

Unusual presentation of an intra-abdominal testicular seminoma in an adult

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ABSTRACT

Intra-abdominal testicular tumors are characterized by their rarity and insidious progression. They are often revealed in adulthood in the form of a pelvic mass. This study reports a new case of an intra-abdominal seminoma in a 57-year-old patient which presented with isolated left flank pain, which is an unusual symptom. CT scan revealed a large pelvic mass along with a second retroperitoneal mass that was responsible for left hydronephrosis. Surgical excision of the pelvic mass was performed and the diagnosis of seminoma was confirmed by histopathology.

1. Introduction

Undescended testis is usually detected at the early stages of life and surgically managed by orchiopey at a young age.¹ However, when undiagnosed, an undescended testicle is at increased risk for cancerous degeneration which is revealed in adulthood at advanced stages.²

We report the case of an intra-abdominal seminoma in an adult with an unusual presentation.

2. Case presentation

A 57-year-old male patient without any medical history presented with isolated left flank pain that had been evolving for 2 months. He was an active smoker and has been married for 20 years and had no children. Upon interrogation, the patient reported recent, progressively worsening weight loss and fatigue without notion of hematuria. Abdominal examination was negative for any palpable mass. Genito-urinary examination revealed an empty left scrotum. The right testicle was palpated and had a normal consistency and size. Digital rectal

examination revealed an extra-rectal bulging mass. Alpha-fetoprotein, Human chorionic gonadotropin and Lactate dehydrogenase were all in normal range. Abdominal computed tomography revealed a round, heterogeneous, enhanced 7x7x6 cm lesion located in the recto-vesical pouch which displaced the bladder anteriorly (Fig. 1). Imaging also revealed a second 7x5x4 cm mass of the left retroperitoneal space which invaded the left lumbar ureter and the left renal hilum and was responsible for hydronephrosis (Fig. 1). A cystoscopy was performed to eliminate the urothelial origin of the mass. The bladder mucosa was normal upon inspection. A CT-guided biopsy of the tumor was conducted but the histopathological examination and immunohistochemistry were inconclusive. Exploratory laparotomy was performed via a lower midline incision. Upon access to the peritoneal cavity, a mass of the recto-vesical space was revealed whose shape and color was similar to that of a testicle. The mass adhered to the bladder anteriorly and to the rectum posteriorly (Figs. 2–3). Excision of the lesion was performed after difficult dissection. Post-operative course was uneventful. Histopathology report showed a locally advanced pure seminoma of an ectopic left testicle. The whole mass was sectioned to make sure there

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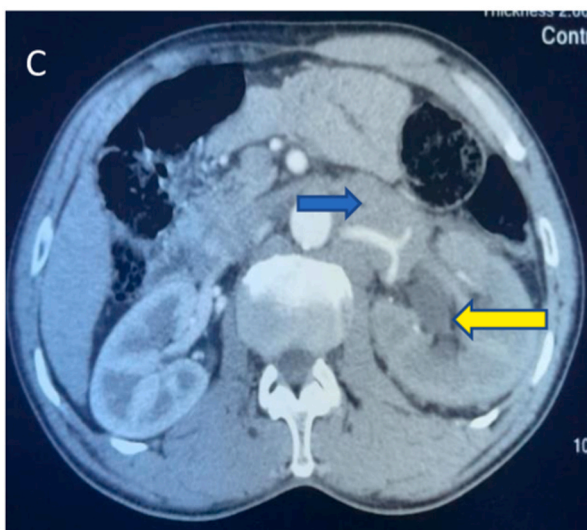
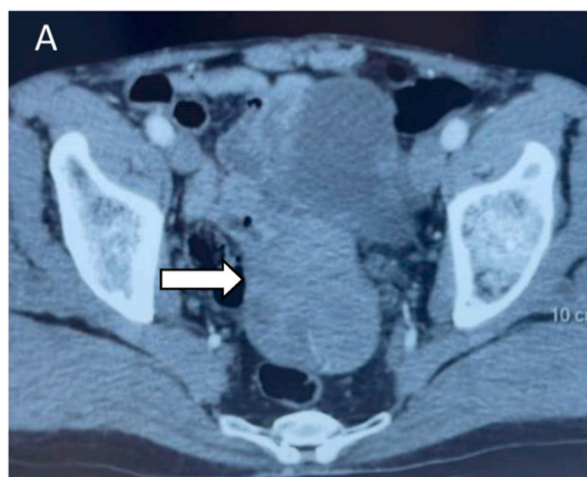


