

bladder. This must be eliminated by means of the sound. If no stone is found in the bladder there is likely to be one in the kidney.

We frequently see cases of renal calculus, or its ally, renal tuberculosis, that have been treated for cystitis. Morris is strongly of the opinion that there is no such thing as reflected pain, reflected from one side to the other, and he lays it down as an axiom that the kidney, which ought to be first explored, is the one on the painful side. If both sides are affected, the last side affected should be the one first operated on.

In women an attempt should be made to examine the ends of the ureters digitally. The stone is likely to be on the side on which there is pain or tenderness, or swelling, or a hard contracted condition of the abdominal wall.

One authority states that when calculi have been previously passed, when well marked attacks of renal colic occur, and crystals of uric acid or calcium oxalate are frequently found in the urine, and when the urine is intermittently mixed with a good deal of blood or persistently contains a microscopic quantity, there are the strongest *a priori* grounds for thinking that a stone is present.

It must be remembered that some cases of stone in the kidney are accompanied by nerve symptoms, with or without elevation of temperature. Many of the conditions produced are obscure.

*Treatment.*—In every case in which a stone is believed or known to be present, the best course is to explore the kidney and remove the stone. This is the opinion of many of the best authorities. Morris says that when, either by accident or systematic examination of the urine, we have cause to suspect the presence of a calculus, we should recommend its immediate removal regardless of the fact that it is not causing renal or transferred pain. He considers that a quiescent calculus is as dangerous to a patient as an unsuspected calculus, and that it ought to be removed. And, further, that the old exploded teaching, that a renal calculus if causing only mild symptoms, should be treated on the expectant plan, should be discarded as unsound in theory and dangerous in practice. We must not wait for these calculi to become encysted or spontaneously expelled.

Surely this is advice worth following, coming as it does from one of the greatest, if not the greatest, of living nephrolithotomists. We cannot be sure that the stone will become encysted, and if no encystment occurs valuable time is lost.

The mortality of these operations shows that a kidney that is not suppurating can be cut into with much greater safety than a kidney that is suppurating or, in other words, that danger