

## Giant intra-abdominal seminoma

*Albsoul M. Nader, MD, MSc,  
Alsmady M. Moaath, MD, FRCS,  
Almasad K. Jamal, MD, FRCS,  
Murshidi M. Mujalli, MD, FRCS.*

The susceptibility to malignancy of an undescended testis is well established. We report a 56-year old patient with giant intraabdominal seminoma of right undescended testis with no lymph node or distant metastasis, and normal left testis. The tumor was completely excised. The late presentation and size of the tumor were discussed. The patient is now 40 months postoperatively with no evidence of local recurrence or metastasis. A 56-year-old man, smoker one pack/day for 40 years, carpenter, married for 2 wives with kids. He was admitted with right upper quadrant and right loin pain of 4 weeks duration. The pain was colicky in nature, mild in severity, radiates to right groin, and is associated with attacks of urinary frequency, and dribbling. He has no hematuria, no fever, chills or rigors, and no history of weight loss or change in appetite. On examination the patient was healthy looking, his head and neck exam were within normal limits, and there was no lymph node enlargement. Chest exam showed no pathology. Abdominal examination showed a pelviabdominal mass 24cm x 18cm, directly beneath the skin, extending above the umbilicus, hard in consistency, and mobile in horizontal axis, there was no hepatosplenomegally, no inguinal hernias or lymph node enlargement. Scrotal examination showed absence of the right testis and normal scrotum **Figure 1**.<sup>1</sup> Investigation showed elevated alkaline phosphatase (10 times the normal), and B-HCG (4 times the normal). Sperm analysis was within normal limits, alpha fetoprotein, prostate specific antigen, and carcino embryonic antigen was within normal limits. The CT scan shows a huge solid mass arising from the pelvis and reaching the upper abdomen with calcification, no liver lesions or para-aortic lymph node enlargement. Intravenous pyelogram: Pelvi-abdominal mass causing lateroposterior deviation of both ureters. Angiogram identified a feeding vessel as a branch from internal iliac artery. Fine needle aspiration was carried out transabdominally and showed a germ cell tumor that was most likely seminoma. The abdomen was explored under general anesthesia through a midline laparotomy, the mass was solid, not adherent to any intra abdominal structure, and the pedicle was identified and divided. The mass was approximately 1850 gram

in weight. No other intra abdominal pathology was found. There was neither para aortic lymph node enlargement nor liver metastasis. The final pathology came as: encapsulated tumor formed in cells arranged in nests separated by fibrous bands, centrally located, prominent nucleoli, abundant clear to acidophilic cytoplasm, with scattered mitotic figures. The fibrous band showed heavy infiltration with lymphocytes, plasma cells, and histocytes. Cryptorchidism was the abnormal formation, and descend of the testis. It is a frequent pathology that affects 2-5% of boys at birth,<sup>2</sup> and approximately 0.8% of infants at one year of age,<sup>3</sup> it can be bilateral in 10% of cases.<sup>4</sup> The defects in embryogenesis of the testis and the exposure to a higher temperature in the abdomen or inguinal canal are the main responsible factors for malignant transformation. Approximately 90% of these tumors are seminomas. Malignancy in an imperfectly descended testis ranges from 9-30%.<sup>1</sup> A history of undescended testis was present in 3.5-14.5% of patients with testicular tumors.<sup>3</sup> The risk of malignancy is 5 times more in abdominal than in inguinal ectopic testis. Congenital upper urinary tract anomalies occur in approximately 13% of cases, commonly encountered anomalies are ureteral duplication, uretero-pelvic junction obstruction, and renal agenesis. Routine intra venous pyelogram in all patients with undescended testis is needed to rule out these anomalies. No other anomalies were present in our case. Presenting symptoms of patients with testicular neoplasia are variable; they may be due to



**Figure 1** - Abdominal mass (black arrow). Empty right scrotum (white arrow).

pressure on surrounding structures such as the bladder or bowel, like in this case, or symptoms and signs of acute abdomen due to trauma or torsion of the tumor. Over all prognosis is relatively bad since these tumors being inaccessible for examination are noticed late after invading the surrounding vital structures, which were not present in our case. Our patient is now 40 months postoperatively, which was followed by cisplatin based chemotherapy, the patient has no clinical, radiological, or biochemical evidence of recurrence or distant metastasis. The largest testicular tumors recorded were by Kamidono et al<sup>5</sup> in 1985 (3500 gm) in an adult with down syndrome. Our patient tumor size is less, but the weight was 1850 gm. We think that our patient was presented to us late because he has no problems related to infertility and impotence, and for other social reasons.

Received 15th December 2008. Accepted 24th January 2009.

From the Department of General Surgery and Urology, Jordan University Hospital, Amman, Jordan. Address correspondence and reprint requests to: Dr Albsoul M. Nader, PO Box 735, Amman 11953, Jordan. Tel +962 (7) 95673425. Fax +962 (6) 5544319. E-mail: albsoul@yahoo.com

## References

1. Dhankar SS, Agarwal RK, Kant K, Dewal DS. Seminoma in atrophic testis (report of 3 cases with review of literature). *J Postgrad Med* 1985; 31: 115-117.
2. Favorito LA, Rachid Filho D, Mannes CH. Hydronephrosis secondary to a seminoma in abdominal cryptorchid testis. *Int Braz J Urol* 2002; 28: 437-438.
3. Woodward PJ. Case 70: seminoma in an undescended testis. *Radiology* 2004; 231: 388-392.
4. Friedland GW, Chang P. The role of imaging in the management of the impalpable undescended testis. *AJR Am J Roentgenol* 1988; 151: 1107-1111.
5. Kamidono S, Takada K, Ishigami J, Furumoto M, Urano Y. Giant seminoma of undescended testis in Down syndrome. *Urology* 1985; 25: 637-640.

## Statistics

Excerpts from the Uniform Requirements for Manuscripts Submitted to Biomedical Journals updated November 2003.  
Available from [www.icmje.org](http://www.icmje.org)

Describe statistical methods with enough detail to enable a knowledgeable reader with access to the original data to verify the reported results. When possible, quantify findings and present them with appropriate indicators of measurement error or uncertainty (such as confidence intervals). Avoid relying solely on statistical hypothesis testing, such as the use of *P* values, which fails to convey important information about effect size. References for the design of the study and statistical methods should be to standard works when possible (with pages stated). Define statistical terms, abbreviations, and most symbols. Specify the computer software used.