

came to the hospital, when it returned, and the bone began to enlarge. The pain at the time of his admission was so severe that he could not sleep at night. It affected his health; he had lost flesh, and could take little or no food. I concluded that there was probably an abscess in the tibia, but as the disease had only been of short duration, I thought it might be better to treat it as if it were merely chronic inflammation in the first instance, having recourse to some other remedies before I performed the operation. I prescribed, therefore, calomel and opium, sarsaparilla, and iodide of potassium, one after the other. At last, there being no amendment, I applied the trephine at that spot where the bone appeared more tender than elsewhere, and thus exposed an abscess, which contained two or three drachms of pus. The relief was immediate, and soon afterwards the patient left the hospital cured.

I will mention another case. In the year 1841, a young lady came to consult me on account of pain in the lower end of the tibia. It began in the spring of 1835, when she had an attack of what appeared to be inflammation in that bone. The pain was at first confined to the lower end of the tibia, but afterwards she had, in addition to it, other pains, apparently of a nervous character, extending up the limb to the hip. She was of an hysterical constitution, which might, perhaps, make the diagnosis of the disease a little more difficult, the hysterical pain being mixed up with the other. However, I found her having occasional attacks of most severe pain in the lower end of the tibia, the bone being enlarged and tender to the touch; and, after a most careful examination, I was satisfied that there must be an abscess in the bone. Accordingly, I recommended the application of the trephine. She could not then stay in town, and, either because her surgical attendant in the country did not accord with me in opinion, or because she would not submit to it, the operation was not performed. She dragged on a very uncomfortable existence for four years more. In the interval she was married, travelled abroad, had various opinions, tried different remedies both here and elsewhere, but nothing afforded her any relief. Last August she again came under my care; the tibia was then very much enlarged; at times she was quite free from pain, at other periods she had severe attacks of it, so that she could not sleep at night. I was still of opinion that there was a collection of matter, within the tibia. Mr. Travers and Mr. Key saw the patient with me, and it was agreed that I should perforate the bone with the trephine. Accordingly I performed the operation. The bone was excessively vascular, so that there was a good deal of bleeding; and, towards the end of the operation, a quantity of what appeared to be sero-purulent fluid gushed out from beside the trephine, mixing with the blood. At the bottom of the bone removed by the instrument, there was a cavity that would just receive the end of the finger, and from which the fluid had escaped. After this she had considerable pain for some time, but evidently of an hysterical character. She went into the country, and I have been just now informed that the wound has been for some time healed, and that she is free from all her former symptoms. The piece of bone that was taken away is upon the table; it is more hard and compact than it ought to be just above the ankle, where, in the natural state, there is a mere cancellous structure. You will perceive on its under surface, one corner of the cavity in which the sero-purulent fluid was lodged.

Since I first published some observations on the subject, in the year 1832, I have the satisfaction of knowing that similar cases have been treated successfully in the same manner by other surgeons. Mr. Liston has given me an account of two such cases, which occurred in his practice, and I have in my possession the written statement of a third one, in the hospital at Lincoln.

Now what are the circumstances that would lead you to

suspect the existence of abscess in the tibia? and supposing it to be probable that such an abscess exists, how are you to proceed to relieve it?

When the tibia is enlarged from a deposit of bone externally—when there is excessive pain, such as may be supposed to depend on extreme tension, the pain being aggravated at intervals, and these symptoms continue and become aggravated, not yielding to medicines or other treatment that may be had recourse to—then you may reasonably suspect the existence of abscess in the centre of the bone. You are not to suppose that there is no abscess because the pain is not constant; on the contrary, it very often comes on only at intervals, and in one of the cases which I have related there was, as I then mentioned, an actual intermission of seven or eight months. After the disease has existed a certain number of years, indeed, the pain never entirely subsides, but still it varies, and there are periods of abatement and of exacerbation. The combination of circumstances which I have described will fully justify you in making an opening into the bone with a trephine. But how will it be if you are mistaken? This will not often occur, but if it should, really the taking out a circle of bone can be of no consequence; no injury follows the operation—it is unattended with danger. The operation is a very simple one. You expose the surface of the bone, and make a circular opening with a trephine at that part where there seems to be some tenderness and some pain on pressure. One principal thing to be attended to is, that you have a proper trephine. You do not want so large a one as for the cranium, and it must be somewhat differently constructed. Those which lie on the table are made for the purpose. One is of very small diameter, but generally it is quite sufficient. The common trephines are made with a rim or shoulder, and if there be much enlargement of the bone, they will not penetrate deep enough to reach the abscess. It is true that you may break away the bone afterwards, by means of a chisel, but the operation may be more easily performed with a trephine having no shoulder; which will at once penetrate to the abscess, however deep it may be, and render the chisel unnecessary. The after-treatment is as simple as possible. There may be some pain for a day or two, and especially, as in the case I last mentioned, if the patient be an hysterical female, there may be hysterical pain afterwards; but all that is required is to maintain the general health, and lay on some simple dressing; the bone soon granulates, the space is filled up by a sort of fibrous substance, and the wound cicatrises.

But what would happen if you were not to perform the operation? The patient may continue in torture, as I have already told you, for eighteen years, losing all the best part of his life; or a worse event than that may take place. The preparation which I show you is one of the oldest in the Museum. I attended a patient who laboured under various diseases; there were tubercles in the lungs, and vomica; dead bone in the ribs, and some other local complaints which I forget. Besides all this, he had an enlargement of the lower end of the tibia, attended with excessive pain—pain, indeed, hardly to be borne, and which came on in paroxysms lasting for many hours, and then in some degree subsiding. By and bye an abscess appeared externally, in the neighbourhood of the enlarged tibia, and then the pain ceased. Under this complication of disease the patient sank, and died; and on examining the body I found an abscess in the centre of the tibia. One effect of the abscess had been to cause absorption of the cartilage of the ankle-joint. It might have made its way into the joint, but it took another course; and if you examine the preparation, you will perceive on one side of the tibia a round aperture, by which the matter escaped, and by which the external and internal abscesses communicated with each other. It is plain from this, that such an abscess cannot exist for many years without the joint being en-