

## HETEROTOPIC PROSTATIC TISSUE: A REPORT OF AN UNUSUAL CAUSE OF HAEMATURIA IN A BANTU YOUTH\*

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Haematuria is a very common symptom in the Eastern Transvaal because bilharzia is an endemic disease among the Bantu. It is regarded as almost normal by the patients. When the haematuria is severe enough to bring the patient to hospital it warrants more investigation and should not be accepted as a bilharzia problem, as this case illustrates.

### CASE REPORT

A 15-year-old Bantu youth was brought to hospital with a history of slightly painful haematuria of several months' duration. This haematuria was of such severity as to bring the patient's haemoglobin concentration down to 6 G/100 ml. General examination was completely normal apart from the anaemia. Special examination showed a mixed urinary tract infection but no evidence of bilharzia in the urine or on rectal snip. Full blood count, X-ray examination of the chest and IVP were normal.

Cystoscopy and examination under anaesthesia showed gross haematuria and a mass in the bladder with no extension outside the bladder wall.

The patient was transferred and a cystostomy performed. At operation a large tumour was found, measuring 10 × 12 × 4 cm., with slight ulceration at the apex. It was attached to the bladder wall by a 2-3-cm. stalk and situated on the right lateral aspect of the bladder about 3 cm. lateral to the ureteric orifice. As we did not have facilities for a frozen section, and in view of the fact that the patient was very young and the possibility of a benign neoplasm existed, a partial cystectomy was performed. Three weeks later the patient was free from haematuria and was passing urine well.

### *Histology Report on the Tumour*

The tumour is composed of glandular areas and areas of smooth muscle. The glands are of prostatic type and surrounded by a loose fibrous tissue containing a varying number of smooth muscle fibres. They are arranged in lobules which are grouped together into nodules of glandular tissue. There are also areas of smooth muscle without any glands where the smooth muscle fibres form

bundles running in different planes and not organized in any way. This mixture of glandular and muscular nodules is somewhat reminiscent of the structure of a benign nodular hyperplasia of the prostate. The tumour is partly covered by a thin muscle coat and bladder mucosa which is ulcerated in places and chronically inflamed. A few glands of prostatic type are scattered here and there in the mucosa.

'The specimen consists of aberrant prostatic tissue so that it is a congenital malformation and not a neoplasm.'

### DISCUSSION

According to Hamilton-Boyd and Mossman<sup>1</sup> the prostate is derived from a series of endodermal buds in the lining of the primitive urethra and the adjacent pelvic portion of the urogenital sinus in the foetus at about the 55-mm. crown-rump length. These buds grow into the dense surrounding mesenchyme which differentiates into muscle and connective tissue components of the gland. The buds are said to arise from all sides of the urethra above and below the openings of the mesonephric ducts (future ductus deferens) and are arranged into 5 groups: anterior, middle, dorsal and two lateral.

The standard urology texts do not have much to say about congenital abnormalities of the prostate. Campbell's *Clinical Pediatric Urology*<sup>2</sup> remarks that congenital absence of the prostate is rare, hypoplasia is common and congenital prostatic cysts are sometimes seen. Willis<sup>3</sup> reports several cases of aberrant prostatic tissue, namely, in the urethra, vesical trigone, root of the penis, behind the bladder and round the unobliterated lower part of the urachus.

### SUMMARY

A rare cause of severe haematuria in a Bantu youth is presented. This was found to be due to ectopic prostatic tissue growing from the lateral wall of the bladder.

### REFERENCES

1. Hamilton-Boyd, W. J. and Mossman, H. W. (1966): *Human Embryology*, 3rd ed., p. 293. Cambridge: W. Heffer & Son.
2. Campbell, M. (1951): *Clinical Pediatric Urology*, p. 313. Philadelphia: W. B. Saunders.
3. Willis, R. A. (1968): *Brit. Med. J.*, 3, 267.

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