

Discussion

A polypoidal growth protruding from the nostril, urethra or vagina is usually the first sign of a sarcoma botryoides. Occasionally, hematuria or urinary obstruction may draw attention to its presence. Intravenous urography and cystoscopy establish the diagnosis in the tumours arising from the bladder. Microscopically these tumours are nodular fleshy and pearly white in colour. Histologically the cells are embryonal in type and grow in an edematous matrix beneath a largely intact mucosa. They tend to extend along tissue planes into the urethra, and less commonly into the ureters. Spread to contiguous structures, lymph nodes, and distant metastases occur relatively late. Metastases via blood and lymphatic routes and supplementary radiological examinations are needed to evaluate metastatic disease.

Therapy of any tumour should be so designed that the tumour and its local extension are eliminated, metastases are controlled and yet the function of the affected organ is maintained intact. As microscopic metastases are often present in most patients who do not have clinically detectable metastases, many centres have adopted a multimodal approach which supplements surgical excision with radiotherapy and chemotherapy.

For tumours of the bladder extensive resection may be needed to remove the primary tumour and its extension. Urinary diversion will be needed and the stoma of an ileal conduit or a colostomy should be placed away from the site of planned irradiation. Radiation therapy could be restricted to those patients in whom surgical excision is incomplete. In such cases, a high dose (6000 rads over six weeks) may be needed for control of the lesion². The benefits of prophylactic postoperative radiotherapy must be weighed against the known deleterious consequences of high dose radiation therapy, such as radiation fibrosis or enteritis and adhesion of the large and small bowel to the raw surface. Rhab-

domyosarcomas of the embryonal and botryoides type are often radiosensitive so that preoperative radiation may be considered for large tumours, to reduce their size prior to surgery, three to six weeks later. Chemotherapy is recommended for all patients for control of remote metastatic disease. A combination of actinomycin D, vincristine and cyclophosphamide is most commonly employed.

The prognosis depends upon the age of the patient, site of the lesion and the stage, and the histological type. The prognosis is better in young children, with tumours of the urinary bladder, female genital tract and the orbit^{3,4}. Tumours of these areas tend to be locally invasive but do not give rise to early dissemination.

Jaffe and Tefft² in a review of tumours of the bladder and prostate found that the unfavourable histological types were more frequent in patients with more advanced stages of the disease at diagnosis. Jaffe et al⁴ reported 61 children staged according to Pratt staging with survival rates of 46%, 19% and 0% for stages I, II and III respectively. Hence the extent of the disease at diagnosis has an important influence on long term survival. Prognosis is better in children with resectable tumours than in those with regional extension.

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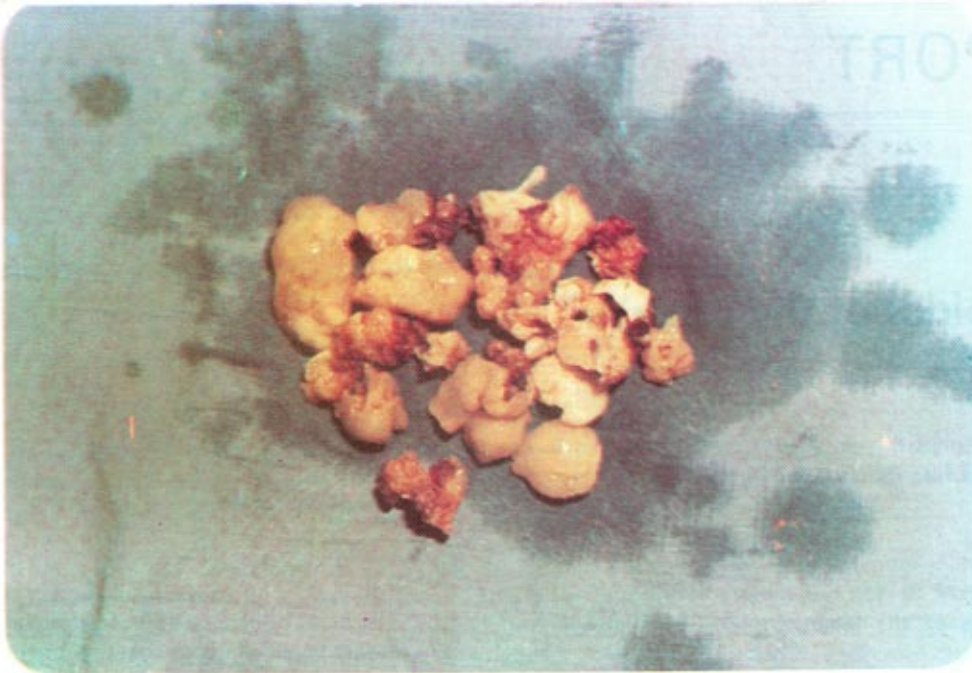


