

usual clinical signs will be discussed more fully later. In these cases the early diagnosis is so essential to rational treatment that X-ray examination, cystoscopy, meatoscopy and ureteral catheterization should be resorted to at once. It is scarcely necessary to say that in every case where operative treatment is deemed advisable that the exact location of the stone and the condition of the other kidney should first be determined by these means. In bilateral ureteral calculus and in calculus anuria operation is always indicated. It is perhaps unnecessary to call attention to the frequent occurrence of ureteral calculus. I have had six cases diagnosed as such during the past year, and in three of them the exact seat of the calculus was determined by X-ray examination. In two of these Dr. Cummings operated and removed the calculus, and the patients are now well. In another the calculus, as before stated, has extruded spontaneously. As a rule it is impossible to distinguish with certainty a renal calculus from one in the ureter by medical examination alone. At times a calculus impacted in the lower end of the ureter may produce purely vesical symptoms. Rectal or vaginal palpation of the ureters may be of value in some instances, but cases are reported where enlarged glands along the ureters have led to erroneous conclusions. In two cases of mine with calculus impacted in the lower end of the ureter the patient complained of a peculiar parasthesia and numbness extending down the outer side of the thigh. I have not seen this symptom mentioned elsewhere and whether it has any localizing value or not one is not warranted in saying.

Speaking generally, it may be said that the elaboration of the surgical technique of cystoscopy, ureteral meatoscopy, ureteral catheterization and X-ray examinations during the past dozen years in urinary diseases, constitutes one of the most brilliant developments in practical medicine of any period. They have elucidated the pathology and have given certainty and precision to diagnosis in conditions previously obscure or only guessed at and have made possible the successful treatment of many cases formerly beyond our help. At the same time these methods are not to be considered exclusive of, but rather as supplementary to the medical investigation of the case. As before stated, in many cases the medical examination is sufficient for a diagnosis which enables the physician to direct the treatment of the patient. The more precise methods of local diagnosis possessed by the surgeon are required in every doubtful case or whenever operation is contemplated. The following reasons may be adduced against their employment as routine measures in every case: