

right side, and three days after the acute attack, with positive signs in the urine and a markedly tender kidney. Through an incision in the flank the right kidney was removed. A gauze drain was left in. The kidney showed typical foci of infection of various sizes. Infection, colon bacillus.

Patient made a good recovery. At no time did the temperature rise above 100 deg. F. The remaining kidney performed its functions with entire satisfaction. Gauze drain removed on the fifth day."

Dr. Cobb thinks it probable that some of the cases, especially those less acute in onset, may recover without operation. (One case under the care of the writer seemed to make a good recovery under the opsonic treatment. The infective agent in this case was also the colon bacillus.) He comes to the conclusion that: "Delay in operating, especially in those fulminating cases in which diagnosis is doubtful, cannot be justifiable. Delay for reasonable study and observation in the subacute cases will always be wise."

*Treatment:* This should always be by operation, even in the presence of severe sepsis. Recovery will be the rule if operation is not delayed too long. In the majority of reported cases nephrectomy has been the operation of choice. In three or four cases drainage of the infarcts with rubber tubes or gauze wicking has been successful. (A second case, under the writer's care, was treated by drainage. Temperature, 104 deg. F. at time of operation. Kidney (left) greatly enlarged and engorged, perinephric edema, but no pus found at time of incising the organ. No calculus found. Subsequently free discharge of pus and urine. Temperature fell steadily after the operation and reached normal in a few days. Patient made uneventful recovery. Sinus closed and patient left hospital about four weeks after operation.) Two of Dr. Cobb's cases recovered after treatment by drainage. One remained well, but in the other case it was necessary to do a nephrectomy subsequently because of stone. In very toxic cases in which the areas of infarction are numerous, so that the function of the kidney is seriously interfered with, nephrectomy must always be done. It is not advisable to remove an infected kidney through the anterior incision, on account of the risk of infecting the peritoneum, although this has been done once by Dr. Harrington, and quite successfully. Woolsev has reported a case in which the cortical substance involved only the lower pole of the kidney. He resected the infected third of the kidney, leaving the remainder. The infection was staphylococcus. Although this unique operation was successful, it can hardly be a safe procedure, even if the septic areas are so distributed as to make it possible.