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Hospital Reports.

ST. MARY'S HOSPITAL.

CASE OF SMALL-POX OCCURRING TWICE IN A PATIENT WITHIN A PERIOD OF SIX MONTHS.

Communicated by G. G. GASCOYEN, Esq., House Surgeon.

CASE. J. W., aged 23 years, labourer, was admitted into St. Mary's Hospital, December 28th, 1855, under the care of Dr. Alderson. Five months ago he was laid up with small-pox; from this he had recovered about a month, but for the last week he had suffered severely with pains in the shoulders and limbs, the joints having been much swollen. For this he was admitted. He now complained of pain in the shoulders and knees; the latter were slightly swollen, but he could walk tolerably; his skin was cool and perspiring, everywhere covered with cicatrices, exhibiting loss of substance, exactly similar to those left by variola. He had occasional chills and heats, with slight cough. Tongue clean. Pulse 96. Urine natural. He was placed upon full diet, with bark and colchicum, under which treatment he steadily improved till January 17th, when his former symptoms returned, with violent headache, a furred tongue, and a rapid weak pulse. Salines were now given.

The next day he had nausea, rigors, and severe aching in his back and limbs.

January 9th. The above symptoms continued unabated. His eyes were much congested, and his face thickly covered with an ill-defined eruption; over the limbs and body the skin around the old cicatrices was red and inflamed, forming bright red patches, with very distinct margins, giving a peculiar appearance; elsewhere it was of the natural colour.

January 20th. Over the forehead the eruption is more tuberculated, and feels like shot beneath the skin; the eyelids are much swollen; he has a sore throat, and is troubled with a short dry cough. He was very restless and delirious through the night, but now is quiet, and answers rationally.

January 21st. The spots on the face are increasing in size, having a hard inflamed base, many of them are distinctly indented. Over the body and extremities the eruption is coming out, especially around the old scars, so that now few of them can be seen. He is very delirious at times, especially towards night. He swallows with great difficulty; has a very foul tongue, and a quick, weak, irritable pulse.

January 22nd. The eruption over the face is becoming pustular, and, in places, confluent; the eyelids are completely closed. He takes scarcely any nourishment.

January 23rd and 24th. He is not delirious now, but cannot sleep, and continues restless. Tongue brown, dry, and hard; throat very sore. He is ordered, as a gargle, and to drink, an ounce of port wine, with a drachm of yeast in half a pint of water, which is very grateful to him. The pustules over the face have all run together, encrusting it in one large scab. Over the rest of the body the skin is so thickly covered with pustules that it is impossible to place the tip of the finger on any part without touching some.

January 25th and 26th. The pustules have become confluent over the scrotum, and down the inside of the thighs;

and there are several large patches on various parts of the body. The eyelids are now enclosed, and there is a considerable discharge from the nose and mouth. The bowels not having acted for two days, he was ordered a small dose of castor oil.

Jan. 27th. The patient is very prostrated, and speaks with difficulty, in a husky low whisper, but takes more food, such as port wine, beef-tea, or milk. He has considerable dyspnoea, and loud moist crepitations can be heard all over the front of the chest. Pulse so small it cannot be counted.

10 P.M. He is quite conscious, but cannot articulate; he has mucous rattle in the throat. Pulse imperceptible. He swallows wine in small quantities.

Jan. 28th, 3 A.M. Died.

The autopsy presented nothing of the slightest interest.

REMARKS. Though this case does not present any new feature, it is very complete in itself; and there is one circumstance worthy of notice. I allude to the constipation of the bowels during the matured period, when diarrhoea is not an unusual concomitant. The fact of the inflammation being acute around the old scars, whilst the rest of the skin was not involved, affords a good illustration of how any cutaneous affection determines the *locale* of the eruption.

