the renal substance about this contained numerous small grayish nodules. The bladder was distended, and the mucous membrane showed some slight loss of substance. The spleen, liver and right kidney showed well-marked amyloid reaction to iodine. The descending colon was adherent to the wall of the abscess cavity, but there was no evidence of any communication between the two. The lungs showed signs of beginning tuberculosis, but otherwise the remaining viscera were not remarkable. The vertebral column and left hip-joint were examined with negative results.

Pathological diagnosis: Primary tuberculosis of the left kidney and ureter, with retro-peritoneal abscess; tuberculosis of the right kidney; tuberculosis of the lungs; amyloid degeneration of the spleen, liver and right kidney.

CASE IV. J. O'M., forty-five years of age, entered the Boston City Hospital August 3, 1885, in the service of Dr. E. H. Bradford. His history is very long and indefinite, and much has been omitted, as it would simply be confusing and of no particular value, but condensed it is as follows: When three years of age he had disease of the right hip-joint, and has been lame ever since. He had syphilis twenty-four years ago. The present trouble began about two months ago, the first symptoms being an occasional attack of vomiting, frequent micturition, and pain referred to the back and to the right hip. After that time his general condition grew steadily worse; the pain became more severe and was of a sharp, shooting character, starting in the back and extending into the right side. The pain was worse at night. Just previous to entrance some tenderness in the right lumbar region was noticed. The urine varied in character; at times was clear, and at other times contained much pus. There was quite a persistent diarrhoea—together with a marked loss of flesh and strength.

On entrance to the hospital the patient was very weak and extremely emaciated. There was evidence of an old hip disease on the right side with dislocation of the femur upwards and backwards. Pressure over the right iliac fossa caused pain as did also pressure in the axillary line just below the ribs. No tumor was to be felt in front, but in the right lumbar region there was a slight prominence which was flat on percussion. There were a few moist râles with diminished respiration at the base of the right lung. There were also two perineal fistulae. The urine contained much pus.

During the patient's stay in the hospital previous to operation, he steadily grew weaker; the swelling in the right lumbar region gradually increased, and the pain was quite severe, requiring morphia for relief.

Ten days after entrance Dr. Bradford operated. An incision was made over the swelling on the right side just external to the quadratus lumborum muscle. A trochar was then passed through this wound, and it came upon some thick, cheesy pus. This opening was dilated, and a few drachms of similar material were evacuated. (The renal substance was recognized in the exposed tissues.) Because of the very weak condition of the patient no farther exploration was made. He was freely stimulated, but failed to respond, and sank into a state of collapse and died the next morning.

The autopsy was performed by Dr. W. W. Gannett. The site of the right kidney was occupied by a mass of dense connective tissue, in which were to be seen

on section a few isolated masses of renal substance. In these portions were cavities, which varied in size from a pea to a walnut, and were filled with cheesy material. The outlines were crenated, and the outer borders showed a translucent line about two millimetres in width, which separated the cheesy material from the renal substance. In the connective tissue already mentioned were several similar cavities. The right ureter could be followed up to a cheesy cavity the size of a walnut, which probably represented the pelvis of the kidney, and it was at the junction of the ureter with this cavity that the opening made at the operation ended. In the right half of the pelvis, along the ilium and following up across the ureter, was a mass of dense fibrous tissue. The bladder showed nothing abnormal. There was a compensatory hypertrophy of the left kidney. The liver, spleen and the mucous membrane of the intestine showed a well-marked amyloid reaction to iodine. The right acetabulum had wholly disappeared, the femur being attached to the pelvis by fibrous bands, and the point of junction of the two bones showed a roughened surface covered with connective tissue. The remaining organs showed nothing remarkable except that in the upper lobe of the right lung there was a group of grayish translucent nodules; the whole about the size of a filbert.

Pathological diagnosis: Chronic tuberculosis of the right kidney, with chronic fibrous perinephritis; recent circumscribed tuberculosis of the right lung; amyloid degeneration of the liver, spleen and intestines.

A CASE OF NEPHROLITHOTOMY (FOLLOWING NEPHRECTOMY) FOR TOTAL SUPPRESSION OF THE URINE LASTING FIVE DAYS: RECOVERY.¹

BY R. CLEMENT LUCAS, B.S., F.R.C.S.,

Surgeon to Guy's Hospital and to the Evelina Hospital for Children.

THIS case was mentioned by the editors of the medical journals at the date of the operation, in 1885, as a case of exceptional interest; but the details of the case have never been before published, nor has the patient, or her kidney, or the stone which caused suppression ever been exhibited before. The author had delayed publishing it because those to whom he mentioned it, whilst applauding the attempt to save a life on the extreme verge of dissolution, threw the coldest doubt upon the patient's future, maintaining that even if she recovered from the immediate effects her life must be a short and painful one; that the one remaining kidney, having been opened and drained, would rapidly degenerate, or another stone would quickly form and bring about a final catastrophe. After the lapse of five years the author thought he might be acquitted of any attempt to claim an incomplete success. The patient is still living and enjoying the best of health, and a freedom from pain, discomfort, and hæmaturia, which, for seventeen years before her right kidney was removed, were almost constantly present. The operation for total suppression of urine was one that the author had long considered justifiable, and he had on more than one occasion previously publicly advocated its performance.

The patient had been under the care of Mr. F. D.

¹ Abstract of paper read on Tuesday, January 13, 1891, before the Royal Medical and Chirurgical Society, London.

