of the fifth pair, that is, to the chin, and even to the teeth. In some cases the tongue and palate are affected also.

In some cases the disease torments the patient for a month, six weeks, or even six months, and then, without rhyme or reason, vanishes, and he continues well for an uncertain period: then it recurs, and continues as long or longer than before. In other cases the disease may vanish, not for a time, but altogether, the patient obtain-

ing a complete recovery. In other cases, again, there is never an actual giving way of the disease; it goes on tormenting the patient day after day, month after month, year after year; and in some of these cases other symptoms ultimately supervene, and the disease proves fatal. But of this I shall speak again hereafter. In addition to what I have already stated, it is worthy of notice that the disease attacks only one side of the face; I never saw it in both sides.

On what cause do these symptoms depend? Many persons thus affected have a bad tooth, and they generally go and get it drawn, it being thought that the carious tooth may be the cause of the pain. I never knew a case myself where the patient was relieved of genuine tic douloureux by the extraction of a carious tooth; and I remember that in a conversation which I had some years ago with a very experienced dentist, he told me that he had frequently been called upon to draw bad teeth where the patient had laboured under tic douloureux in the face, and he could not remember that the operation had ever been of any service. I have said that the disease may depend on different causes. Sir Henry Hallford has published a paper, in which he mentions some cases bearing all the character of genuine tic douloureux, in which the symptoms seemed to be connected with a diseased condition of the bones of the face; and I have no doubt that such is their origin in some instances. There was a man in this hospital suffering from a pain in the face and cheek, having all the characters which I have just endeavoured to describe, and in whom there was disease of the bone of the upper jaw. If I remember right, for I have preserved no notes of the case, he went through a course of sarsaparilla; a portion of the bone exfoliated, and after this the pain was very much relieved. I saw another case where there was pain very like that of tic douloureux existing in combination with disease in the bones of the upper jaw, but of which I know not the result. But these are rare instances. There is no diseased bone to account for the pain in ordinary cases. Then from what else may it arise? You will find it sometimes in young women of hysterical constitution, a product of hysteria. Where there is hysterical pain referred to the part in which the branches of the fifth pair are distributed, it assumes the form of tic douloureux. Then at other times the pain is intermittent and periodical, depending on that peculiar state of the system which may produce the phenomenon of ague, and may be cured as ague is cured, by quinine or arsenic. In other cases, again, the disease evidently depends upon the state of the digestive organs, and the patient is cured by great regularity as to diet, and a course of medicine which is calculated to put the digestive organs into a more healthy condition. In another order of cases the pain in the face is the result of disease in the brain. The late Dr. Pemberton, who was for many years physician to this hospital, and was engaged in a large practice at this end of the town, in the midst of his career of prosperity became affected with tic douloureux, and suffered from it in the most horrible manner. I never saw any individual, under any circumstances, suffer more. He went into the country, and died with symptoms of disease in the brain.

There was a gentleman who had tic douloureux in the face for a very long time. The pain at last left the face, and then he was attacked with fits of epilepsy. As the pain left the face when the patient became affected with epilepsy, that alone seemed to be sufficient ground for believing that there was some disease in the brain. After that, however, there was a ptosis, or a dropping down of the upper eyelid, on the same side on which the tic douloureux had existed. After a more than usually severe epileptic fit, he fell into a state of apoplexy, and died. Mr. Green, Mr. Freeman, and myself, who had attended him, examined the body after death. We found all the membranes of the brain bearing marks of chronic inflammation; the vessels connecting the *dura mater* and the bone unusually large; the *tunica arachnoides* thickened, and at the upper and back part of the left hemisphere of the cerebrum adhering to the inner surface of the *dura mater*, in a spot about an inch in diameter. The cerebrum generally was soft and vascular, exhibiting a red mottled appearance on many places. The softening of its substance was most distinct in the *crura cerebri*, *fornix*, and adjacent parts. The nerves of the fifth pair were carefully dissected to the extremity of the cavernous sinus, but presented no morbid appearances.