From the sore throat and difficulty of breathing, we were led to expect an extension of the pustules along the mucous membrane of the fauces and air-passages; but the examination after death proved the absence of this complication. We must account, then, for these symptoms through the fact, that when the action of one of the eliminating organs of the body is destroyed, there is an attempt to compensate for the loss by a corresponding action on the part of the other emunctories. Thus, the sudoriferous glands being very extensively implicated in this case, the vitiated blood was thrown, to an unnatural extent, upon that portion of the mucous membranes which is exposed to the air; this excessive determination of blood being followed by congestion and inflammation of the tonsils and fauces, which gradually involved the whole respiratory mucous tract, and resulted in effusion.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

TWO CASES OF ENCYSTED URINARY CALCULUS.

LITHOTRITY THRICE, LITHOTOMY FOUR TIMES BY THE LATERAL, ONCE BY THE RECTO-URETHRAL INCISION, ON ONE PATIENT: LITHOTRITY AND LITHOTOMY TWICE, ON THE OTHER.

By GEORGE MURRAY HUMPHRY, Esq., Surgeon to the Hospital.

CASE I. John Ayres, aged 51 years, a healthy looking labourer, was admitted, October 5th, 1849, with the usual symptoms of stone, of about five years duration. I removed an oval, lithic acid calculus, weighing nine drachms one scruple, by the lateral operation. He recovered quickly and left the hospital quite well.

January 23rd, 1852. About two months ago he returned to the hospital with symptoms of stone. He said he had been quite well till within the preceding three weeks, during which he had suffered under the old trouble. He was quite positive that from the time of the operation to the period mentioned he had no pain or other symptom. I questioned him particularly about this, and he was clear upon it. As he had previous experience of the complaint, and was,

therefore, in all probability, watchful in reference to a return of it, I thought he might be relied on as a tolerably accurate observer of his own symptoms, and determined to try lithotripsy. He was in good health, and his bladder was not very irritable. I could not be sure of the size of the stone from an examination with the sound, but thought it was a small one; accordingly, soon after his admission, I used the lithotrite, cautiously and gently; and seized and crushed a calculus several times with great facility. Many fragments were passed afterwards with a good deal of pain. I repeated the operation twice, each time seizing the calculus easily, and breaking down many pieces. The operation was attended with a good deal of pain, though done very carefully; and he suffered a great deal afterwards; particularly after the last operation, which was followed by swelled testicle, and by so much local and general disturbance, that the man wished to have no more of this procedure, but to undergo the old operation. At one time, after the passage of a large rough fragment, he was so far relieved as to induce us to hope that the whole of the stone had come away; but the symptoms soon returned with as great force as ever. He suffered very severely, and experienced such acute gnawing pain in the perineum, that I feared some ulceration might be taking place. The examination of the perineum and rectum, however, gave no evidence of anything unusually wrong. The urine was ammoniacal, alkaline, and contained many crystals of triple phosphate, with mucous or pus globules. The sound quickly came in contact with a calculus which we judged to be friable, or composed of fragments. I determined to accede to his request. He looked rather pale, and was evidently lowered by the confinement and suffering he had undergone. Still his condition was not bad. I operated this day, cutting, in great measure, through the old cicatrix. I thought the finger made its way through the deeper parts rather more easily than usual. I could feel the stone, or rather stones—for I was surprised to find several—with my finger, and had no difficulty in grasping and removing five in succession. They were of about the size of beans, and had facets, resulting from mutual pressure. There were also fragments, some of which were removed by forceps; others by the aid of the scoop. I took a good deal of pains quite to clear the bladder, and believed I had succeeded. The finger could not reach every part, so I used the straight sound, diligently and carefully; threw warm water into the bladder with a syringe; and then examined again repeatedly.

In the evening no water had passed, so I introduced my finger into the bladder, when a few ounces escaped, smelling strongly. He was much easier than before the operation.

After this the urine did not pass, or passed only in small quantities, by the wound. It soon found its way by the urethra, and from the first continued to be voided in great measure by that passage. The wound healed up quickly: no unfavourable symptom occurred, and the man, being apparently quite well, was discharged February 9th.

