HISTORY OF
A CASE
OF
NEPHRITIS CALCULOSA,
IN WHICH
THE VARIOUS PERIODS AND SYMPTOMS OF THE
DISEASE ARE STRIKINGLY ILLUSTRATED,
AND
AN ACCOUNT OF THE OPERATION OF LITHOTOMY,
GIVEN BY THE PATIENT HIMSELF.

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THE subject of this remarkable case is a gentleman about forty years of age, who, to the advantages of a liberal education, unites an uncommon share of cheerfulness, and a firmness of mind which does not forsake him under the most trying circumstances. His habits are those of great activity, and he has long filled public situations of considerable labour and responsibility.

In the retrospective view of the circumstances

of his illness, with which he has himself furnished me, he divides it into four periods. During the first, which he traces as far back as the year 1801, while otherwise in perfect health, he began to discharge calculous matter, which, however, occasioned at first but little pain, and none of the sensations in the region of the kidneys which became afterwards a source of so much suffering. This calcareous discharge consisted in a white chalky substance, generally passed immediately after voiding his urine, and enveloped in a quantity of thick mucus. In the course of 1802, however, this discharge became almost constant; some irritation was produced at the neck of the bladder and in the urethra, a troublesome chordee occurred, and the mucus frequently came away slightly tinged with blood. The calculous substance was at this time discharged in the form of a pretty stiff paste, which hardened on standing, and crumbled between the fingers into a white powder, in which sparkling crystalline particles could be discerned.

At this period the patient was about twenty-three years of age, of a tall and robust structure, and exceedingly fond of bodily exercises, in some of which he excelled in a remarkable degree. His general health was perfectly good.

The second period seems to have been connected with a change in his mode of life. Towards the end of 1803, his habits became extremely

sedentary, and in 1804, he became subject to violent paroxysms of pain in the lumbar region, which were immediately attended by violent retchings, and more or less obstinate constipation. Under these circumstances cathartics were instantly rejected ; but it often happened that a dose of laudanum sufficiently allayed the pain to enable him to retain the cathartic ; and whenever a passage through the bowels was obtained, the nephritic symptoms were considerably relieved.

During these attacks, whether in or out of bed, it was hardly possible for the sufferer to place himself in any position which could afford him material relief. But that into which he invariably endeavoured to throw himself, by a kind of irresistible impulse, consisted in inverting his body as much as possible, which he effected by elevating his lower extremities and body along the bed-post, with his head downwards, and resting entirely upon his shoulders. During this period no calculous matter was passed,

In 1806 and 1807, these attacks became less frequent, which the patient ascribed to his duties having become less arduous, and his habits less sedentary ; and in November, 1810, they ceased altogether. During the prevalence of the paroxysms, very little, if any, of the calcareous matter was passed, but there still was occasional irritation about the neck of the bladder, and he was

subject to a troublesome degree of flatulence and constipation, which required the use of frequent aperients, and in particular of magnesia, from the habitual use of which he derived considerable relief. In other respects his constitution remained sound, and his strength and spirits unbroken.

Soon after the cessation of paroxysms just mentioned, our undaunted sufferer was assailed by symptoms of a still more severe description. Here begins the third period; a stone had formed in the bladder, with all the well known train of sufferings it produces. First, increased irritation at the neck of the bladder, tormenting itching and shooting pains at the extremity of the urethra, violent chordee in the night-time, a difficulty of passing his urine, which was frequently tinged with blood, &c. The patient now became incapable of riding or dancing, and even walking became very troublesome.

These symptoms gradually increased, till they arrived at the utmost pitch of severity. However familiar they are to physicians and surgeons, it will not perhaps be without interest to hear them described by the patient himself, whom, after an acquaintance and professional attendance of several years, I can state to be much more apt to underrate than to exaggerate his sufferings.

“ The only position,” says he, “ in which I could succeed in passing my urine, was upon my knees, with my forehead placed upon the bed or sofa, and the urinal under me. All changes of posture were dreadful, especially from the erect to the recumbent position. Getting into or out of bed were the severest trials, especially the former. I have often made repeated attempts at different modes of accomplishing this object, and resolution has failed, when at length, having succeeded so far as to get into bed on my knees, with my head placed as low as possible, I have not had courage to move, till, in a state of exhaustion, I have cautiously extended one limb and gradually got upon my side. When awoke by irritation and pain, I have endured it as long as I could, rather than move; and when goaded to an effort, I usually regained the position on my knees, and after waiting the subsiding of the chordee, endeavoured to obtain relief by passing my urine. While labouring under these unpleasant effects, they were almost constantly increased by costiveness and flatulence; the use of the hip-bath, sitting over the steam of warm water in the pan of a night-table, aperient medicines and injection with an elastic gum-bottle, were the palliatives to which I had recourse.”

