

6. Mr. H., age 48, had the classical symptoms of left renal and ureteral colic, sudden intense pain shooting to the groin, retraction of the testicle, blanched facies and considerable shock, tenesmus and frequent urination, but no blood in the urine. After eight hours he experienced sudden and complete relief, no doubt due to the escape of the calculus from the ureter. Three days subsequently a skiagraph was taken, but after the most careful search no calculus could be found in the kidneys, ureters or bladder, demonstrating conclusively that it must have been voided from the bladder.

7. Mr. R., age 44, has had several attacks of renal colic on both sides; urine normal. Skiagraph shows three small calculi in the right kidney and one in the right ureter at the brim of the pelvis, and one small calculus in the left kidney. Operation not advised.

8. Mr. T., age 63, has had several severe attacks of renal colic affecting the left side, urine normal; for the last two years no attack. Skiagraph fails to demonstrate the presence of any calculi, showing evidently that they have all been passed.

URETERAL CALCULI.

Nearly all these have been found accompanying renal or vesicle calculi.

Miss C., age 34, a patient of Dr. Olmstead, urine acid, some pus and frequency of micturition, family history strongly tubercular. Dr. Olmstead cystoscoped the bladder and found it normal, catheterization of the ureters showed that the right one was normal and that some pus came from the left. With a Kelley's bougie tipped with wax he obtained a scratch from the left ureter. The case was referred to me for X-ray examination; skiagraph showed a small calculus the size of a pea in the left kidney. The second skiagraph, taken some days later, showed the interesting condition that the calculus had descended the ureter and was lodged about one and a half inches outside the bladder walls. The wax-tipped bougie confirmed it in this location. The ureter was dilated with bougies, and the calculus subsequently was passed, demonstrating the value of this method of treatment of ureteral calculi in the female.

Mr. —, age 69, complained of chills at times, frequent micturition and purulent urine swarming with bacteria, but never had any pain. The skiagraph taken in October, 1900, showed three minute calculi in the right ureter, about one and a half inches from the bladder, and one small calculus in the left kidney. The patient was placed on urotropin and large quantities of distilled water, with the result that the urine improved, but the skiagraphs, taken at intervals of three and six months,