

occasions and noting that there was no growth. So since this cure there has been no relapse.

Let me illustrate the group of difficult cases by giving you a brief outline history of seven of my patients. In two the disease was tuberculosis, in the others the organism was a colon bacillus.

II. Miss J. MacD., 33 years of age, came to me in 1899 suffering from frequent urinations with a slight pyuria and hematuria.

Examination showed an area of intense cystitis at the vesical vertex and as she had suffered for four years I proceeded at once to surgery and opened the abdomen and excised an ulcerated area of the bladder at the vertex  $3 \times 2\frac{1}{2} \times 1\frac{1}{2}$  cm. in size. This was closed without drainage, using sixteen catgut sutures in the first and ten in the second layer. She recovered at once and has been in the best of health ever since.

The pathological examination of the greatly hypertrophied bladder wall showed granulation tissue and inflammatory infiltration.

III. Miss J. R., age 29, came to me in March, 1900. She had been suffering with her bladder for five years. It is probable that the frightful cystitis from which she suffered was induced by catheterization in a hyperacid bladder in a nervous woman.

She was in a wretched mental state from the suffering night and day, emptying her bladder every few minutes.

The urine was full of pus and contained blood; cultures showed that the infectious organism was the colon bacillus.

Cystoscopically, the bladder was of an intense angry red color, with extensive areas of ulceration; there was not even a small area of sound tissue seen at any point. She simply screamed whenever she was touched.

She was about three years under treatment, and her recovery is largely due to the untiring efforts of my chief nurse.

The following treatments were used:—

1. Curettage and the use of the wire brush over the whole inner surface of the bladder, followed by a 10 p.c. solution of silver nitrate.

2. Fourteen days later another curettage.

3. Ten days later I was able to catheterize the left kidney and demonstrate a left pyonephrosis, which was opened and drained. At the same time a suprapubic cystotomy was done to facilitate irrigating the sensitive bladder.

I left a mushroom catheter in the kidney wound and a ureteral catheter in the ureter to facilitate washing out the kidney.

4. Dilatation of the renal and suprapubic openings.

5. Left nephrectomy (intracapsular enucleation) by morcellation, Closure of the suprapubic opening.