



## Case Report

# Seminoma in Undescended Intra Abdominal Testis: A Case Report

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### Abstract

A mass in the lower abdomen in a sexually active man with a cryptorchid testis strongly points towards the diagnosis of malignancy in the abdominal testis.<sup>1</sup> The incidence of testicular tumor is 11 times more in inguinal testes and 50 times more in intra abdominal testes.<sup>2</sup>

Normally, the testes, which are inside the abdomen during gestation, migrate into the scrotum by the time of birth. Occasionally, boys are born with testes that are still in the abdomen or in the groin, not having completed their journey to the scrotum. These undescended testes are at high risk of cancer and should be moved into the scrotum at an early age or removed entirely.

TAJ 2005; 18(2): 131-133

### Case Report

Md. Hanif a young muslim farmer was admitted into the surgical unit IV, Rajshahi Medical College Hospital with complaints of swelling in the hypogastric region for 6 months and in the left lumbar region for four months. He had been suffering from anorexia, weight loss during last three months. The patient experienced dragging pain in the hypogastrium during the last two months.

On general examination the patient was found to be ill looking and mildly anemic. He had been apprehensive as well.

On local examination two intraabdominal masses could be palpated. The hypogastric mass was elongated occupying the whole hypogastrium and extending into the right iliac fossa (12cm x 8cm approximately). The margins were ill defined,

surface was irregular and consistency was firm. The lump was tender as well.

The left lumbar lump was globular in shape, firm in consistency and fixed with underlying structures (8cm x8 cm approximately).

On digital rectal examination rectal mucosa was found to be free without any bulge.

On examination of the inguinoscrotal region the right testis was found to be in place but the left testis was absent from the left scrotal sac.

Our provisional diagnosis was malignant tumor of the left intraabdominal testis.

On ultrasonographic scanning of whole abdomen the hypogastric mass was demonstrated as large complex soft tissue mass (14.7 cm x 10.9 cm) with an hypoechoic oval area at the centre (suggestive of testicular growth). The left lumbar mass was a

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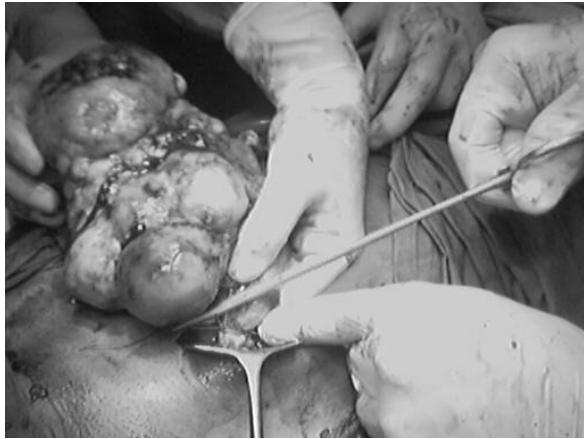
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large solid predominantly echogenic soft tissue mass (11.9 cm x 9.0 cm). The mass was separated from the left kidney, spleen and left lobe of the liver. The growth was suggestive of metastatic lesions of paraaortic lymph nodes.

Interpretations of IVU and Ba-enema X-ray of Colon were normal. All other investigation reports were insignificant.

We went for laparotomy with lower midline incision and found a huge growth occupying the hypogastrum and the right iliac fossa. The growth was adherent to the greater omentum and part of the sigmoid colon which was separated carefully. The growth was found to be on a stalk at the left internal inguinal ring. The growth was separated and excised (Fig.1).

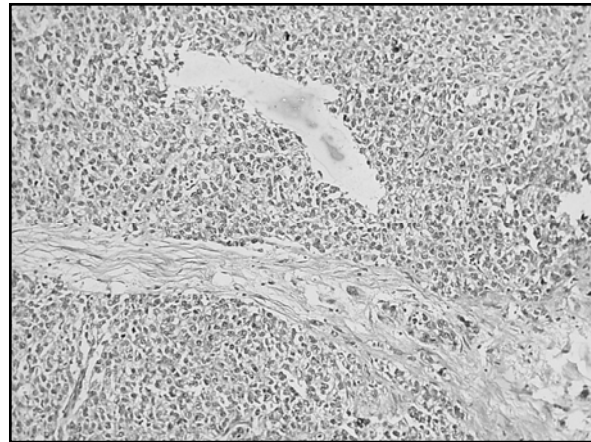


**Fig.1:** Seminoma of intra abdominal left testis during operation.

The abdominal incision was extended upwards and a transverse incision was made to the left from the upper end of the midline incision. The left lumbar mass appeared to be metastatic lymph node which was fixed to the underlying structures. Maximum debulking was done. The abdomen was closed in layers with two drains in situ.

The postoperative period was uneventful. The histopathological examination of the hypogastric mass revealed Seminoma of testis (Fig.2) and that of left lumbar mass was seminoma as well.

After three weeks the patient was subjected to combination chemotherapy in under supervision of oncologist.



**Fig. 2:** Photomicrograph of intra abdominal left testicular tumour- seminoma.

## Discussion

Cryptorchidism is a known cause of testicular tumor. The position of the undescended testis is related to the likelihood of carcinogenesis with the intra-abdominal location having the highest risk for malignancy.<sup>3</sup> The cause of carcinogenesis is still an enigma. A high intra-abdominal temperature has been incriminated as the cause of carcinogenesis in the testis. There may be a decrease in the spermatogenesis, Leydig cell abnormality, and delay in the development of the Sertoli cells in the testis leading to infertility<sup>4,5</sup> In our case, there was no evidence of sterility due to the testicular malfunction and the patient has three children.

Painless enlargement of the testis, or abdominal mass, is the common mode of presentation in a cryptorchid testis.<sup>6</sup> Rarely, an abdominal testicular tumour can cause acute abdomen, massive abdominal mass, pain, and haematuria because of adjacent visceral infiltration.<sup>7, 8</sup> Our patient had no such complication

The management of the contralateral testis in cryptorchid patients is controversial and there are no firm guidelines for their management. About 5%-20% of patients with a cryptorchid testis develop a testicular tumour on the opposite, normally descended, testis.<sup>9</sup> Some authors suggest prophylactic orchiectomy of the uninvolved testis as the preferred option rather than stringent follow

up of unreliable patients.<sup>6</sup> With all available information and facilities we declined to manipulate the opposite normal looking testis.

Dramatic improvements in survival have resulted from the combination of effective diagnostic techniques, improvement in serum tumor markers, effective multi-drug chemotherapeutic regimens and modifications of surgical techniques during last twenty years. This patient, with stringent follow up, is expected to have a very good prognosis.

### Conclusion

In conclusion, the abdominal variant of cryptorchid testis is rare and carries a high risk of malignant transformation to seminoma. Very rarely they can affect the nearby viscera presenting as acute abdomen. Primarily the parents, then the school medical officers and finally the patients himself must be aware of undescended testes and address the problem seriously. An undescended testis, whenever possible, must be brought down into its normal scrotal position within school going age.

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