

cretions normal; microscopically a few epithelial cells and uric acid crystals were seen, but no pus or blood cells. A provisional diagnosis of stone was made, and for confirmation an X-ray examination was suggested. For this purpose the patient went to Toronto, where an eminent physician was first consulted, who partly confirmed the diagnosis, but thought a skiagram should be taken before a positive opinion could be given. He was consequently referred to the skiagrapher who the same day took a skiagram. This clearly showed a shadow just above the brim of the pelvis and in the line of the ureter, which was interpreted as a stone impacted in that canal. The shadow was distinct and clear in outline, and in a note from the skiagrapher, who also kindly sent me a skiagram, a positive opinion was given as to the presence of stone. Two weeks later the patient came in for operation. During these two weeks he abstained from work, lived very quietly, and had no attacks of pain. The incision employed eventually corresponded to the lumbo-ileo-inguinal incision employed for removal of a tuberculous kidney and ureter, and extended from the last rib, adjacent to the edge of the erector spinae, downwards and forwards in front of the anterior superior spine of the ileum, and then parallel and about two inches above Poupart's ligament, down to almost its centre. The structures were divided or separated down to the peritoneum, which was then carried upwards and towards the middle line, as in the operation for tying the external or common iliac arteries. The lower limb of this incision was first made, as it was expected to find the stone in that part of the ureter where it crosses the brim of the pelvis, as there is naturally a slight narrowing at that site. The ureter was readily found and palpated, first downwards to well below the pelvic brim, and then upwards to the renal pelvis, but no stone was felt, nor was there any evidence in the ureter itself of any thickening or dilatation, as if obstruction had at any time occurred. The incision was then extended upwards and the kidney delivered onto the loin and the pelvis and renal substance palpated, and the latter then incised from pole to pole and its interior thoroughly examined, but no stone was discovered. A ureteral bougie was then passed through the incision in the kidney into the ureteral orifice, but could not be passed downward to any great length, as the delivered organ formed an angle with the ureter, so a small incision was then made in the ureter itself lower down, and from this point the bougie was readily passed on into the bladder. In doing this the two precautions noted by Fenwick were borne in mind, namely, that the ureteral catheter passed from above