

# A Case Of Teratocarcinoma In Abdominal Testis: A Case Report

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## Citation

L Chandrasekharan, T Abdl Ghaffar, M Venkatramana, S Rath. *A Case Of Teratocarcinoma In Abdominal Testis: A Case Report*. The Internet Journal of Radiology. 2004 Volume 4 Number 1.

## Abstract

Testicular tumors are strongly associated with cryptorchidism. The higher the level of arrest during the descent, greater is the risk. Though not as common as seminomas, teratocarcinomas is the second common germ cell tumor in undescended testis. We report a case of teratocarcinoma in a young male with bilateral undescended testis .

## INTRODUCTION

Testicular tumors are strongly associated with cryptorchidism , more so with intra abdominal testis. We report a case of teratocarcinoma in a young male with bilateral undescended testis . We discuss about teratocarcinoma ( NSGCT) in intra abdominal testis with a review of literature.

## CASE REPORT

A 25 year old man presented with vague lower abdominal pain, dysuria and fullness in lower abdomen of about ten days duration. Examination revealed a lower abdominal mass, which showed mild tenderness. Scrotal sacs were small and empty. The left testis was palpable at the root of the scrotum. The right testis was not palpable. There were scars in the inguinal regions consistent with the history of bilateral inguinal exploration in childhood. He had oliguria and elevated serum urea and creatinine levels. Lab investigations showed elevated Serum B-HCG (1500mIU/ml) ,Serum AFP (> 300 IU/ ml) and LDH(700 Units/l).

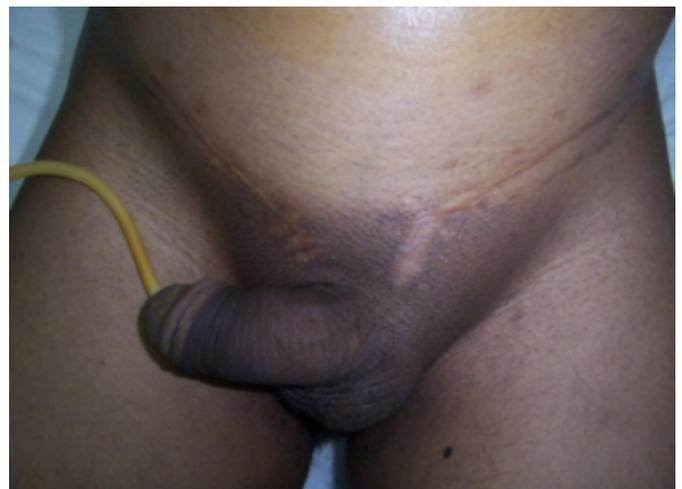
## IMAGING

Ultrasound showed a large, well defined solid mass with cystic changes occupying the entire pelvis and extending up to the umbilicus .It extended into the iliac fossa and lumbar regions bilaterally. No calcifications were seen. It was avascular on Color flow studies. .The mass measured 15 x 15cm. Bilateral hydronephrosis and ascites was noted. Scrotal sacs were empty bilaterally. Left testis was seen at the root of scrotum. Right testis was not identifiable . Chest X-ray was unremarkable. C.T. Scan of the abdomen and

pelvis showed a large solid mass with multiple cystic spaces within. No calcification or hemorrhage seen. The mass measured 16 x15 cm. and occupied the entire pelvis, extending into the iliac and lumbar regions bilaterally, and up to the umbilicus superiorly. The mass did not show any enhancement after contrast administration. No retroperitoneal adenopathy seen. There was bilateral hydronephrosis and ascites.

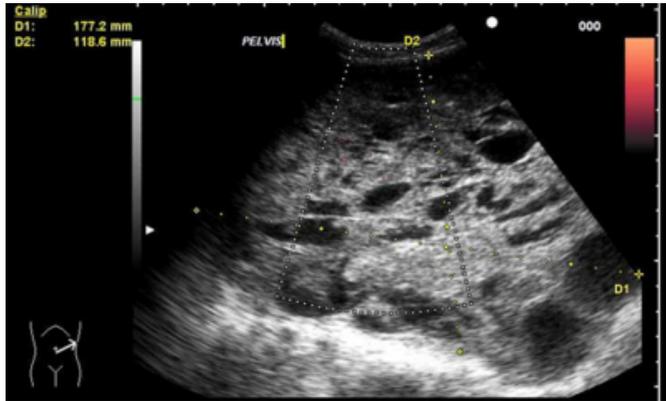
## Figure 1

Figure 1: Clinical photograph showing empty scrotal sacs and bilateral inguinal exploration scars.



**Figure 2**

Figure 2 : US shows large avascular, abdomino pelvic solid mass with multiple cystic changes.



**Figure 3**

Figure 3 : US shows the pelvic component of the mass adjacent to the emptied urinary bladder



**Figure 4**

Figure 4 : CECT of abdomen shows the nonenhancing mass and ascites



**Figure 5**

Figure 5 : CECT shows the mass occupying the entire pelvis.



**Figure 6**

Figure 6: CT scan shows left testis at the root of the scrotum.



**DISCUSSION**

During fetal development, the testis develop in the abdomen and later descend into the scrotal sac in the 3rd trimester, usually between 28 to 32 weeks . During the descent , it may be arrested anywhere along its tract (cryptorchidism) or may migrate into an abnormal position (ectopic testis).The most common sites of undescended testis are high scrotal (50%), canalicular (20%) and abdominal (10%), bilateral (10%).(1) The higher the testis is located (abdominal vs inguinal canal), the greater the risk of malignancy. The risk is greatest in cases of bilateral cryptorchidism(2) .Intra abdominal cryptorchidism has 20-40 times higher incidence of

malignancy than the general population.(3 )

Testicular cancer is more frequently seen on the right side, similar to greater incidence of right sided cryptorchidism. Tumor in an abdominal testis is more likely to be seminoma, and tumors in testes previously corrected by orchipexy are more likely to be nonseminomas (4)

Orchipexy does not alter the risk of malignancy. Teratocarcinoma, which is a combination of teratoma and embryonal carcinoma forms about 25% of all testicular tumours. They are predominant among the mixed type of tumours.(5) They occur mainly between the ages of 25 and 35 years. Doubling time of testicular cancer is estimated to be 10- 30 days. (6)

Adult teratomas may have a propensity for metastases. Approximately half of patients with non seminomatous tumors present with metastatic disease.(4)

On Ultrasound most GCTs are solid, hypoechoic tumors. Cystic degeneration may be seen representing necrosis and hemorrhage. CT and MRI shows heterogenous soft tissue mass. and retro peritoneal lymphadenopathy. CT shows calcifications better and MRI is superior for detecting hemorrhage. Imaging and laboratory studies (AFP and B-HCG)are quite useful in suggesting the diagnosis.

Exploratory laparotomy and subsequent pathological examination is diagnostic (7)

### CONCLUSION

Though not as common as seminomas, possibility of NSGCT should be considered in the diagnosis of abdominal mass in patients with cryptorchidism.

Imaging and laboratory investigations play an important role in narrowing down the diagnosis.

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