There are still other cases in which you cannot trace tic douloureux to its real source. There is something or other somewhere or other in the system, which acts as a source of irritation to the nerves of the face; but where that something is, and what it is, we cannot discover. Indeed, generally speaking, I should say that nothing is more difficult than to trace any local nervous affections to their real source. The disease may be in one part of the body, and the pain or spasm which it produces may be in another. I have known a patient have violent neuralgia of the foot, which depended on a stricture of the urethra, and which, whenever it occurred, was invariably relieved by the use of a bougie. I have known another patient have neuralgia of the foot depending on internal piles, which came on when the piles were protruded through the anus, and went away when they were reduced. I have known a spasmodic wry neck, or a nervous pain in the back, to alternate with insanity.

If it were worth while to do so, I might mention other cases illustrative of this observation, that the disease may be in one part of the body, and from some nervous connection, it may produce pain in some other part of the body. We cannot explain the matter much further than this. I may, however, venture to make this additional observation—namely, that there is good reason to believe that the seat of the nervous communication, on which those sympathies depend, is for the most part not in the nerves themselves, but in a higher place—in the brain, or in the spinal cord.

*Treatment.*—The treatment of *tic douloureux*, of course, must differ in different cases. In some instances it may be relieved by one method; in others, by another; but in the greatest number of cases it cannot be relieved at all. A very old operation, which had fallen into disuse, but has been revived of late years—namely, that of dividing the trunks of the nerves, to the extremities of which the pain

is referred. It has been said that if the pain be referred to the extremity of the second branch of the fifth pair of nerves, you should divide the second branch where it passes out of the infra-orbitary foramen on the face; that thus you will cut off the communication between the extremities of the nerve and the brain, so that the painful sensation may no longer be communicated to the sensorium. Now this would do very well if the seat of the disease were really in the extremity of the nerve: but there is no reason to believe that it is so, and there is every reason to believe the contrary.

The irritating cause, whatever it may be, manifestly acts not on the extremity of the nerve, but on its origin; and both reason and experience prove that the division of the nerves below the origin is of no service. I have myself performed this operation without the smallest benefit to the patient.

In the late Dr. Pemberton's case the branches of the nerves were divided by Sir Astley Cooper. Sir Astley did not recommend it, and, if my recollection be accurate, when Dr. Pemberton first applied to him to do it, he declined acceding to his wishes. He did it at last in order to satisfy the patient; but the division of the nerves, instead of giving relief, very much aggravated the evil. It is altogether an unscientific operation, from which we have no more right to expect any benefit than we should have if we were to amputate the testicle, because pain was referred to it in consequence of a calculus being lodged in the ureter.

In those cases in which the disease has an intermitting and periodical character, you can always relieve it, as you may all other cases of intermitting and periodical disease, by the exhibition of quinine, bark, and arsenic. But then, if you give quinine, it must be in large doses; you must begin with ten grains, and go on increasing it. I saw this very morning a gentleman who had formerly a nervous pain in the back, almost as bad as tic douloureux in the face. It was intermitting and periodical. I told him, when he consulted me about it, that I was sure that quinine would cure him. He took ten grains without benefit; he took twenty with little benefit: and was not cured till he took half a drachm daily. He remained well for two or three years afterwards. The combination of bark and arsenic, also, is an excellent remedy in these cases of intermitting and periodical disease; but I generally prefer giving quinine first, because it is a more innocent medicine, requiring no watching, and not subject to the inconveniences which belong to the use of arsenic.

I was consulted in conjunction with another practitioner, concerning a young lady who had tic douloureux of the face. She was hysterical, and the disease had followed the occurrence of some circumstances which had occasioned great agitation of mind. The case was evidently connected with hysteria and an irregular state of the menstruation. We gave her steel and ammonia in combination, which put her into better health, and in the course of a few weeks the tic douloureux, which had existed for many months, had disappeared.

If you can really trace the pain to disease in the bones of the face,

you must, of course, instead of directing your attention to the pain which is the symptom, endeavour to cure the disease in the bone which produces it. A piece of bone may exfoliate; and if the dead fragment has caused the pain by pressing or otherwise irritating the trunk of a nerve, the pain may thus be removed; or perhaps the patient may get well under the use of sarsaparilla, which, as you know, acts most beneficially in a number of cases of disease of the bones; or if sarsaparilla fail, you may serve your patient by the exhibition of calomel and opium, oxymuriate mercury, some preparation of iodine, or the mezereon; every one of which may in its turn be advantageously resorted to in cases of disease of the bones.

In cases where the pain depends on an organic disease of the brain, you must of course turn your attention to the primary affection, although it is probable that in the majority of these cases you will be able to render the patient but little real service.

