

While tuberculous disease of these organs can be diagnosed in a general way by ordinary medical procedure and bacteriological examination, yet as this falls short of a complete diagnosis in not being able definitely to locate the seat of the lesion and in determining the condition of the ureter, bladder, and especially of the other kidney, operative interference is not warranted without the more definite information to be obtained only by cystoscopy, meatoscopy and ureteral catheterization.

In urinary lithiasis as with tuberculosis, the patient usually first consults a physician, upon whom therefore falls the responsibility of recognizing the character of the case. Careful attention to the history of the case and the attendant symptoms, combined with urinalysis, usually suffices for this purpose. The subsequent management whether medical or surgical has to be determined in each case. In renal or ureteral lithiasis where the pain, attacks of colic, hæmaturia and pyuria are not marked or occur only at long intervals, and there is no evidence of blocking of the ureter and damming back of the urine with subsequent infective pyelitis or pyelonephritis tending to destroy the organ, then medical treatment should be given a fair trial. Every physician knows that under proper dietary, alkalies, urotropine, turpentine, mineral waters, saline catharsis, etc., complete relief may be obtained in many cases. Some authorities speak highly of the value of glycerine in doses of 50 to 100 c.c., which is said not infrequently to produce painful crises, with expulsion of the calculus. That ureteral calculus may be expelled after months of impaction was shown in a case referred to me by Dr. H. R. Frank of Brantford last December. The patient had been suffering for some time from frequently recurring attacks of severe colic, hæmaturia, pyuria, cylindruria, etc. Calculus was diagnosed but its seat could not be located. Dr. Cummings by an X-ray examination and ureteral catheterization, demonstrated the calculus in the lower end of the ureter. The patient returned home, had several recurrences of the colic, one of which occurred about a month ago when he was on the street. There was urgent desire to urinate, and during this act the calculus was expelled and the patient completely relieved of all his symptoms. In ureteral calculus injection of oil into the ureter is sometimes followed by extrusion of the calculus. There are many cases however especially those in which *painless hæmaturia* is the only symptom, where in the early stages it may be impossible for the physician to determine whether the case is one of calculus, tumor, interstitial nephritis, ruptured varicose veins, or other cause of this phenomenon. The difficulties presented and the fallacies of our