

## A CASE OF HEPATO-NEPHRO-LITHOTOMY.

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A RECENT case coming under my observation is so unique in many of its features that it would seem to deserve full report.

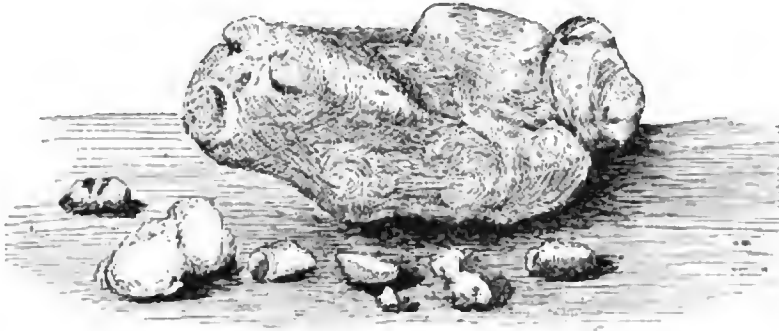
A man, now aged forty-six years, came under my notice about seven years ago suffering with deep and, for a time, surgically impermeable traumatic stricture. It was some weeks before I succeeded in passing a filiform into the bladder on account of the tortuous formation of the stricture. The patient could evacuate the bladder fairly well after prolonged straining. Aside from the stricture, the patient had always been a healthy man. His habits were temperate. His family history was excellent. There was no history of gout, rheumatism, or other constitutional disease in the family. After some weeks of careful treatment, I succeeded in dilating the stricture up to a calibre of No. 30 French. The patient has, since his first course of treatment, visited me occasionally for the purpose of having the sound passed. There was a moderate amount of cystitis, as might be expected, secondary to the stricture. The urine did not clear up perfectly after the successful treatment of the stricture, but remained quite cloudy. Exacerbations of cystitis occurred from time to time, necessitating irrigation and the usual general and local treatment for cystitis. The cystitis was finally apparently under control when, without increase in the symptoms referable to the bladder, the urine began to show a marked deposit of pus. This increased, there being no constitutional symptoms incidental to the suppuration. Careful examination showed the origin of the pus to be in the pelves of the kidneys. The pus gradually increased until the urine contained the

largest quantity that I have ever seen, aside from certain exceptional cases of evacuation of an abscess into the cavity of the bladder. There were no casts, the urinary deposit consisting of pure pus admixed with a small amount of epithelium from the bladder and the renal pelvis. This profuse discharge of pus continued for some months without having any special deleterious effect upon the patient's health. Suddenly, however, he began to have a moderate amount of fever, loss of appetite, emaciation, night-sweats, and diarrhoea. Within a week he became extremely debilitated, but not sufficiently so to necessitate his going to bed. There was no clear indication for surgical interference; hence the sole reliance was internal medication, the usual urinary antiseptics, tonics, and stimulants being given. After this condition had lasted for several weeks without any material improvement, Clark's solutions of iodine and chloride of gold were administered hypodermically with most excellent results, the patient soon regaining his usual condition of health and the pus in the urine being reduced to a minimum. From the beginning of his urethral trouble there had never been the slightest complaint of pain in the back, or symptoms referable to the kidney or ureter. Never during his life had the patient been affected by anything which might be termed renal colic. There was at no time, nor has there ever been, excepting after the operation upon the kidney, which will shortly be described, the slightest trace of blood in the urine. The patient remained in a condition of health quite satisfactory to himself until the onset of the difficulty for which the operation under consideration was performed. The urine remained quite cloudy, and contained, at all times, a moderate amount of muco-pus. About November 20, 1894, while I was away from the city, the patient was suddenly taken ill, with recurrent chills and fever, vomiting, loss of appetite, and night-sweats. On my return to the city, five days later, I found that, for the first time since he came under my care, the patient had been compelled to take to his bed. He came to my office, however, and remained an ambulant patient until operated upon. There was still no pain or tenderness in the vicinity of the kidneys, and it was difficult to convince the patient that even a suspicion of a collection of pus in one or the other loin was warrantable. After careful study of the case for about a week, I became convinced that there was some suppuration in the vicinity of the right kidney, and, as the liver was considerably enlarged, I suspected a complicating hepatic abscess, this suspicion being otherwise justified by slight

jaundice. The tongue was heavily coated ; temperature ranged from 102° F. in the morning to 103° F. in the evening. The patient emaciated quite rapidly. A few days after informing the patient of the probability of localized suppuration, Professor William E. Quine saw the case with me in consultation and verified my suspicions of a circumscribed collection of pus in the vicinity of the right kidney, and also the possibility of a complicating hepatic abscess. As there was no definite tumor in the flank and no well outlined local symptoms, I was not perfectly clear as to the condition present for nearly a week later, when I succeeded in striking pus anteriorly just below the free border of the ribs after repeated attempts by means of the aspirator. An operation was decided upon, and I determined to open anteriorly with the view of operating upon the hepatic abscess which I believed to be present, leaving the abscess in the region of the kidney for future consideration.