June 16th, 1854. He had now been in the hospital again for a fortnight, on account of a recurrence of his complaint, from which he had suffered two months; having been perfectly well up to that time since the last operation. His sufferings had been very great. The urine was ammoniacal, with a thick white sediment, containing pus-corpuscles and abundance of crystals of triple phosphate. I lithotomised him again on this day for the third time, cutting through the old cicatrix. The deep parts did not yield under the finger more easily than usual; in short, I perceived no distinct peculiarity traceable to the former operations. I had not much difficulty in grasping and extracting the stone, which was loose in the bladder. I could feel with my finger that it was loose before I introduced the forceps. Yet when withdrawn it was of somewhat conical shape, the tapering end being truncated as if it had been broken off. It gave me the idea that it might have formed part of an hour-glass-shaped calculus. Accordingly, I searched diligently for any remaining portion, but could not find it with finger or sound. I also injected water into the bladder. Some

small fragments I removed with the scoop. The bladder felt corrugated as to its mucous membrane, the folds being large and thick. My finger would not reach over the entire extent, so I used the sound very carefully. The stone weighed forty-four grains. In the evening he was doing well.

June 20th. There were no unfavourable symptoms. I to-day passed my finger through the wound into the bladder to prevent its healing too quickly, and to afford an escape for fragments that might remain. I could feel none such. In addition I injected with syringe nearly a pint of warm water into the bladder.

July 20th. He recovered quickly, and said he was quite well, having no pain, or difficulty in micturition. There were still crystals of triple phosphates and pus corpuscles in the urine. I therefore gave him small doses of nitric acid, twice daily; and he promised to come again in a month.

When he did come at the appointed time, there was some uneasiness about the bladder; enough to make me fear a return of his trouble.

January 6th, 1855. His pain increased; and as he felt quite sure that it resulted from stone, he came to the hospital ten days ago. The sound came in contact with a calculus in the hinder part of the urethra, and would not enter the bladder. He brought a rough fragment, about as large as a pea, which had passed through the urethra since he left the hospital. He cheerfully submitted, for the fourth time, to the operation, which I performed on January 5th. The staff was stopped by the calculus; but while he was under the influence of chloroform, before I began the operation, it slipped into the bladder. Still we could feel that it was in contact with the stone. I cut in the old cicatrix; the tissues were more resisting than usual. Having opened the urethra, I could feel the calculus, and extracted it with a small pair of forceps. It was a small rough fragment, like that which had passed through the urethra. I then introduced a straight sound through the wound into the bladder, and with it discovered a calculus there. I was, therefore, obliged to extend the incision into the bladder; and introducing my finger, could feel a rough soft calculus behind the prostate, a little to the right of the median line. Examining carefully, I found it was attached to the bladder by a pedicle, which seemed to penetrate the coats of the bladder, and be connected with another mass beyond. In short, it was quite evident that it was a calculus of the shape of an hour-glass; one part being in the bladder, the other in a sac, and the intermediate narrow portion lying in the neck of the sac, which was very narrow. Mr. Lesturgeon examined and perceived the same. I hoped, by using the forceps gently, to bring it nearer the prostate, and more within reach, so as to render it possible to extract the sacculated portion. But the part in the bladder, being doubtless of recent formation, was quite soft, and crumbled away, leaving only the small rough stump of the calculus sticking up in the neck of the sac. This I could only reach with the extremity of my finger; and sometimes it became covered by the mucous membrane, so that I could not feel it at all. I tried to seize it with a small pair of forceps; I was obliged to guide them to the spot with the finger, which, of course, in so confined a space, rendered it difficult to open and close them. With the scalpel I extended the incision in the prostate, still could not grasp the stone; or if I did, the neck broke off, or the forceps slipped. The finger and other instruments in the rectum gave no help. With a probe-pointed bistoury I endeavoured to enlarge the opening into the sac, but it was so far distant, the prostate being rather large, that I could not use the instrument with certainty and success. Neither could I pass blunt instruments into the sac for the purpose of trying to turn out the stone; because when they were pressed against the part they pushed it away from my finger, which was my only guide, and often I was some time before I could find the fragment of calculus again. Mr. Lesturgeon tried to grasp the stone, but could not succeed. Even if it had been grasped with the forceps it

