

spasmodically. On the insertion of the soft catheter to inject fluid to distend the organ so much pain was caused that I made this examination under chloroform, Dr. Adam H. Wright assisting. A small cluster of tubercles, yellowish and very distinct, was revealed on the base of the organ, in the inter-urethral line. A tumor was also detected in the left upper and anterior wall of the bladder, of dark-reddish color, apparently smooth, and gave us the idea that its size would be that of a pigeon's egg. The other parts of the bladder were healthy, the vessels and the trabeculae were easily distinguished. A second cystoscopic examination was made without anæsthetic and the same conditions found, but the pain of this examination set up spasmodic contraction in a few minutes, so that it had to be discontinued. I decided to operate, and chose the suprapubic route on account of the special advantage offered.

On January 24th, 1892, assisted by Drs. Adam H. Wright and W. Lehmann, I operated. In the abdominal incision no vessels required to be ligated; the bladder was found low down in wound, and was opened on a sound passed per urethram and pressed well up; no rectal bag was here used. The bladder wound was enlarged by the fingers to sufficient size to admit a speculum. No tumor was found, which rather chagrined me, but the tubercles were present, and another cluster seen and felt on the fundus. Bruce Clarke's speculum was the one used, and an exceedingly perfect view was obtained of the whole bladder. The mouth of the left ureter was congested and protruded slightly. The tubercles were thoroughly cauterized by the Paquelin, double drainage tubes inserted, and the abdominal wound drawn together at the upper part by two deep sutures. The wound was dressed with boracic acid and gauze, retained by a T bandage. The temperature never rose above 99°, pulse never higher than 84; drainage tube removed on the 26th. A few drops of urine passed per urethram on the 29th, and about two ounces passed on the 3rd February; on the 11th she sat up and ate her dinner. The urine had continued to come from the wound until the 12th of February, 19 days after the operation, when it ceased to do so and was passed in the natural manner. She was downstairs on the 13th, and was out on the 14th for a short walk.

CASE No. 3.—Mr. P., æt. 72, plasterer, and working up to within three months from the time I first saw him.

*Family history:* Good; no previous illness until five years ago, when he first complained of lancinating pain in the back, which gradually became more severe. Periods of exacerbation in the pain became frequent, and he passed several small calculi. He says that he has passed, during five years, as many as fifteen or twenty, two of which I here show you. His bladder has never been sounded, the case having been treated by solvents entirely.

*History of present illness:* I first saw the patient on the 12th of March, this year. Found him in bed, apparently well, complaining of nothing except spasmodic pains in the bladder and severe pains on micturition, which were increased and intensified on assuming the erect posture. When in recumbent position, the periods between the act varied from two to three hours; while in standing the periods would be from three-quarters of an hour to an hour and a quarter. The urine was clear and straw-colored, acid, and contained no sediment. On the 13th I examined the bladder with Thompson's searcher, and immediately came against a stone with the beak of the instrument. I found the patient had misunderstood my question as to how long since he had passed urine, and instead of the bladder being full, it was quite empty.

*A large uric acid stone:* The composition of the large calculi passed and the apparent size of the stone in the bladder led me to advise an immediate suprapubic operation. The urine was examined four times between the 12th and the 16th; always found to be clear. Specific gravity varied from 1020 to 1024, always acid; contained no albumen nor sediment, nor were there any casts. On one occasion Dr. John Caven (who also examined the urine for me) thought there was a slight trace of albumen, but it was very slight. On the 16th of March, assisted by Drs. W. H. B. Aikins, W. Lehmann, Mr. C. Carter, medical student, being present, I did the high operation. After the patient was anæsthetized the bladder was filled with six ounces of boracic acid solution, the rectal bag introduced and distended with twelve ounces of water. The distension set up a severe