*Operation.*—An incision was made in the abdominal wall just beyond the outer border of the rectus muscle, extending from the free margin of the ribs to the crest of the ilium. On cutting through the fascia transversalis, I found the peritoneum adherent to a coil of intestine, which in turn was adherent to the anterior surface of the greatly-enlarged liver. Only cautious dissection prevented injury to the bowel. Repeated attempts at aspiration were necessary before I finally encountered pus, the needle being passed obliquely backward and inward in the direction of the spine. Pus was found at much greater depth than I had anticipated from the results of the aspiration performed before the abdomen was opened. The needle was left in position and an incision made in the thickened visceral and parietal peritoneum, which were closely fused together over the surface of the liver. On turning down the inferior edge of the incised peritoneum, it was found to be firmly adherent to the liver and to the coil of intestine already alluded to, the general peritoneal cavity thus being effectually walled off. The Paquelin was now made to follow the needle and the pus cavity was finally entered, this being a rather difficult matter, because of the small area of the operation field. On entering the abscess cavity in the liver four ounces of creamy pus escaped. On exploring the cavity with the finger, I found that it extended backward and in such a manner that its long axis was directed towards the region of the kidney. Thinking that I detected fluctuation in the posterior wall of the abscess, I deliberately pushed my finger through the thin wall and opened into a second abscess evidently perine-

phritic in character. On opening the perinephritic abscess a large quantity of pus escaped, and with it a small amount of sabulous material, which caused me immediately to suspect the presence of stone. By dint of great exertion I was enabled to pass the finger to the pelvis of the kidney, which I found enormously dilated and presenting an opening towards the perinephritic abscess cavity. The region of the pelvis of the kidney was no sooner touched than a hard body was felt, and on passing the finger through the encapsulating wall of the renal pelvis a calculus was distinctly outlined. Thinking that the calculus was not of large dimensions, because of the small size of the presenting part reached by the finger, I attempted to extract it with a pair of forceps, and the presenting point breaking off I extracted a calculous mass which, as shown by its facets, was evi-



Renal calculus removed in Lydston's case of hepato-nephro-lithotomy.

dently a secondary calculus fused upon one of larger size. Several particles of calculous material now escaped from the pelvis of the kidney into the abscess cavity, and were removed with the finger. I decided to remove the larger calculous mass entire, if possible, and, finally, by the aid of a pair of long-curved pedicle forceps and a lithotomy scoop, I succeeded in extracting the remainder of the calculus entire. The wound was deeply tamponned with iodoform gauze for drainage, the gauze in a few days being substituted by rubber tubing, the latter being entirely removed at the end of four weeks.

The illustration above shows the calculus and its natural size. The entire calculous mass weighed 746 grains. As will be observed, it is ovoid in form, and tuberculated. It is evidently composed of a number of calculi fused together by phosphatic laminæ.

The subsequent history of the case was uneventful. At the present writing, three months after the operation, the wound is almost closed, there being but a small amount of pus and no urine escaping from the resulting fistula. The patient has gained rapidly in weight and strength; the urine is vastly improved in appearance, and it is evident that the patient's life has been greatly prolonged by the operation. The liver is still considerably enlarged, and, notwithstanding the fact that the temperature is now normal, I am suspicious that there may be further collections of pus in that organ. That there is a certain degree of pyelitis in the left kidney, I am satisfied, and whether it may become necessary to remove the degenerated remains of the right kidney is questionable. If the patient were otherwise in excellent condition, and the urine should remain purulent, a nephrectomy would certainly be indicated, but under the existing circumstances of this case it is questionable whether further operative interference will be warrantable unless definite abscesses should form in some situation.

I submit the case as exceptional,—

- (1) Because of the large size of the calculus.
- (2) The entire absence of all symptoms referable to renal calculus, notwithstanding the fact that the patient was most carefully observed for some years.
- (3) The difficulty of diagnosis incidental to pyelitis from ascending infection secondary to a condition entirely independent of the renal calculus.
- (4) The extraordinary method of operation necessitated by the exigencies of the case.