probably could not have been drawn from its bed. So after I had washed out the bladder, and removed as many fragments as I could find, having kept the patient on the table fifty minutes, I thought it prudent to desist from further attempts, reflecting that sacculated calculi are said sometimes to cease to give trouble; and that if he experienced a return of symptoms, another kind of operation must be undertaken. The second incision in the prostate was followed by a smart flow of blood; this ceased when he was placed in bed. An hour after, he was comfortable. In the afternoon he had a chilly fit, followed by warmth, and some perspiration. A return of the same next afternoon. No pain or tenderness of body. Urine flowed freely through the wound.

January 10th. He had had no unfavourable symptom referable to the operation. The urine passed through the wound. It being ammoniacal, I introduced a gum elastic catheter through the wound into the bladder, drew off some urine with tenacious mucus, and injected a mixture of nitric acid and water. This was repeated three or four times; but on each occasion caused so much pain that I was obliged to discontinue it, and give the dilute nitric acid by the mouth; fifteen minims three times a-day. Some small fragments of phosphatic calculus had been passed by the urethra.

He recovered quickly, without any unfavourable symptom occurring, and went home, continuing to take the nitric acid drops. On the 16th of June, 1855, he came, fearing that there was a stone again, because of a return of some of his symptoms, though they were not nearly so severe as before. One of the symptoms was an aching under his right shoulder-blade, which he had felt each time the stone was gathering. I introduced a sound, examined carefully in the standing and recumbent posture, but could not discover a stone, till I passed my finger into the rectum and pressed up the right side of the bladder, behind the prostate. This being done, and the end of the sound turned down towards the part, the stone was evident to the touch and the ear. The sound elicited was sharp, as of a hard stone; and the sensation communicated to the finger gave the same idea. The finger in the rectum discovered a lump in this situation: but it was not very distinct. He made up his mind again to come into the hospital, and was admitted June 20th. On two occasions we sounded and found the stone by the manœuvre just mentioned. On the second occasion I was conscious of the staff rubbing against a calculus as it traversed the prostate. His health was good, and he was anxious to be relieved of his trouble before the suffering caused by it became so great as on former occasions. We discussed the nature of the operation that should be performed. It was useless to repeat the lateral method; for there was no better prospect of its succeeding than on the last occasion. Either the high operation, or the urethro-rectal would give a better chance of removing the stone. The advantages to be expected from the former did not seem a sufficient compensation for its dangers and difficulties. Accordingly, we decided to try the urethro-rectal incision, hoping that by cutting in the middle line, and dividing the sphincter ani, it would be possible to introduce the finger into the bladder far enough to guide instruments to the stone, and effect the necessary division of the sac in which it was contained, and the necessary proceedings for its extraction. Still we did not feel sure of the possibility of accomplishing this result. On the 5th of July he passed, by the urethra, an oblong rough fragment of calculus, rather larger than a pea, with a stalk, showing evidence of having been broken off from some other portion. It was like that removed in the third operation, though smaller. It was probable this had been broken off in the recent soundings, and had been felt in the prostate on the last occasion.

July 6th. The sound passed through the prostate without detecting any calculus; the stone in the bladder was found in the same way as before. When he was tied up, as usual, a staff introduced, and the influence of chloroform attained, the left forefinger was passed into the rectum; a straight bistoury was thrust into the perinæum, in the

