as well as the condition and position of the ureters. He spoke of the various causes of hydronephrosis, and then stated that it usually began early in life, in which case it was dependent upon the valvular conditions of the ureter, which were probably congenital. When it began later it was acquired and due to obstruction.

Rupture of the kidney was then considered briefly, and the different varieties described. He showed a slide representing the body form of a patient who had had a fall of some 20-odd feet eleven days before entering the hospital. It resembled a large watermelon tucked into one side of the peritoneal cavity, extending from the diaphragm to the pubes. "As the patient had no hematuria, and there was no history of any, it appeared to be a rupture of the spleen, and an anterior abdominal incision was made, extending through the peritoneum. The intestines were found to be flattened out between the anterior and posterior peritoneal walls on account of something situated posteriorly to it which pushed the posterior layer forward. I accordingly closed the wound, turned the patient on to the healthy side, and made a loin incision into the kidney region, evacuating several quarts of reddish-brown fluid, containing whitish particles, typical of the fluid present in case of rupture of the kidney. Whether this was due to some action of the urine or whether pus was present, I do not remember. At any rate, if pus was present at the time, it was but a very small percentage. The fluid was evacuated and the cavity was washed with peroxide and salt solution, and a drain inserted. After a few days the patient began to run a temperature, and it was found that pus was present in the cavity about the kidney. A second operation was performed, and the kidney was found to be ruptured, and also the pelvis. The other kidney was found to be in good condition and the diseased kidney was removed."

Dr. Guiteras then showed a picture of the ruptured kidney, with the urine extending through both the pelvis and the kidney. He stated he believed that a kidney which has an enlarged pelvis, dilated either by urine (hydronephrosis) or by pus (pyonephrosis) is more liable to be injured than any other variety, and he thinks that a pyonephrotic kidney due to stone is especially liable to rupture. He said that this was a case of subparietal rupture of the kidney, with an extensive accumulation of blood and urine about it; that he would later show a case of subparietal rupture, in which the fluid was subcapsular. He stated that he had had quite a number of cases of subparietal injury from one cause or another, but only one open wound, a direct injury resulting from a stab wound in the back.