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Seminoma of an Undescended Testis Presenting As Incomplete Large Bowel Obstruction

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ABSTRACT. Seminoma is the most common neoplasm to arise in the undescended testicle. The clinical presentation of such a tumor is either as an abdominal mass or abdominal pain. A patient with a seminoma developing in an undescended testicle which presented as an incomplete large bowel obstruction is being reported. To our knowledge, such presentation has not been reported previously. The clinical presentation, investigations, treatment modalities, and long term follow-up result are described.

Introduction

The undescended testicles carry a higher potential for malignant transformation than the normally descended intrascrotal testes. This risk is highest among the intra-abdominal testes.[1] The intra-abdominal germ cell tumors arising from an undescended testis may present as painless mass or acute abdominal pain secondary to torsion of the pedicle or hemorrhage within the tumor.[2-5]

We are reporting a patient with a seminoma arising in an undescended testicle who presented in a state of incomplete large bowel obstruction.

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Case Report

A 22-year old male was referred to our unit with a chief complaint of progressive difficulty in passing stools which were frequently covered with bright red blood for the last 8 months. The patient was gradually losing weight. He had been taking laxatives regularly for the last two months. He also suffered left sided lower abdominal pain of moderate severity.

On examination, he looked moderately ill, pale but not jaundiced. His abdomen was slightly distended, soft, and with no palpable masses. He was slightly tender in his left lower abdominal quadrant. Examination of the genitalia revealed absence of the left testicle. Rectal examination revealed at 6 cm from anal verge a hard fungating, ulcerating lesion that bled easily on touch. The lesion involved the rectum circumferentially. A rigid sigmoidoscope could not pass beyond it.

Multiple biopsies were obtained. Histologically, the picture was of a malignant neoplasm compatible with a germ cell testicular tumor with features typical of seminoma (Fig. 1). Immunohistochemical studies (Avidin Biotin technique) showed that the cells infiltrating the stroma were positive for placental alkaline phosphatase, but negative for cytokeratin, epithelial membrane antigen, and leukocyte common antigen. Meanwhile, barium enema (Fig. 2a & b) and computerized tomographic

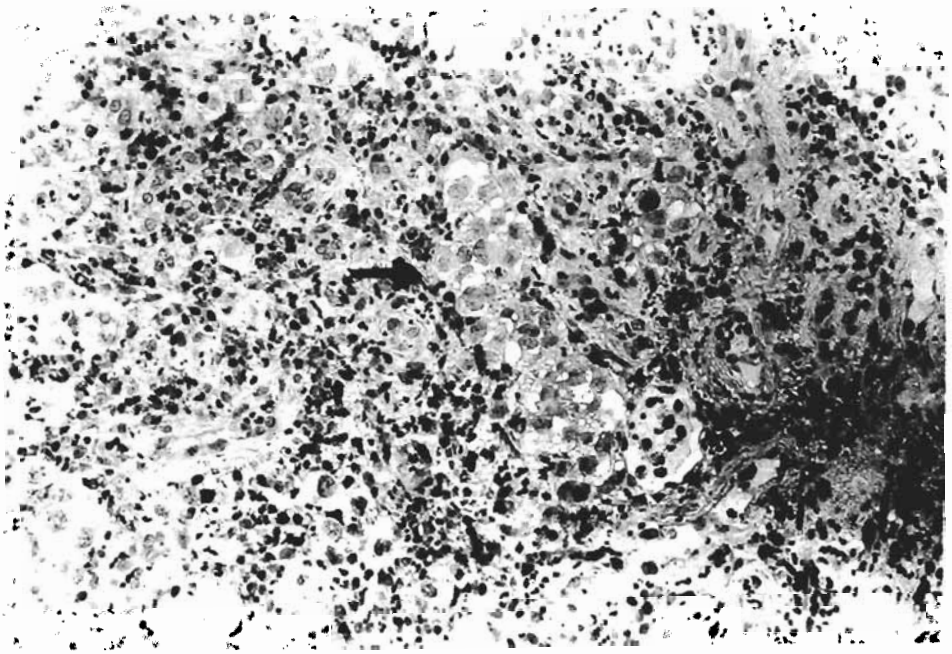
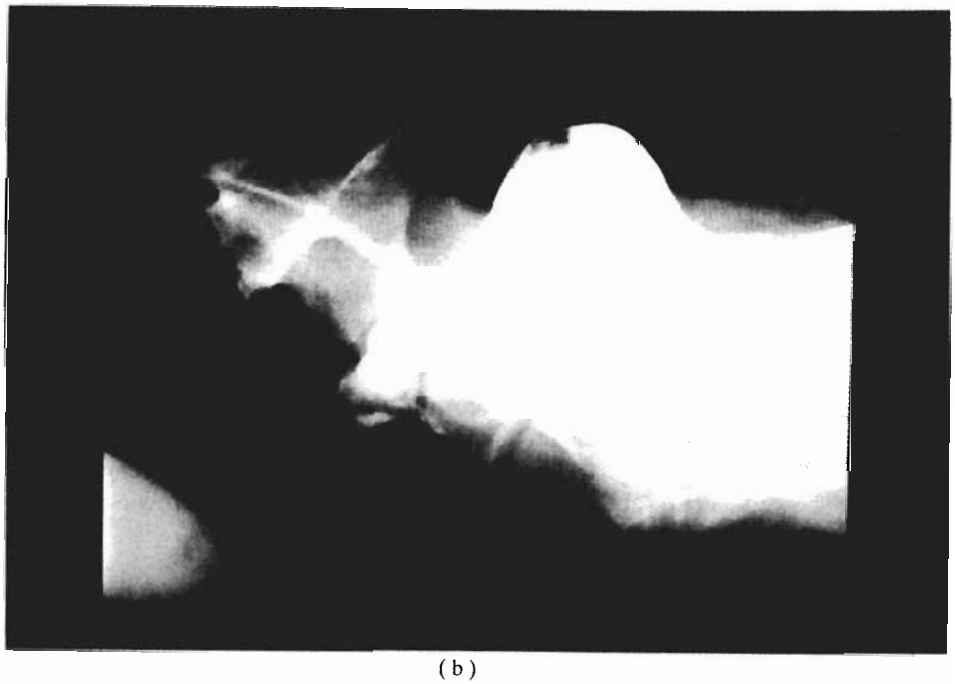