middle line, about an inch in front of the anus, carried into the rectum a little in front of the prostate, and brought outwards, dividing the intermediate structures. It was then inserted into the groove of the staff, and carried along it, dividing the fore part of the prostate. The finger, passed into the bladder, felt the extremity or neck of the calculus sticking up through the coats of the bladder, and tightly encircled by them; while an induration under the coats of the bladder, indicated that it extended to some depth and distance. It was more within reach of the finger than it had been in the lateral operation, and I had good hope of removing it, though it was still at considerable distance. I could not insinuate my finger or finger-nail between the neck of the calculus and the edge of the mucous membrane encircling it, and could not use an ordinary bistoury freely enough; but managed to insert the end of a hernia knife, and with it incised the edge of the sac. Having done this two or three times, I was enabled to get the tip of my finger into the sac, so as to dilate it a little, and separated the calculus from it. I made many unsuccessful attempts to remove it with scoop and forceps. I felt the danger of rupturing the walls of the containing sacculus, which were probably thin, and the possibility of losing the stone in that manner; and was careful accordingly. Having extended the incision through the prostate, I guided a middle-sized pair of forceps down to the calculus in the cyst, and feeling the calculus with the end of them, opened them carefully, feeling it all the time; and after a few failures, having separated the blades widely, and at the same time pressed them on, succeeded in grasping the stone, and then extracted it without difficulty. It was as large as a walnut, with a truncated stalk, corresponding with the calculus removed on June 16th, 1854, and of that passed yesterday. It was hard and superficially lobed, as if there had been divisions in the containing sacculus.

At 5 P.M. I was sent for on account of his suffering pain above the pubes. There was a small quantity of bloody fluid only in the sheet. I directed warm fomentation; passed a large gum elastic catheter through the wound into the bladder, and left it there. Its entrance was indicated by the gush of about two drachms of urine. At 9 P.M. he was rather easier; a little urine had flowed through the catheter and beside it. At 11 P.M. the pain continued, and was severe about the navel. The abdominal muscles were rigid, and the abdomen tender. Pulse under 100. Twelve leeches and a fomentation were ordered; calomel gr. i, opii gr. ½, 3tiis horis.

July 7th. He was easier in the morning, and had had some sleep. The bowels had acted. The urine flowed through and beside the catheter. Towards evening the pain increased in spite of the continued application of fomentations, and the pills. He took only toast and water.

July 8th. He had a bad night; and though he was easier in the morning, I found him a good deal altered. Eyes sunken, and brows knit. Pulse 100. The belly still was rather tense and tender. Tongue dry. He got rapidly worse during the day. In the evening the hands were cold, and he died early on the morning of the 9th.

EXAMINATION OF THE BODY, made the same day. A quantity of dirty brown serous fluid was found in the abdominal cavity, which looked as if urine were mixed with it. I accordingly searched diligently for some laceration of the peritoneum; but there was none. The colon was dilated; the peritoneum was vascular, and covered in parts, sparingly, with delicate rags of lymph. There was a good deal of inflammation about the cæcum. Removing it, we found the cellular tissue around, above and below it, in a filthy, almost putrid state—dark coloured, soft, and infiltrated with dirty dark fluid, in some places purulent. On the hinder part and left side of the bladder, there was purulent infiltration. The pelvic organs were removed; and, on dissection, we found that the orifice of the cyst in the bladder was situated just above the entrance of the right ureter. Its neck had been incised pretty freely in front. It was just large enough to hold the stone; and at its furthest part was a considerable opening, communicating with the

adjacent foul infiltrated tissues. The adipose cellular tissue was closely adherent all round the sides and neck of this sac. Evidently this adhesion had taken place before the operation, and had prevented any infiltration of urine, blood, or other products, in this immediate situation. The same was the case close around the opening just mentioned. The edges of this opening were sealed down to the surrounding tissue, and covered in by lymph; so that they were not clearly seen, and scarcely looked as if they had been caused by a laceration so recent as the operation. The part presented rather the appearance of there having been some ulcer in this situation, through which the scoop or forceps had been pushed. On this, however, I do not wish to insist, for I cannot be sure of it; and nothing is more likely than that the delicate sac should have been torn by the instruments repeatedly introduced into it during the operation, though I was not unmindful of the liability to this accident at the time, and endeavoured to avoid it.

