HISTORY OF A CASE OF LITHOTOMY.

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COMMUNICATED BY

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THOMAS CLAYTON, aged 62, of a spare habit, applied to the Macclesfield Dispensary on account of a complaint which he supposed to be stone in the bladder, and for the relief of which he was desirous to submit to the operation of lithotomy, if it should be considered proper. He had laboured under the symptoms of the disease nearly 30 years, which had gradually reduced his comfort and strength to the lowest degree. At the time of his application to the Dispensary he was unable to retain any quantity of water in his bladder, and that which he passed deposited profusely upon settling a purulent sediment. Upon the introduction of a commonsized sound, a firm structure was discovered at the membranous portion of the urethra; and a

smaller having been passed, the point of the instrument, immediately after clearing the prostate gland, struck against a stone which completely prevented its further progress into the bladder. The point of the sound being retained in this position, the finger was introduced into the rectum where the outline of a large and hard tumour could be distinctly traced. From this examination it became evident there was a stone in the bladder of very unusual size ; and considerable surprise was excited that the alimentary excretions could be passed in a solid state. On pressing upon this tumour the patient experienced very acute pain, much exceeding in degree that which had been occasioned by the introduction of the sound. The perineum had been extensively lacerated in early life, the wound having extended to the urethra. A fistula in perineo was the result of this accident, which continued some time. The cicatrices were in a state nearly approaching to cartilaginous hardness ; from this period the patient dated the beginning of his disease.

Under these circumstances several important considerations presented themselves requiring mature deliberation. First, the propriety of operating at all in such a case. Secondly, which of the several operations should be adopted ; and lastly, the instruments to be used.

As to the first question, it was observed that some

surgeons considered the operation inexpedient whenever matter could be clearly distinguished in the water; the kidneys being, in all such instances in a diseased state, and the operation universally unsuccessful. In reply to this it was the unanimous opinion of the surgeons of the Dispensary that the patient could not exist many weeks under his sufferings, and as a chance of recovery, however faint, would be afforded by operating, his own wishes being also strongly in favour of such a measure, the operation was decided upon.

The second point to be considered was the mode of operation to be adopted. The stone was unquestionably of large size; this was decisively ascertained by computing the distance between the point of the sound and that of the finger in the rectum, which appeared to be in extent not less than four inches. Professor Scarpa, Mr. Samuel Cooper, and other eminent surgeons had recommended, whenever the stone was discovered to be of very large size, the performance of the high operation. Against this mode it was stated that the irritability of the bladder was too great to admit its distention by urine, consequently it could not be made to rise freely above the pubis, and from the size of the stone it was impossible to lift up the bladder by any instrument passed by the urethra, nor could so ample a passage for the discharge of matter and urine be afforded as to remove the apprehension of effusion into the surrounding cellular

membrane with its consequent dangers. Should a catheter or canula be left in the bladder for the prevention of this mischief, much hazard would be incurred of increasing diffusive inflammation by the presence of an extraneous body in the bladder already disposed to inflame from the performance of an operation so severe. To these objections another was added, that the high operation had become obsolete in this kingdom, which most probably was in consequence of the want of success attending it. These considerations led to the final adoption of the lateral operation.

With regard to the last question, *viz.* what instruments should be employed, very little hesitation arose. Experience upon the dead subject amply proved the great superiority of the knife over every other instrument. With the knife an incision more than twice the extent of what the gorget could accomplish, could be safely effected, and its direction determined by circumstances during the operation. The particular knife selected was the one used by the late ingenious Mr. Gibson.

Having thus decided upon the propriety of operating and the mode of operation to be adopted, I proceeded on the 1st of May last to the performance of it, assisted by my colleagues of the Dispensary, whose suggestions and aid materially conduced to the successful conclusion of the operation. The patient being secured in the usual manner, the staff

was introduced and firmly fixed with its point upon the stone ; an incision was now commenced an inch or more above the anus, and continued to the extent of full three inches and a half ; the parts were divided with much difficulty ; indeed this part of the operation was necessarily tedious. From the indurated state of the perineum the staff itself could not be felt, and much care was therefore required to effect an opening safely into its groove. The knife being at length properly fixed in the groove of the staff, it was carried forward through the prostate gland ; but here its further progress was arrested by the beak hitching upon the stone. The advantage of the knife over the gorget was now manifest. At this period of the operation, the gorget would have been useless, or it is probable might even have slipped between the bladder and the rectum. It became necessary to leave the groove, and finish the incision by directing the edge of the knife first slightly upward, then obliquely downward and outward. The stone could now be easily felt, and seemed to be equal in size to the globe of a large goblet ; the forceps were introduced, and broke off a projecting portion of stone ; by repeated efforts other pieces were detached, but still the bulk of the concretion was not materially reduced, and the application of the stone-breaker was impracticable, (although the incision was enlarged to facilitate its application) on account of the impossibility of including the stone in its grasp. At this moment I recollected having

seen it recommended in a manuscript copy of Mr. A. Cooper's Lectures, to perforate the stone; it was suggested also by one of my colleagues to fix it by a blunt midwifery hook to prevent its recession. By this means with a common small chisel the calculus was broken into fragments, and the pieces extracted. The bladder was then washed out by repeated injections of tepid water. I could now feel the bladder perfectly smooth and free from particles of stone. Faint and languid, with his pulse scarcely perceptible, his extremities cold, and his face bedewed with clammy sweat, the patient was put to bed, and forty drops of laudanum administered in a little brandy and water. The fragments of stone collected and washed, weighed eight ounces and a half; besides which the surgeons present were decidedly of opinion that two ounces and a half were lost in scrapings and grit washed out of the bladder. The shape of the calculus, as far as could be ascertained during the operation, was globular. The composition of it appears to be chiefly phosphate of lime. It would afford but little interest to relate here the detail of the after-treatment, it will be sufficient to state that the inflammatory symptoms never rose so high as to require general blood-letting; but there were some events subsequent to the operation which may deserve notice as arising immediately out of the peculiar circumstances of the case. On the 12th day afterwards a slough was perceived between the lips of the wound, which upon removal

was found to be thickly studded with gritty particles. From this period to the 31st of May, the 30th day after the extraction of the stone, sloughs of considerable size were frequently removed from the wound; several of which were smooth on one side, and gritty upon the other. This led to the suspicion that the rectum was sphacelating, although no fœces had as yet been passed by the wound nor any urine with the stools. On examination by the rectum, a small orifice was discovered sufficient to admit the point of the finger. No water had been passed since the operation naturally, which induced the belief that the bladder, kept upon the stretch continually by the calculus, had lost its tone. This opinion, the subsequent condition of the patient decidedly confirmed. In the middle of June fœces in great quantity passed through the wound, which still continued to heal up slowly; nor was it till the second week of July that this distressing symptom finally ceased. Early in August the wound had so far healed up that a small probe could scarcely be passed into it. The bladder appeared to have entirely lost its power, and the patient was obliged to wear continually a flexible gum catheter with a bag contrived to receive his urine. His health, however, in all other respects, was perfectly restored, and he was able to walk a distance of ten miles in the day. From this date to the present time he has not been under medical care. There is still the same fistulous opening remaining, notwithstanding every

endeavour used to obliterate it; which tends to confirm the opinion of Mr. C. Bell, given in the first part of his surgical observations, that whenever substance is lost, either from the urethra or perineum, the reproduction of it is a process of much difficulty, and frequently cannot be effected. The bladder is now slowly regaining its tone, being capable of retaining a few ounces of water, and I have considerable hope that my patient may ultimately be restored to the perfect functions of his urinary organs, as he is to the full enjoyment of health in every other respect.