Atkins, of Sutton, Surrey, to whom much credit is due, both for the original diagnosis and for the promptitude with which he acted when total suppression occurred.

E. F., age thirty-seven, was first admitted into Guy's Hospital on June 22, 1885. There was a strong family history of consumption. For seventeen years she had suffered from hæmaturia at intervals, and for nine or ten years this had been accompanied with pain on the right side of the abdomen, and for seven years a tumor diagnosed as a floating kidney had been felt on this side. On July 14th the right kidney was removed by lumbar incision. It was a mere shell containing masses of stone, and weighing twenty-one ounces. The wound healed completely, and she left the hospital convalescent on August 10th, just within a month of the operation. All went well for three months. She had returned to her household duties, was free from pain and hæmaturia, and much satisfied with the result of the operation.

On Sunday morning, October 24, 1885, she was suddenly seized, between seven and eight o'clock, with most violent agonizing pain in her back and left loin. The pain passed through the loin to the front of the abdomen and groin. About eight o'clock she passed a little urine, but from that time all secretion stopped. Vomiting commenced about half-past eight on the same morning, and was continued at intervals and whenever anything was taken. Mr. Atkins was called to see her, and found the bladder empty. Vomiting and anuria continued throughout Sunday, Monday, and Tuesday.

On Tuesday Mr. Lucas met Mr. Atkins in consultation, and advised operation.

The symptoms continued without cessation on Wednesday, when she was brought to London, but Mr. Lucas's medical colleagues still advised him to postpone operation till a further trial had been given to diuretics, and in deference to their opinion he waited another day. On the afternoon of Thursday, the fifth day of anuria, the patient became drowsy and weaker, so that it was difficult to rouse her to obtain answers to questions. Her pulse was weak, her temperature 99°, and she had become less sensitive to pain and indifferent to what was passing around. Ether was given, and Mr. Lucas cut down on her remaining kidney and discovered a conical stone acting as a ball-valve to the top of the ureter. The stone was rather more than three-quarters of an inch in length, and from three-eighths to five-eighths in diameter. Urine began to drop away out of the wound as soon as the pelvis of the kidney was opened, but the pelvis was not found much dilated.

The patient recovered well from the anæsthetic, and was sick once only after the operation. For twelve days all urine was passed by the wound in the loin. Then an ounce and a half was passed with great pain from the bladder, and the quantity gradually increased.

After the nineteenth day all the urine was passed naturally. The wound ran an aseptic course, and the patient's temperature scarcely rose above normal. Healing was complete ten weeks after the operation. During the last five years she has been employed in household duties, and has enjoyed good health.

The patient was exhibited, together with her right kidney, which was excised, and the stone removed from the left kidney for total suppression of urine.

REMOVAL OF LARGE CALCULI, FIRST FROM ONE KIDNEY AND AFTERWARDS FROM THE OTHER; DEATH FROM HÆMORRHAGE.¹

BY RICKMAN J. GODLEE, M.S.

THE patient was a gentleman, aged thirty-seven, who first complained of renal symptoms in 1886. In the autumn of 1888 a diagnosis of left renal calculus and left pyelitis was made, but mischief on the right side was suspected also.

In November, 1888, a large quantity of stone, uric acid and phosphatic, was removed from the left kidney. The patient made a rapid recovery, but the closure of the wound was not permanent, and after several febrile attacks it was found best for the patient to wear a plug permanently in the fistula, to prevent periodical accumulations of pus and urine in the kidney. At one time the ureter became completely blocked, and an operation was undertaken to remove a stone which was supposed to be obstructing it. None was found, but the ureter became again patent after the operation, and the state of the kidney very much improved.

The patient now became convinced that he had stone in the right kidney. The risks of an operation were explained, but he was recommended to submit to it, and on November 19, 1890, large masses of uric-acid stone were removed. No bleeding followed the first incision into the kidney, but the laceration that was caused by the removal of the stones gave rise to very free venous hæmorrhage, which was easily controlled by pressure. At the completion of the operation there was little or no bleeding, but it was thought safer to plug the pelvis of the kidney. The patient remained in fair condition for an hour and a half after the operation, and then suddenly died, as the result of fresh hæmorrhage from the kidney.

The rarity of the accident is dwelt upon, and attempts are made to suggest means of combating it if it arise.

TUBERCULOSIS IN CHILDREN: SOME PHENOMENA ATTENDING INITIAL INJECTIONS WITH KOCH'S FLUID.

CASES IN BERLIN IN THE PRIVATE HOSPITAL OF DR. LEVY.

BY J. WARREN ACHORN, M.D.

FOR at least six weeks prior to the appearance of Professor Koch's announcement, in the *Deutsche Medicinische Wochenschrift*, November 13th, of the details of his treatment for tuberculosis, patients suffering from phthisis and glandular tuberculosis had been undergoing experimental injections at Dr. Levy's private hospital, Prenslauer Strasse, Berlin, under the immediate supervision of Professor Koch himself. After that date the entire hospital was given up to cases selected for treatment by the injections.

Among the cases treated there were several children, notes of which I took whilst serving as interne in the hospital. These notes, though brief and somewhat incomplete, are here presented in the hope that they will be found sufficiently instructive to warrant perusal, the presentation being based upon the appearance of certain phenomena during the initial injection.

CASE I. Supposed lupus, in a healthy-looking boy ten years of age, the patches appearing, the size of the

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