Until then, though his own suspicions were almost amounting to a conviction that he had a stone in his bladder, yet he had never been sounded,

and therefore some doubt still remained in the minds of his friends as to the precise nature of his disorder. He was advised to go to Brighton, for the purpose of using the tepid bath. The motion of the carriage during the journey produced so much pain and irritation, that he declares that, even now, he almost shudders at the recollection of the torture he endured. Still, even at this period, he had intervals of ease, during which his spirits were good, and he almost appeared to be in perfect health.

One day, while at Brighton, in December 1811, and after an unsuccessful attempt to sound him, made by a medical person, he seized upon a bougie and introduced it himself into his bladder. He then distinctly felt the bougie graze upon a hard substance, and upon withdrawing it, he found the point strewed with glittering particles of calcareous matter. Immediately on his return to London a consultation was held, in which the presence of a stone having been fully ascertained, he was advised to undergo the operation of lithotomy, upon which he instantly made up his mind ; but as the introduction of the sound was followed by the discharge of a few calculous fragments, which afforded a glimpse of hope that the calculus might be entirely discharged in that way, a second consultation was held, at which it was agreed that a delay of a month would be allowed, with a view to the possibility of such a happy termination.

Those hopes, however, proved entirely groundless, and on the day before the month expired, MR. CLINE performed the operation.

However familiar all the circumstances of this severe operation are, no doubt, to most of the members of this Society, a description of the patient's sensations, drawn up by himself, cannot, I think, fail to excite some interest, and I shall make no apology for introducing it in his own words :

“ My habit and constitution being good, it required little preparation of body, and my mind was made up. When all parties had arrived, I retired to my room for a minute, and bent my knee in silent adoration and submission, and returning to the surgeons, conducted them to the apartment in which the preparations had been made. The bandages, &c. being adjusted, I was prepared to receive a shock of pain of extreme violence, and so much had I over-rated it, that the first incisions did not even make me wince, although I had declared that it was not my intention to restrain such impulse, convinced that such effort of restraint could only lead to additional exhaustion. At subsequent moments, therefore, I did cry out under the pain, but was allowed to have gone through the operation with great firmness.

“ The forcing up of the staff, prior to the introduction of the gorget, gave me the first real pain ;

but this instantly subsided after the incision of the bladder was made, the rush of the urine appearing to relieve it, and sooth the wound.

“ When the forceps was introduced, the pain was again very considerable, and every movement of the instrument, in endeavouring to find the stone, increased it. Still, however, my mind was firm and confident, and, although anxious, I was yet alive to what was going on. After several ineffectual attempts to grasp the stone, I heard the operator say, in the lowest whisper, “ it is a little awkward, it lies under my hand. Give me the curved forceps :” upon which he withdrew the others. Here, I think, I asked if there was any thing wrong, or something to that purport, and was reanimated by the reply, conveyed in the kindest manner : “ Be patient, sir, it will soon be over.” When the other forceps was introduced, I had again to undergo the searching for the stone, and heard MR. CLINE say, “ I have got it.” I had probably by this time conceived that the worst was over ; but when the necessary force was applied to withdraw the stone, the sensation was such as I cannot find words to describe. In addition to the positive pain, there was something most peculiar in the feel. The bladder embraced the stone as firmly as the stone was itself grasped by the forceps ; it seemed as if the whole organ was about to be torn out. The duration, however, of this really trying part of the operation was short ; and

when the words, " now, sir, it is all over !" struck my ear, the ejaculation of " thank God ! thank God !" was uttered with a fervency and fulness of heart which can only be conceived. I am quite unable to describe my feelings at the moment. The most captivating vision to the sight, the most enchanting harmony to the ear, or a combination of every thing that is calculated to delight the senses, must fall far short of the perfect blessedness of my situation. There was a feeling of release, not from the pain of the operation, for that was gone and lost sight of, but from my enemy and tormentor, with a lightness and buoyancy of spirits, elating my imagination to the belief that I was restored to perfect health as if by a miracle. Yet, with all this elation, a disposition of mind perfectly tranquil and collected, nor were my nerves in the slightest degree affected. I never heard what was the precise duration of this operation, but conceive it to have been between twelve and fifteen minutes. With respect to the pain, I am persuaded that if it were possible to concentrate what I have often suffered in one night, into the same space of time, it would have been less endurable. Indeed, this difference between the operation and one night's endurance of the stone was manifest ; I have often been most distressingly reduced by the latter, but was not exhausted in the slightest degree by the former ; at least my mind was firm throughout, and my body was not sensibly enfeebled. Upon the whole, should I be

again similarly afflicted, I should not hesitate in again submitting to the same mode of relief, provided I could place myself in equally able hands."

