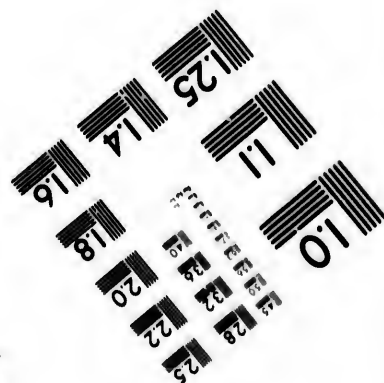
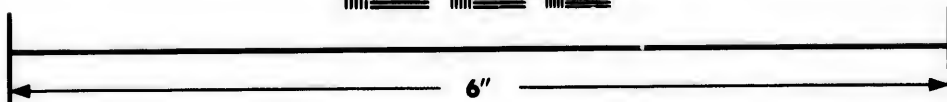
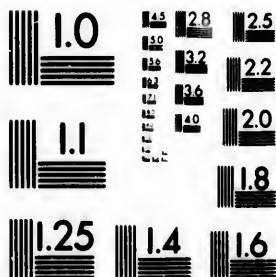


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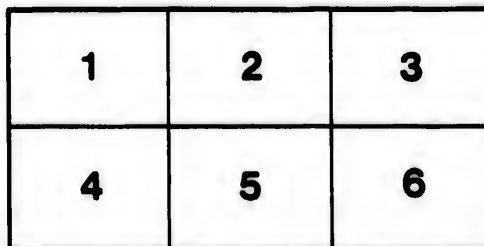
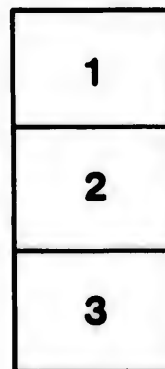
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## EXPLORATION OF THE KIDNEY IN A CASE OF TUBERCULOUS PYELITIS.

BY FRANCIS J. SHEPHERD, M.D.

The following case is of interest, as showing the difficulty of diagnosis in the early stage of tuberculous disease of the kidney. All the symptoms at first were referable to the bladder, and the amount of pus in the urine was small. In many such cases the prominent early symptom is frequent micturition, and this may or may not be accompanied by pain, which, when excessive, may be due to tuberculous deposits in the bladder itself. When the man first came under my notice I considered that the disease was one of the kidneys and not of the bladder, because of the small amount of urea excreted daily and the absence of mucus from the urine. The personal and family history of the patient did not point to tuberculous disease, and the amount of pus was so small that it might easily have originated in the bladder. Careful examination revealed no tumor in the region of the kidney, but there was always discomfort and pain in the left lumbar region. Later on, when pus became more abundant and the amount of urine less, it was evident that there was some destructive disease of the kidney going on, due either to the presence of stone or tubercle. The sudden diminution of the flow of urine showed that both kidneys were inefficient, and it was decided to cut down on the tumor which was now present in the region of the left kidney in the hope of finding a stone which was preventing the outflow of urine. When the operation was performed the man was in an uræmic condition, and evidently had not long to live.

The operation is instructive, and this lesson is to be learned from it, viz., that no mere external examination of the kidney

can satisfactorily determine its condition, and that in every case an incision should be made into the organ and the parts explored with the probe or finger. The aspirator failed to evacuate the contained pus, because it was so thick and tenacious, although a previous exploration had revealed its presence in small amount. In cases of tuberculous pyelitis the disease is often symmetrical, and it would be folly to perform a nephrectomy without a knowledge of the condition of the opposite kidney. Such cases demand a nephrotomy with subsequent drainage until the condition of the other kidney is ascertained. If it is found to be healthy, nephrectomy may be afterwards performed with the object of removing a suppurating organ and ridding the patient of foci of disease. The condition of the other kidney is easily ascertained after a nephrotomy, for all the urine from the incised and drained kidney would come out of the lumbar wound, and that which was passed through the ordinary channel would necessarily come from the other kidney. If the urine is large in amount and of a healthy character, this is partly good proof that the other kidney is performing its functions properly.

For the report of the following case I am indebted to my late house surgeon, Dr. H. S. Birkett :—

S. B., aged 38, was admitted into the Montreal General Hospital on the 13th of July, 1886, complaining of frequent and painful micturition. These symptoms first appeared three months before, and he had been treated by several physicians for catarrh of the bladder. Had always been healthy up to three months ago, and was formerly stout, but had lost considerable flesh lately. He made water every few minutes, night and day, and each time the pain was severe. It commenced in the small of the back, on the left side, and extended down the groin, along the urethra to the point of the penis. He complained of continuous dull, aching pain in the left lumbar region. Had never passed any blood; urine contained a small amount of pus, but no mucus, specific gravity 1.005, contained albumen, and only two grains of urea to the ounce. Quantity passed daily, 60 to 70 ounces. No tumor could be made out in the lumbar regions. Bladder sounded for stone,

with negative result. No cough or expectoration, and lungs and heart perfectly normal. From the condition of the urine and general symptoms, Dr. Shepherd concluded that he was suffering from some affection of the kidney. He remained in the hospital some weeks, but left no better than he entered, treatment having no effect whatever.

Dr. Shepherd afterwards attended the man at his own house, and the symptoms still continued as before, viz., frequent and painful micturition, with pus in urine. The quantity of pus in urine now rapidly increased and the urine diminished. He passed 20 to 30 ounces of urine daily, 30 per cent. of which was pus. He also became rapidly emaciated, and there was occasionally an elevation of temperature in the evening. The patient went to some mineral springs in the neighborhood, and was not seen for several weeks, not, in fact, till the latter end of September. He was then much emaciated, and seemed to be in a stupid, drowsy condition. He was passing only 20 ounces of urine daily, and of that 50 per cent. was pus. A tumor could now be distinctly made out in the left lumbar region. It was aspirated, and at first only a little thick pus was drawn off and then thin bloody serum.

He was again admitted into hospital Oct. 11th, 1886, and the day after admission passed only six ounces of urine, from which all pus had disappeared. His condition was serious; he had well marked uræmia, and Dr. Shepherd, thinking that the arrest of urine might be due to a stone blocking the ureter, determined to cut down and explore the kidney, a proceeding which he thought could do no harm and might do good. The horizontal lumbar incision was practiced, beginning posteriorly at the edge of the erector spinæ muscles and extending downwards and outwards below the 12th rib. The kidney was soon reached and found to be enormously enlarged and non-fluctuating. The finger easily went through some tissue to the depth of one inch at the upper end. A large aspirating needle was thrust in several directions into the kidney, but failed to reach either a stone or pus. From the great enlargement and general appearance it was thought a neoplasm existed, and considering that the man was secreting



only six ounces of urine daily, the conclusion was arrived at that the other kidney was also diseased, so a drainage-tube was introduced and the wound sewed up. The man recovered from the immediate effects of the operation, but died comatose that night. No post-mortem examination was allowed, but after death the wound in the lumbar region was reopened and the kidney taken out. At the same time the kidney of the other side was searched for, but could not be found; it had probably been affected by a similar disease and had undergone atrophy. On cutting through the greatly enlarged kidney numerous pockets of pus were found and some large cysts distended with serum. The cortical substance was studded with small suppurating points, and was much thickened. Dr. Wyatt Johnston examined the case, and came to the conclusion that it was a tuberculous kidney; tubercle bacilli were found in large numbers.

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