Fig - I : CYSTO SARCOMA BOTRYOIDES

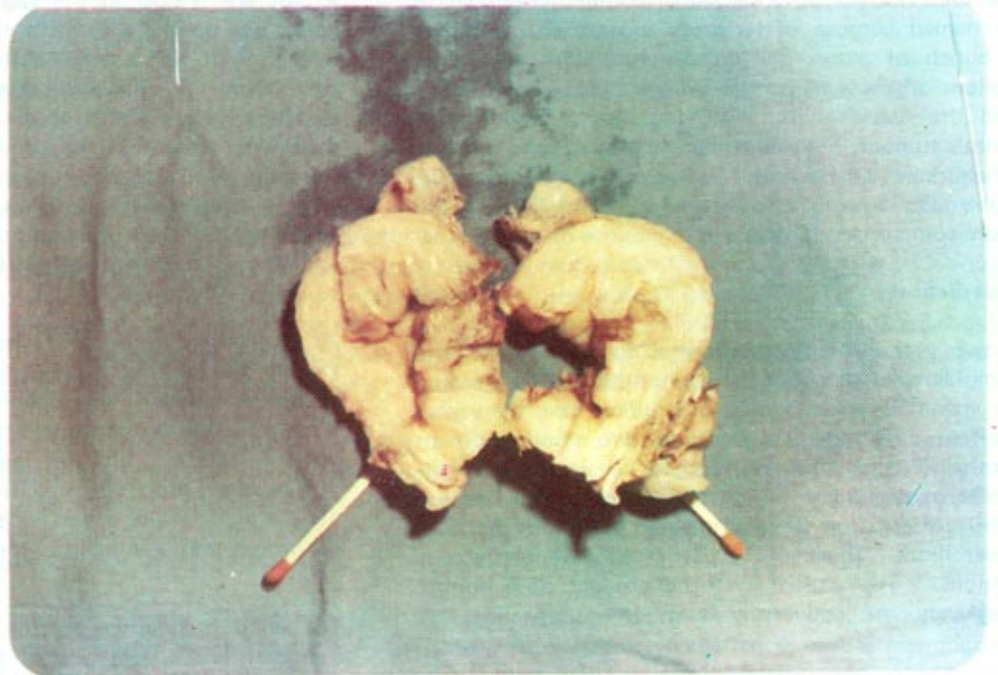


Fig - II : CYSTO SARCOMA BOTRYOIDES

CASE REPORT

Sarcoma Botryoides of the Bladder

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Abstract

A case of sarcoma botryoides of the bladder is described and treatment discussed.

Key words: Sarcoma Botryoides—Bladder

Introduction

Sarcoma Botryoides, a variant of rhabdomyosarcoma is so named because of its gross appearance resembling a bunch of grapes (botryoides-grape like). Found in hollow organs such as the urinary bladder, the vagina and the nasopharynx. Although less common than Wilm's tumour, it accounts for 10% of all solid tumours of children. Of the four histological types, Embryonal, Botryoides, Alveolar and Pleomorphic, the first two are more common in children.

Case Report

A two year old girl was admitted to our unit with the complaints of dysuria for two months, vaginal bleeding for fifteen days and a mass protruding from the vagina for four days. She was well until two months prior to admission when she would hold her lower abdomen whilst micturiting. During these two months she was febrile off and on, and complained of pain in the right lower limb. There was a past history of febrile convulsions. The patient was the product of a normal pregnancy and delivery. During the pregnancy, the

mother was not on any medications. The mile stones were normal and her immunisations up to date. A brother aged 13 and sister aged 8 years are both alive and healthy.

On admission palpation revealed a vague mass in the lower abdomen. A vaginal examination was painful and a clot was visible at the vaginal orifice. The blood count was normal with a Hb of 10.2G/dL a blood urea of 21 mg/dL and a sedimentation rate of 6 mm. in the first hour. A urinalysis showed numerous RBC and 8-10 pus cells per high power field, but no albumin or sugar was present in the urine. Her chest X-ray was normal. An intravenous urogram showed normal functioning kidneys with an irregular filling defect in the urinary bladder. A urine culture revealed *Pseudomonas aeruginosa* sensitive to gentamycin.

At cystoscopy, a grape like mass was seen protruding through the urethra, A similar mass occupied the entire lumen of bladder. Histopathological examination of a biopsy specimen confirmed the diagnosis of cystosarcoma botryoides. She was therefore explored through a transverse suprapubic incision. The bladder and the uterus, to which it was adherent, were removed, and the ureters transplanted into the colon.

The child had an uneventful recovery and was discharged home in two weeks. She was referred to the oncologist for combined radiotherapy and chemotherapy. Three months following surgery the patient is doing well and is clinically free of disease.

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