The recovery from the operation was as rapid as might have been expected, from the favourable state of mind and body in which the patient was at the time he submitted to it. At the end of the second week he ceased to keep his bed; at the expiration of the third he was able to go down stairs; and at the end of the month he walked near two miles. By the end of the sixth week he was able to ride on horseback, and was in fact perfectly recovered; but the tone of the sphincter was but slowly regained, especially when walking or standing, when he found it very difficult to retain his urine.

His general health, however, was soon perfectly restored, and he began again to enjoy his usual vigour, with an uncommon flow of spirits. In this happy state he remained until about eighteen months after the operation, when he was suddenly seized with very acute pain in the region of the left kidney, which lasted for several hours, when a sharp knock at the street-door made him give a sudden start, and the pain instantly ceased. On attempting to pass his urine a moment after this, a small calculus stuck in his urethra, but was soon discharged without difficulty, and the patient was immediately restored to his usual state. In a few

weeks, however, his urine became habitually tinged with blood, though, at that time, without any pain or uneasiness, and it generally looked, immediately on being discharged, like a mixture of florid blood and water; and there was no longer any appearance of dark-coloured coaguli, except in the first urine discharged in the morning. He continued nevertheless to be subject to dreadful attacks of nephritic pains, ending in the discharge of a small calculus; and one of these attacks put a sudden termination to the appearance of blood in the urine, which however returned in the course of about two months. Between the attacks of pain his recovery was complete; he was not sensible of any affection of the kidney, any farther than from an occasional sense of fulness and tenderness in that organ; and he continued perfectly free from any symptom of calculus or disease in the bladder. During the nephritic paroxysms the pain was always felt in the left kidney, except in one instance, in which the right kidney was the seat of attack, and in this case also a small calculus was discharged.

When I was first consulted on this interesting case (in 1816), I examined the calculus extracted by the operation, which proved to be of the fusible kind, as well as all the fragments since discharged. These were of a globular shape, and were therefore neither detached from a larger mass, nor secreted on the surface of the bladder, but proceeded, as

the symptoms fully indicated, from the kidneys only.

I advised the patient to discontinue all alkaline remedies, and to substitute for them small doses of muriatic acid, a plan to which he readily assented, and which he continued to follow with great perseverance for the greatest part of that year. The acid, in the dose of from ten to fifteen drops, diluted in water, two or three times a day, agreed with his stomach perfectly well, and seemed to have the effect of diminishing the discharge of mucus considerably, though the habitual hemorrhage still continued*. But this did not hinder him from using all kinds of exercises without inconvenience. He had, however, a sharp nephritic attack in the following January, (1817) which terminated as usual, and for a short while suspended the hemorrhage. In April, of the same year, he experienced another nephritic

* In describing the different appearances of the blood, the patient, in one of his letters, dated March, 1819, relates the following singular occurrence. "Perceiving," says he, "several small masses of coagulated blood in the urine, and that the urine itself was not at all tinged, I poured it off to examine the blood more narrowly, when I found that these masses were coils of blood of the thickness of a stout packthread, and upon moving them about they looked very like small red worms; and as I had passed my urine about half an hour before, without observing any such appearances, I inferred that this blood must have immediately come from the kidneys, having derived its form from the ureter."

attack; and in the following July he had a long and severe fever which lasted several weeks, and was supposed to have been brought on by some great exertion and mental fatigue, to which he was then exposed, being apparently quite unconnected with his calculous disorder*. On the third day of this fever, however, he observed, to his great surprise, that the hemorrhage had entirely left him, and from that time it has never returned. This fever did not only produce the beneficial change just mentioned, but it was followed by a long truce of the nephritic attacks, which (with the exception of the passage of a few small calculi which occasioned no pain) was not interrupted till towards the latter end of April last, when he again experienced a paroxysm which ended in the discharge of a small calculus, without however producing any return of his former hemorrhage. I am happy in being able to state that he is at this moment in perfect health and spirits.

I have only to add to this long, but I hope not uninteresting narrative, that a full trial was given in this case to the muriatic acid during the year 1817, which was only interrupted by the attack of fever above related. The small calculi passed during that period, the largest of which was scarcely the

* During this fever, and on various other occasions, the patient was attended by DR. MATON. He was also seen once, in consultation with me, by DR. BAILLIE.

size of a pea, continued to consist of phosphate of lime ; but I could no longer detect any magnesia in them, and they had lost the fusible character. And it is equally remarkable, that during the year 1818, and some time after the use of the muriatic acid had been discontinued, the magnesia reappeared in the calculous fragments voided during that period.