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Haemangioma of the bladder

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VASCULAR tumours of the bladder are rare. Less than fifty cases have been reported in the literature at the time of writing, and few of these have been documented histologically (Fuleihan & Cordonnier, 1969). In this paper a case of cavernous haemangioma of the bladder is presented together with the histological features and results of surgical treatment.

Case report

A 15-year-old boy was referred to hospital with a history of intermittent attacks of gross haematuria since the age of 2 years. The haematuria appeared to be related to physical exertion and, as he grew older, he was able to state that each episode was associated with diffuse back pain. He had been treated successfully in the past by bed rest alone, the haematuria usually stopping within a few days. However, in view of the persisting nature of his symptoms, he was admitted to hospital for further investigation. He admitted no other urological symptoms and his general health was good.

On examination, he was a well-developed Caucasian boy, slightly pale and in no distress. BP 120/70 mmHg and the pulse 78/min. The haemoglobin was 10·2 g/100 ml with a haematocrit of 34%. The urine contained albumin and, on microscopy, two or three red blood cells were seen per high power field. Coagulation studies were normal. The only abnormality seen on the excretory urogram was a filling defect on the right lateral wall of the bladder (Fig. 1). At cystoscopy, a large (2 × 3 cm) bluish-red sessile mass was noted in the right postero-lateral wall of the bladder. There were four similar tumours of less than 0·5 cm in diameter located at the dome. A biopsy of the larger mass was taken and was reported to be 'cystitis with numerous blood vessels'. Three days after cystoscopy, an exploration of the bladder was carried out because of severe, persisting haematuria which was found to be originating from the biopsy site. The large tumour was removed by segmental cystectomy and the smaller lesions were fulgurated. The patient made an uneventful recovery, and on removal of the urethral catheter, the urine

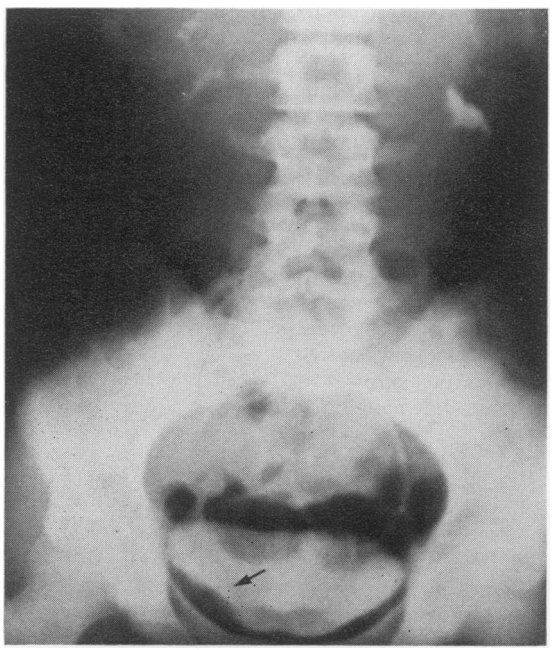

FIG. 1. Intravenous pyelogram. Arrow shows a filling defect on the right lateral wall of the bladder.

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was clear. Three years later, there has been no recurrence of haematuria, and an intravenous pyelogram is normal. Histological examination of the excised tumour showed the characteristic features of a cavernous haemangioma.

Discussion

Vesical tumours are rare in young people, and those of vascular origin are unusual in any age group. The cavernous haemangiomata are congenital tumours. They often increase in size due to growth of the original vessels and also to the formation of new vessels which spread to contiguous tissues (Campbell, 1964; Herbut, 1959). Fuleihan & Cordonnier (1969) pointed out that 65% of these tumours occur in patients less than 15 years old. They are more common among Caucasians (Herbut, 1959). The presenting symptom is usually painless haematuria. The bleeding may be copious, and has even been fatal (Williams & Schistad, 1964). Approximately 20% have associated haemangiomata of the skin (Stanley, 1966).

Diagnosis can be difficult since the cystogram may reveal only a non-specific filling defect. Usually the diagnosis is made at cystoscopy when the tumour is seen with its characteristic bluish-red colour. The lesion must be distinguished from other pigmented conditions such as endometriosis and melanoma. When haemangioma is suspected at endoscopy, a biopsy may be hazardous. The patient should be kept under close observation if this is carried out, and it should be realized that immediate open surgery may be required.

Numerous surgical methods have been employed to treat haemangioma of the bladder, including cystoscopic fulguration (Hamsher, Farrar, & Moore, 1958), transurethral resection (Kahle, Maltry & Vickery, 1942), partial cystectomy (De la Pena, 1949), and subtotal cystectomy (Fuleihan & Cordonnier, 1969). Recurrences may occur when removal has been incomplete or the tumour shows malignant degeneration, otherwise surgical results are excellent. Because the great majority of these lesions are benign, Liang (1958) believes that surgical treatment is too radical, and has described two cases treated with radiotherapy with satisfactory results. He maintains that 2500 r, given in divided doses to avoid cystitis, will be effective in the majority of cases, and that more drastic surgical procedures should be reserved for the radio-resistant lesions.

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