

injured his left side and had passed blood in his urine for several days afterwards. During the past three months blood had appeared in the urine from time to time in sufficient quantity to be easily recognized macroscopically. The rapid growth, the great size of the tumour, its mobility and the appearance from time to time of hæmaturia led to a diagnosis of tumour associated with the kidney, possibly malignant and probably a hypernephroma. The man was in delicate health with markedly sclerosed arteries, and a very weak irregular heart action. He had consulted several physicians at home and in the United States, all of whom had made clear to him the gravity of an operation in a man of his years, and he came to Montreal very anxious to have the tumour removed, if possible, and willing to take any ordinary hazard. On catheterizing the ureters the one in the left side failed to deliver any urine until the catheter was introduced to the renal pelvis when 2 c.c. of clear yellow fluid coming in drops, not spurts, was secured in 15 minutes, while the ureter on the right side delivered 10 c.c. in spurts in the same time. In all about 50 c.c. was secured from the right and 10 from the left. On examining the urines the following results were obtained:—Right.—Amt. 50 c.c. Sp. gr. 1014. Reaction acid. Colour pale. Urea .5 per cent. Trace of albumen. No sugar. Freezing point 1.15. Left.—10 c.c. Sp. gr. 1008. Alkaline. Darker. Urea .1 percent. Large quantity of albumen. No sugar. Freezing point 0.8.

Microscopically a few traumatic blood discs were found in both sides. It was thus seen that the left kidney was secreting little or nothing. What little there was in the pelvis of the left kidney had few of the characters of urine. It was evident that the right kidney was functionally good and in fact that the man was already living with his right kidney alone. Therefore, if the kidney was removed one would have nothing to fear of renal insufficiency. Nephrectomy was performed. The diagnosis was confirmed. The patient made a perfectly smooth recovery. The tumour proved to be a carcinomatous growth, a true Grawitz tumour. The recurring hæmorrhages were due to the perforation of the renal pelvis at one point and the projection in of a portion of the tumour.

In the following case the value of catheterization as a therapeutic as well as a diagnostic agent is well illustrated. A lady, 60 years of age, had for several years recurring attacks of severe renal colic in the left side, the attacks being sufficiently severe to require rather large doses of morphia for their relief. She was admitted to the Hospital with a view to having the stone removed from the left kidney. An attempt