But supposing that you can trace the disease to no other source, and that you find the tongue furred, the bowels confined, and other indications of an ill performance of the digestive functions, you have a right to conclude that this very probably is the origin of the pain in the face; at any rate you are called upon, in the first instance, to ascertain what will be the result of putting the digestive functions in better order. It was upon this principle that I proceeded in the case to which I called your attention in the beginning of the lecture; and you see that the practice has answered so far wonderfully well. As the bowels were opened, and the tongue became clean, so the pain abated. A great number of diseases depend on the state of the digestive organs. You will meet with examples of this every day; and there is nothing more remarkable in a patient having tic douloureux from a deranged state of the digestive organs, than there is in having sick headache in consequence of an overloaded stomach, or a lumbago from costive bowels.

But supposing that you cannot trace the disease to its real source—that the patient is in other respects well,—that all the functions are well performed,—that there is this frightful pain, and you have no clue to lead to the real seat of the original malady, and therefore no clue to the practice you ought to adopt,—you are driven to the expedient of trying remedies at hazard,—a very unsatisfactory mode of proceeding, it must be acknowledged, but you have no alternative. You may give the patient quinine, which is useful in many cases of nervous pain, even though it be neither intermittent nor periodical; or you may give carbonate of iron, which I do not hesitate to say relieves many neuralgic affections also. Half a drachm of the carbonate may be given three times a-day, and the dose may be gradually increased to a drachm. I never saw any good arise from pushing the use of the carbonate of iron beyond this; and I can easily conceive that much evil may arise from its being given in those enormous doses in which, if I am rightly informed, it is given by some practitioners. It is easy to conceive that when thus exhibited the bowels may be actually clogged by it, just as in other cases they are found clogged by cubebs or by Ward's paste. Whenever you

give these insoluble substances, you should give an occasional purgative to prevent the accumulation of an insoluble mass in the bowels. I heard of a patient who died of inflammation of the bowels in consequence of taking large doses of cubebs, which were not purged off. So I can conceive that inflammation of the bowels may be produced by the large doses of carbonate of iron being suffered to accumulate in the intestines.

If the quinine and carbonate of iron fail, it may then be worth while to try the effect of zinc or copper, or some of those other metallic salts which are occasionally useful in cases of chronic nervous affection.

But supposing that you have tried all ordinary means without benefit, are you to go on *ad infinitum* tormenting the patient with medicine? The first rule of our art is to do no harm; and if you have tried all reasonable expedients without benefit, you had better not go on to further experiments. No one can be dosed constantly with medicine without the health being injured by it, ultimately, if not immediately; and if you have not some reasonable grounds for giving medicine, you should not run the risk of doing harm by its continued exhibition. It is much more wise and honest, when you do not know what to do, to advise your patient to wait, and take the chance of the pain subsiding of itself, as it does in many instances. But where you cannot cure your patient, you may often succeed in making his life less intolerable than it would otherwise be. Some patients are capable of being much relieved by the use of opium, and among them there are a few with whom opium never disagrees, so that they may take it without harm. Even in these, however, it should be given only when the pain is more than usually severe. Let them avoid taking it constantly, because then the opium loses its effect. In slighter cases, the patient may perhaps be benefited by extr. of lettuce, extr. of henbane, or some other of the slighter narcotics. In all cases the patient is likely to derive advantage from avoiding as to diet, and mode of life in other respects, irregularities, including all unusual demands on the nervous system, great mental exertion and anxiety.

In the present case, one of the first things which I did was to direct that the part should be rubbed with the veratrine ointment. This has been lately proposed as a remedy possessing a most extraordinary influence over a number of diseases, neuralgic affections among the rest. I saw one patient who thought himself relieved by it of a pain in the forehead, connected with disease of the frontal bone in the neighbourhood of the frontal branch of the fifth pair of nerves. I was, however, by no means satisfied that the relief really arose from the use of the ointment; and in several other cases I have had recourse to it without the smallest advantage: however, there could be no objection to the use of it on this occasion, and I thought it worth while to make one experiment more—you have heard the result.