FIG. 1. High power magnification of transrectal biopsy shows groups of large seminoma cells within the stroma which is heavily infiltrated by lymphocytes.

(a)



(b)

FIG. 2a & b. Double contrast barium enema AP + lateral projections showing 10 cm long segment at the rectosigmoid with narrowing and irregularity.

examination of the abdomen (Fig. 3) showed a large retroperitoneal solid mass invading the rectum. The testicular tumor markers, alpha fetoprotein and serum human betachorionic gonadotrophin were within the normal limits as were the renal and liver function tests.

FIG.3. CT scanning image at the upper rectum showing thickening of the wall, irregularities and narrowing of the lumen.

The patient was treated with both radiotheraphy and cyclic courses of platinum based combination chemotheraphy of VAB (Vinblastine-Adriamycin-Bleomycin) protocol. The pulmonary function tests as well as the hemopoietic picture were carefully monitored during chemotheraphy.

He has been followed up regularly every three to six months for the past three years. All his blood work is normal. Repeat CT scans of abdomen showed complete regression of the tumour (Fig. 4). His last sigmoidoscope two and half years after his treatment showed scarring at the area of the tumor with minimal narrowing and multiple biopsies showed no evidence of recurrence.

Discussion

Seminoma is the most common single histologic type of all germinal testicular neoplasms.[6] Primary germ cell tumours originating from undescended testes appear to carry no worse prognosis than those arising in the scrotal testis.[7]

FIG.4. CT scanning image at the same region as Fig. 2 post chemoradiotheraphy showing marked improvement in the rectum. The lumen is still narrowed with some wall thickening.

Approximately 25% of seminoma patients have metastatic disease at their initial presentation.[8] Until recently, because of its high radiosensitivity, seminoma has been primarily treated with irradiation in all stages. Patients presenting with a retroperitoneal tumor > 5 cm in diameter, supradiaphragmatic and extralymphatic metastases are labelled to have an advanced disease. This latter group constitutes 15% of all seminoma patients. It represents an exception in regards to primary treatment since megavoltage irradiation has not proven adequate because of the relatively low cure rate and the high relapse rate.[8] When treated with primary radiotheraphy alone the cure rate for this group of patients is 65% only, this is considered unacceptably low when compared to the cure rate of 93-100% using the same modality for early stages of seminoma. Systemic chemotherapy has become the logical therapeutic alternative and supplement to radiotherapy and the preferred initial treatment of seminoma patients presenting with advanced disease.

Patients with advanced disease initially treated with platinum based chemotherapy programs and irradiation and/or salvage chemotheraphy for residual or recurrent tumors can expect an overall cure rate of 88-92%.[9]

The reported patient three years after his treatment is back to his normal activities and shows no evidence of recurrence.

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ورم منوي خصوي في خصية غير نازلة يظهر على شكل انسداد غير كامل بالأمعاء الغليظة

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المستخلص . إن الورم المنوي الخصوي هو أكثر الأورام حدوثًا في الخصية المتحجرة (غير النازلة) . سريريًا يظهر هذا الورم على شكل ألم أو كتلة بالبطن .

هنا ، تُسجل حالة مريض بورم منوي خصوي تكونت في خصية متحجرة وأدت إلى انسداد غير كامل بالأمعاء الغليظة .

على حد علم المؤلفين هذه أول حالة تسجل على هذا النحو . حالة المريض وفحوصاته وطريقة علاجه ومتابعته سوف تشرح بقدر من التفصيل . *