There was a similar sacculus on the other side of the bladder, rather further from the orifice of the left ureter, formed by the protrusion of the mucous membrane between the muscular fibres; it contained no calculus, and the tissues around it were not indurated. The bladder was very little thickened or diseased. The prostate also was healthy. The incision had not been carried quite through it. The cicatrices of the former operations were seen on the left of the urethra. The right kidney was healthy. The left contained several small cysts; in other respects, it was healthy.

The hinder part of the right pleura was coated with a thin incomplete layer of soft white lymph, and was of deep dark colour, the same colour extending more than a quarter of an inch into the tissue of the lung, and gradually ceasing. There were no softenings. He had no cough or sign of this during life. A large firm clot was present in the right side of the heart.

CASE II. Rev. G. P., aged about 45, a spare person, of rather sallow complexion, with scabrous harsh state skin, approaching to ichthyosis, consulted me Nov. 10th, 1854, with symptoms of stone. He said that he had twice undergone the operation of crushing the stone by Mr. Worthington of Lowestoft—the first time, about two months after he experienced the earliest symptoms of the disease; the last time, two months ago; that Mr. Worthington recommended lithotomy, but performed the other operation by the advice of Sir B. Brodie, who was consulted: that he did not suffer much from the operations, which were done under the influence of chloroform: that, after the second, Mr. Worthington could discover no stone; and, the symptoms being mitigated, he hoped that all had been cleared away. However, the pain never quite subsided, and latterly had increased. Both Mr. Worthington and Sir B. Brodie had some difficulty in discovering a stone. The urine contained much tenacious alkaline mucus, with pus-globules and triple-phosphate crystals. I could not discover a stone till he was laid upon the sofa, when, turning the end of the sound towards the right side of the bladder, I distinctly felt it. I judged it to be small, though, I thought, larger than a nut. I concluded that it had been increasing ever since the lithotripsy, resulting probably from a fragment left after it; and that it was, therefore, probably as large as when the operation was first performed.

Nov. 16th. I passed the lithotrite, which entered with difficulty, owing to some contraction of the urethral orifice, which had probably occurred since the former operations. I had just previously felt the stone lying in its former position (viz., the right side of the bladder, apparently at some distance from the middle line), but I could neither feel nor seize it with the lithotrite: this I thought was owing to the curved portion of the instrument being too short to reach it. I injected the bladder with warm water; still no better result followed: so, after several trials, I gave up the attempt, and it was agreed to have recourse to lithotomy.

Nov. 21st. I went to his house, and removed the stone by lithotomy; it broke in the forceps, and was removed in

two fragments, which made up a calculus about twice the size of a horse-bean, soft, and easily crumbling. I searched carefully with the sound, and injected the bladder, but could find no other fragments.

Mr. P. recovered quickly from the operation. The nurse brought me a specimen of urine when she came away: it was not decidedly alkaline, but there was a sediment, in which were pus-corpuscles—no crystals. At that time—a month after the operation—he was pretty well, suffering very little if any pain. He had taken about fifteen minims of dilute nitric acid three times a day ever since the operation.

Soon after last note, this gentleman began to suffer symptoms of a return of his complaint. About the middle of March, he came over to Cambridge. I sounded him, and, after a little search, found a stone on the left side of the bladder. In a fortnight, he came again, and, sounding, I again found the stone in the same place. Passing my finger into the rectum, I could feel a lump beyond the left lobe of the prostate, in the direction of the left vesicula seminalis. This appeared to be connected with the calculus, which, so far as I could judge with the sound, was fixed at that spot. I took some pains to move it with the end of the sound, but could not. It occurred to me that the calculus, or rather a portion of it, might be contained in a sac here, a portion of it projecting into the bladder, as in Ayres's case; and that, if so, the sacculated portion had escaped notice in the former operation. I remembered to have felt a thickening and some induration in this situation when I examined by the rectum previous to the former operation; but I then thought it might depend upon some disease or enlargement of the vesicula seminalis.