Although I employed the veratrine ointment in this instance, I am not one of those who would be trying indiscriminately all the new

remedies which, in these days, are being constantly brought before the public; nor can I think well of this modern fashion of resorting on all occasions to novel methods of treatment. I see many practitioners who would always rather give a new medicine than an old one, but I advise you if you wish to succeed in your profession and to be useful to the public, to pursue a different course. Make yourselves masters of the old remedies. Learn how to handle them, and what good they will do, and, as a general rule, have recourse to them in the first instance. If the old remedies fail, and you are at a stand-still, then, and not till then, have recourse to the new ones. If you always begin with new remedies, you throw away all the valuable results, not only of your own experience, but of the experience of those who have gone before you. You have to begin, as it were, *de novo*, and the first consequence of this will be that you will not cure your patients; and the second, that you will have none to cure. Where old remedies fail, I say that it is not only not unreasonable, but proper, that you should ascertain what can be done by new ones; but it is very unwise to employ the latter where there are sufficient grounds to believe that those already in use will answer the intended purpose. I should be very sorry to see the march of science impeded by an unjust apprehension of experiments and innovations: but, surely, there is a broad enough line between a discreet and prudent use of new remedies, and that indiscreet and hasty use of them which we find to prevail in the practice of the medical profession at present.

## LECTURE XXXIV.

### ON HEMORRHOIDS.

In the present lecture I purpose to make some observations on the disease which we call piles, or hemorrhoids.

A patient consults you, complaining of swelling, pain and tenderness, in the neighbourhood of the anus: you examine the part, and find on its verge a number of tumours, about the size of the end of the thumb or finger, with broad bases, not very distinct from, but running one into the other, covered by the common integuments, and of a more or less purple appearance. If you cut into one of these tumours there is immediately a flow of venous blood, followed by a small quantity of arterial blood, such as might arise from a cut anywhere else. On making a section of the tumour, it presents to the eye the appearance of dilated and tortuous veins: in fact you cannot doubt that they are dilated veins; they are exactly like varicose veins of the leg. The tumours which I have described are situated below the sphincter muscle, and we call them *external piles*.

Another patient consults you, complaining also of a swelling at

the anus, accompanied by pain and tenderness. You examine the part, and find a number of tumours of a different kind. These, too, have broad bases, and run one into the other, forming a circle, which projects below the anus. They are covered, not by the common integument, but by the mucous membrane of the rectum protruded from above the sphincter muscle. On making a section of one of these tumours there immediately flows venous blood, and arterial blood may flow afterwards. On looking at the divided surface, it is evident that the tumour was composed of a large tortuous vein. It is the accidental enlargement of these tumours which causes them to protrude externally; but they are formed above the sphincter muscles, and we call them *internal piles*, or hemorrhoids.

I cannot doubt that piles are just what I have mentioned—dilated varicose veins. This is the common theory of their formation, and I certainly believe it to be correct. If you cut through piles, and dissect them, as it were, in the living person, you see that they are made of dilated veins; and if you dissect piles in the dead body, you find them just the same. If you insert the pipe of a syringe into the trunk of the inferior mesenteric vein of a person who had laboured under piles, the piles become all dilated largely with the injection. I know that some have held a different opinion concerning the formation of these tumours, and have supposed that they were not composed of dilated veins: but I apprehend that they have been misled by examining the parts in the advanced stage of the disease. If you wish to know what any disease really is, you must make your dissection of it in its origin; for in its progress, one morbid change is followed by another, and when a disease has lasted for a considerable time, you find various appearances in addition to those which existed in the first instance.

Those ultimate changes which take place in cases of piles, are exactly similar to those which occur in connection with varicose veins of the leg. You know that at first the veins of the leg are simply varicose, or dilated; that at last they become inflamed; that lymph is deposited in the cellular membrane surrounding them, and that at last there is a great mass of induration, in which the diseased blood-vessels are, as it were, imbedded. So it is with the veins of the anus and rectum. At first they become simply dilated; repeated attacks of inflammation cause an effusion of lymph into the adjacent cellular texture, and then the pile appears like a solid tumour; in the centre of which, however, you still find the dilated vein in which the disease originated.

I have divided piles into internal and external; but, in fact, it is the same veins which are affected in both cases. The veins run on the inside of the sphincter muscle, and where the muscle compresses them there can be no dilatation of them; it is a bandage constantly operating to prevent the dilation in this particular part; but above and below the muscle the veins become dilated.

Whatever tends to obstruct the return of the blood from the inferior mesenteric vein will lay the foundation of piles. It is said that persons with diseased liver are liable to piles; and no doubt they