Unusual Pathological and Clinical Features in a Case of Renal Papilloma

BY

WILLIAM HOUSTON, M.D., M.CH., F.R.C.S.
Honorary Surgeon, Bulawayo General Hospital.

The following case is reported chiefly because of the interesting pathological features, but also to call attention once again to the golden rule that all patients with haematuria should be investigated fully.

I was asked to see the patient, a married woman aged 72 years, because her doctor had discovered a mass in her left loin when she had consulted him some three weeks previously. Her only complaint at that time was of increasing lassitude. An excretion pyelogram had shown no excretion of dye on the left side, a fairly large filling defect on the left lateral wall of the bladder, a calcified fibroid of the uterus and several small areas of bone resorption in the lumbar vertebrae, suggestive of secondary neoplasm there.

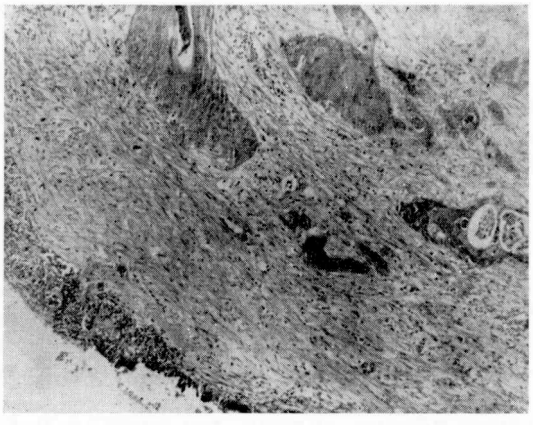

Fig. 1—Showing squamous cell carcinoma in renal tissue.

The patient insisted that her only symptom was increasing tiredness; she admitted some loss of weight, but her appetite was good and she denied any change of bowel habit, any vaginal loss or any urinary upset. However, close questioning elicited the admission that two years previously she had passed "a little blood" in her urine for two days after a fall on her left loin. This had occurred while on holiday, and she had been quite content to accept the local doctor's assurance that the haematuria was due to a "bruised kidney" and that no further investigation or treatment was needed. She had had another mild episode of haematuria some six months prior to my examination, but she attributed this to a "strain" in view of the previous assurance.

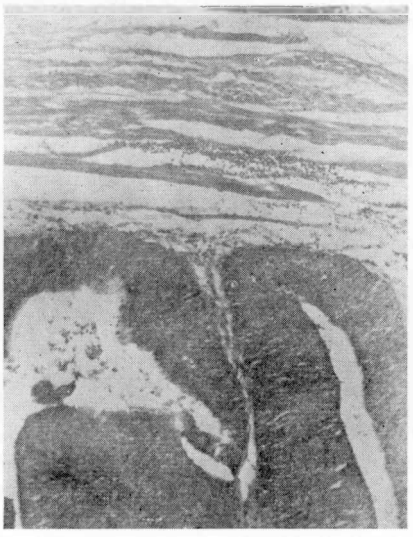

Fig. 2—Showing moderately cellular papilloma in the lumen of the ureter.

Clinical examination showed only a large hard mass in the left loin, which was fairly mobile, but which I felt to be "malignant." Cystoscopy revealed a large collection (about one inch diameter) of apparently simple vesical papilloma around the left ureteric orifice, from which a "worm clot" was being extruded. The left lateral wall of the bladder was normal. Ascending pyelography proved impossible, and a biopsy from the papilloma was reported as showing no evidence of malignancy.

In spite of the biopsy report, I felt that the kidney condition was malignant and inoperable, and I asked my radio-therapeutic colleague to see the patient with a view to treatment. He, however, thought that the mass might well be an old pyonephrosis, in which case radiotherapy would be harmful, and advised exploration. I decided that if exploration was to be undertaken I might as well try to remove the whole tumour, and therefore performed left nephro-ureterectomy, commencing at the bladder and removing a cuff of bladder wall around the left ureteric orifice to allow removal of the intra-vesical papilloma. The condition seemed "simple" here,

and hopefully I proceeded to free the ureter and to complete the nephrectomy. But as the kidney was being exposed it became obvious that a renal neoplasm was present, with considerable peri-renal invasion and metastasis to para-aortic glands. However, the main tumour was freed fairly easily and the complete kidney, ureter and cuff of bladder, with the projecting ureteric papillomata, were removed in continuity.

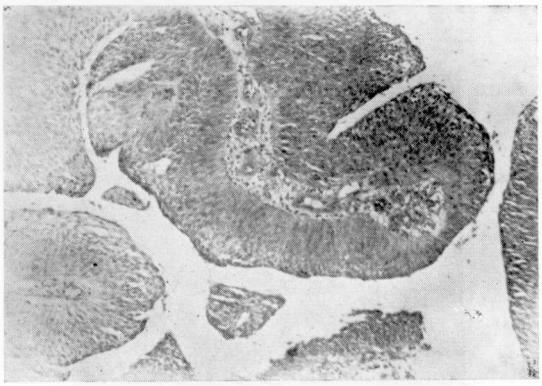

Fig. 3—Showing relatively "simple" papilloma in bladder.

Unfortunately photographs of the specimen were unsuitable for reproduction. Microphotographs (Figs. I, II, III) demonstrate the interesting histological appearances. There is every gradation of cell type, from the malignant squamous cell carcinoma invading the kidney substance and peri-nephric tissues, through the transitional cell carcinoma in the renal pelvis and upper ureter, to the simple papilloma at the lower end of the ureter, including the portion projecting into the bladder.

The pathological sequence was presumably an originally simple papilloma of the renal pelvis with seedlings down the ureter and a gradual onset of malignant change in the "older" parts of the papilloma, finally leading to metaplasia to squamous cell carcinoma there.

The patient died three months later from secondary deposits. One cannot help feeling that if appropriate action had been taken at the time of her first episode of haematuria she might well have been cured.

Summary

(1) A case of renal papillamotosis is reported which showed unusual histo-pathological features.

(2) The clinical course followed emphasises once again that all cases of haematuria *must* be investigated until the causative lesion is found.

(3) The well-known fact that a biopsy may give a misleading impression of the underlying pathological process is well illustrated in this case.

Acknowledgment

I should like to record my appreciation of the work done by Dr. Brian Tulloch in preparing the microphotographs and in elucidating the pathological details.