

Ten days after onset of urinary symptoms an attack reported as influenza. Symptoms, aching over whole body; general malaise; mild chill, with temperature of 103 to 104. Symptoms lasted four days. At commencement of attack of influenza, all bladder symptoms immediately ceased; end of three days, symptoms of influenza abated; patient out of bed. Bladder symptoms reappeared, but were controlled somewhat by mild irrigations of boracic acid and nitrate of silver solution. As symptoms remained stationary (frequent burning, desire to urinate and dull pain occasionally over left kidney) solution of 1,500 nitrate silver was injected into bladder.

Symptoms aggravated immediately and continued to March 20, 1910, when patient was referred by Dr. J. W. Cline, of Tacoma.

Further investigation into subjective history showed habitual constipation with absence of bowel movement for two days previous to onset of symptoms; intake of fluids limited, frequently only two or three cups of tea daily.

Examination (physical and laboratory).

Catheterized urine from bladder contained pus, mucus and epithelial cells and great number of micro-organisms; no casts. Bladder cystoscopically, showed general cystitis, with one area posterior to trigone, much denuded. Ureteric openings, normal. Rate of efflux and volume of urine, normal.

Both ureters catheterized; no obstruction; no hydronephrosis. The urine obtained from each ureter was opaque—especially from the left and contained number of pus cells, some connective tissue, but more especially *clumps* of pure *organisms*, microscopically shown to be bacilli.

Morphological characteristics, indefinite. Possibilities, bacilli coli; typhoid bacilli or bacilli of influenza, judging from history.

Cultures, subcultures and differential tests made.

*Results.*—Colon bacillus, for it coagulated milk within 24 hours; produced acid on litmus agar; formed gas in glucose fermentation tubes, 25% in 24 hours; did not liquify gelatine; some forms preserved their motility after 24 hours.

*Diagnosis.*—Infection of urinary tract by colon bacillus, hematogenous, because history of severe attack of constipation accompanied by small amount of fluid ingested previous to onset of symptoms.

*Treatment Advised.*—Absolute rest in bed; liquid diet; flush kidneys with Poland water; santal oil (fresh), 10 ms., every 2 hours until 8 doses; then one every 4 hours; irrigate bladder twice daily with hot boracic acid solution; autogenous vaccine.