There seemed to be no alternative but a second operation, to perform which I went to his house, April 13th, 1855. He was thinner and more low-spirited than at the time of the first operation; he suffered a good deal, and the urine let fall a turbid ropy sediment. The sound discovered a stone on the right side of the bladder, which, on the two former soundings, I had not perceived, although I searched carefully. I should say that the mucous membrane of the bladder was corrugated, which rendered the sounding a little difficult. The finger in the rectum discovered the lump before mentioned behind the prostate; and turning the point of the sound down in this direction, I could feel a stone there, though not so easily as when I last sounded: it gave us the idea of there being two stones, of which one was encysted behind the prostate. However, I could not be positive about this. Mr. Simpson, of Haverhill, assisted me in this and the former operation, and conducted the after treatment. I cut nearly in the cicatrix: this was shifted a little over the ischium, and the buttock on that side was rather less prominent than on the other. The tissues were rather tough; but there was no difficulty in reaching the bladder, where my finger at once discovered two stones, one loose, on the right side, and another sticking up behind the prostate, quite fixed, evidently the projecting peak of a stone which was imbedded in a sac between the bladder and the rectum. The stalk of the calculus occupied the neck of the sac, and was tightly embraced by a ring-like constriction of the coats of the bladder, between the sac and the cavity of the viscus. The loose stone was removed without difficulty. The impacted one gave more trouble. It was necessary to make the perineal incisions more free, so as to admit my finger more easily. With the finger I dilated the neck of the sac a little, but not enough to allow of the extraction of the calculus; so, with a probe-pointed bistoury, guided along the finger into the sac, I incised its narrow orifice towards the prostate; then, with forceps, grasped the stalk of the stone, which broke, a fragment coming away in the forceps. The finger was now passed into the sac, and found the calculus occupying it of considerable size, quite soft, and crumbled to pieces. To extract these fragments was a work of much difficulty, requiring the repeated introduction of forceps of various kinds, and the scoop. However, at last I succeeded in clearing out the cavity, with the exception of a few

small gritty pieces which hung about the lining membrane of the sac, particularly at the neck, where it had been incised; these I found it impossible to extract, and hoped they would flow away with the urine. I washed the part out well with warm water, by means of a syringe attached to a catheter passed into the sac. I searched diligently for calculi in other parts of the bladder, but could find none. The corrugated condition of the coats rendered the search more difficult and less satisfactory than usual. The operation was necessarily very long, but during the greater part of the time he was under the influence of chloroform, and there was not much blood lost. The chief bleeding took place when I extended the incision in the perinæum.

On the 15th, I passed my finger into the wound, and discovered two small fragments of calculus, which I removed with polypus-forceps. On the 16th, I discovered and extracted a larger piece. These were in the deep part of the wound. On the 18th, 20th, and 22nd, I passed my finger through the wound into the bladder, and could discover no fragments: also explored with sound, straight and curved. The latter I could turn down into the sacculus, and, with the finger in the rectum, could feel it in the sacculus. Also passed a sound by the urethra. Being unable to discover any fragments, I allowed the wound to heal, which it soon did. In October, he told me that he had no pain, but had not reacquired the complete power of retaining the urine.

I saw this gentleman on Feb. 9th, 1856. He was in good health, and told me that he had not been troubled with any return of his complaint.

REMARKS. It happily rarely occurs to us in the operation of lithotomy to find the stone encysted. When it is so, it forms a difficult, perhaps an insurmountable obstacle, to the performance of the operation. Nevertheless, an examination of the specimens in our museums proves that cysts of the bladder, as they are called—that is, pouches formed by a hernial protrusion of the mucous membrane between the muscular fibres—are no uncommon accompaniments of stone; indeed, they more frequently owe their origin to the presence of a calculus than to any other cause. They seem to be related rather to the irritation to which the bladder is subjected, and the straining attendant on and following the expulsion of the urine, than to any obstruction to its passage. Hence they are more common accompaniments of stone than of stricture. Hence, too, they are most frequently found associated with those calculi which are attended with the greatest amount of suffering, viz., the phosphatic. It is worthy of remark that, in each of the two cases I have related, lithotripsy had been practised. I cannot help feeling it more than probable that the irritation consequent on the process of crushing, and the subsequent passage of calculous fragments, was much concerned in the formation of the sacculi in these cases.