Fig. 1. Axial sections of CT scan depicting a 7cm pelvic mass (1-A, white arrow) and a second retroperitoneal mass (1-B, red arrow) extending to the renal hilum (1-B, blue arrow) and responsible for hydronephrosis (1-C, yellow arrow). (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

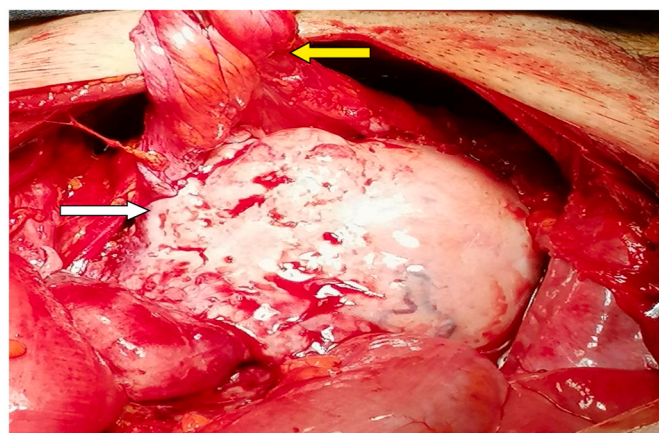


Fig. 2. Perioperative view of the mass (white arrow) adhering to the posterior bladder wall (yellow arrow) anteriorly and the rectum posteriorly. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

were no non-seminomatous components. The surgical margins were positive. After discussing treatment options with the patient, he was referred to an oncology center for chemotherapy. The patient was deceased 3 months post-operatively after a rapid degradation of his condition. He received only one cycle of Bleiomycin-Etoposid-Cisplatin.

3. Discussion

Undescended testis is associated with an 3.7–7.5 increased risk of cancerous degeneration which typically occurs in the 3rd to 4th decade of life.² The intra-abdominal location is particularly rare with less than 10 cases of abdominal testicular tumors being reported before 2019.³ While confined in the abdomen, testicular tumors can reach considerable sizes before being diagnosed. In a series of 10 patients, Gupta et al.² reported a mean tumor size of 9 cm. Our patient’s tumor was within this range and measured 7 cm. Symptoms consist mainly of abdominal pain, abdominal mass, difficulty in micturition and constipation.² In some cases, patients can present with acute complications such as torsion or hemorrhage.⁴ Our patient however presented with isolated left flank pain, probably due to hydronephrosis, which is an unusual symptom in this context. Retroperitoneal lymph node metastasis can typically be responsible for hydronephrosis either by ureteric invasion or compression. More rarely, renal pelvic dilation can occur due to compression from the primary tumor when it reaches a large size.⁵ This rare presentation mode along with the imaging findings posed a differential diagnostic problem. Indeed, the possibility of left upper tract urothelial carcinoma could not be excluded especially when transitional cell carcinoma is endemic in our country. The only clinical finding that pointed to a testicular origin was the empty left scrotum on genital examination. There are no clear guidelines for the management of intra-abdominal testicular tumors due to the scarcity of cases. Surgical excision when possible and BEP chemotherapy are the main components of therapeutic management.³

4. Conclusion

Intra-abdominal testicular malignancies can pose a diagnostic challenge. When presented with a pelvic mass the practitioner should not omit examining the scrotum which could provide crucial etiological information at no cost.

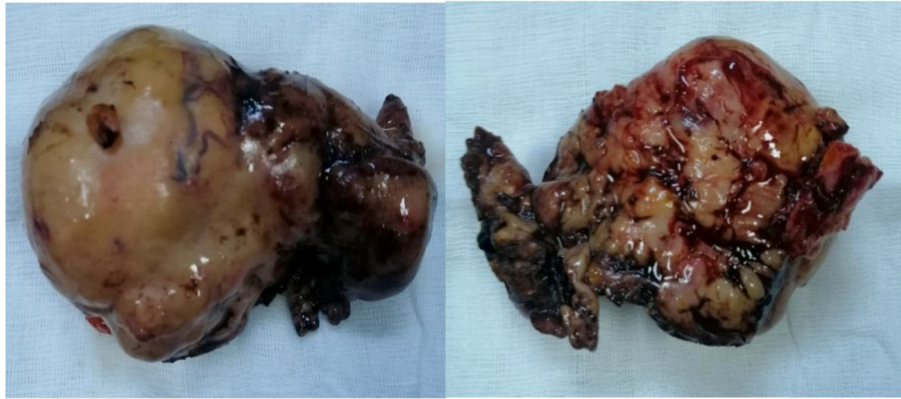


Fig. 3. Macroscopic aspect of the mass after surgical excision.

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