The sacculi are most often found behind the trigone and ureters, between them and the fundus. They may, however, occupy any part of the bladder, and may be quite out of reach in lithotomy. Their walls, consisting only of the mucous membrane, with some cellular tissue, and perhaps a thin layer of muscular fibres, are generally thin—consequently, easily lacerated in an operation: an accident almost sure to be followed by a fatal result. They do not seem liable to be occupied by calculi, unless small ones slip into them from the bladder. When this does happen, the stone becomes the nucleus of a formation, which in time fills up the sacculus, and may, as in the above two cases, project through the orifice of communication into the bladder, when it may increase to any size, thus forming a stone of more or less hour-glass shape.

I know no means, short of exploration of the bladder with the finger, by which it can be made out for certain that a stone is partly or wholly encysted. In Case I, I had no suspicion of such a condition till it was suggested by the appearance of the calculus removed at the third operation. In Case II, my apprehensions were strongly aroused by the stone being found always in the same position, and being apparently fixed there; while the finger in the

rectum discovered, immediately beneath this spot, a lump having more prominence than would be afforded by a stone contained within the bladder. In the last operation performed in Case I, I had been assured of the fact by former experience, and had learnt the position of the stone: I could therefore lay my plans accordingly, and certainly found the recto-urethral incision enabled me to get at the stone better than the lateral operation had done. If the stone had been further removed from the prostate, the only resource would have been the high operation, which, although I had been fortunate enough to have one successful case,* I was unwilling to resort to, so long as there was a prospect of removing the stone by the perineal incisions.

The difficulty of estimating the size and number of calculi through the information afforded by the sound will be acknowledged by all who are in the habit of making the attempt. The information derivable from the patient with reference to the duration of his complaint is also often very fallacious, especially among the poorer classes, who are singularly unobservant or forgetful of their symptoms. A remarkable illustration of this has been furnished during the present year by the case of a man from whom I removed, by the lateral operation, a lithic acid stone, weighing twenty-one drachms; yet this man would barely confess to any symptoms of more than a month's standing. During that time they had been very severe, and a delicate coating of phosphatic deposit upon the stone indicated that there had been an inflamed condition of the bladder. Doubtless the acute pain of the last month had thrown a veil over the previous sufferings, which, in comparison with it, seemed scarce worth mentioning. In the case of John Ayres, I thought I might rely upon the positive assertions of a moderately intelligent labourer, who had on a former occasion been a sufferer from the complaint: yet there is no question of his being mistaken as to the duration of his symptoms, and of my having been led into the error of attempting lithotripsy by placing too much reliance upon his narrative.

Original Communications.

A CASE OF FRACTURE OF THE BASE OF THE CRANIUM: WITH OBSERVATIONS.

By GEORGE GREAVES, Esq., Manchester.

THE instances of recovery after fracture through the base of the cranium, at present recorded, are not perhaps so numerous as to render superfluous the publication of an additional one. That the following was such a case, little doubt, I presume, can be entertained.

CASE. Mr. J. B., aged 37 years, was thrown out of a low pony gig on the evening of July 23rd, 1844, and alighted on the left side of the head. He was for a short time perfectly insensible, but in about a quarter of an hour consciousness returned.

When I saw him, half an hour after the occurrence, he was very pale, had a cold perspiration, a pulse numbering about 80, and very compressible, the pupils were somewhat dilated, and he was vomiting large quantities of an almost black fluid. Venous blood was flowing in a pretty full stream from the left ear, and there was also bleeding from the nose. I found a puffy swelling about two inches above the left ear, and on removing the hair discovered two distinct contusions, distant about an inch from each other. The cuticle was abraded, but there was no wound of the cutis. There was considerable extravasation of blood under the integuments, but I could detect no evidence of fracture with depression. The palpebræ of the right or opposite eye were of a dark purple colour, evidently from blood effused into the orbit; and there was swelling with

* See Transactions of the Association, vol. VII.