

# CASE REPORT

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## TORSION OF MALIGNANT UNDESCENDED RIGHT TESTIS- DIAGNOSTIC DILEMMA- A CASE REPORT

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**ABSTRACT:** Cryptorchidism or undescended testis is the common problem in pediatrics age group. The complications of intrabdominal undescended testis are at the risk of malignant transformation and propensity of torsion. The differential diagnosis for a right iliac fossa mass is appendicular mass, carcinoma caecum, mucocele of appendix or mesenteric cyst. Testicular tumor presenting as right iliac fossa mass in an adult is unusual. We report a case of torsion right intra-abdominal malignant testis diagnosed only after the surgery.

**KEY WORDS:** Right iliac fossa mass, appendix, testis, torsion, seminoma testis.

**INTRODUCTION:** Undescended testis is one of the most common congenital anomalies at birth, affecting up to 3 % of full-term male newborns<sup>1</sup>. Cryptorchid testicular position is most simply described as intraabdominal, Intracanalicular, extracanalicular. Undescended testes are typically found in intracanalicular locations, but a small number of cases occur intraabdominally<sup>2</sup>. The intrabdominal testis usually located just inside the internal ring is liable for torsion and may present as acute abdomen.<sup>3</sup> 64% of adults with torsion in an undescended testis had an association of germ cell tumor.<sup>2</sup> We present a case of right iliac fossa mass clinically diagnosed as appendicular mass intraoperatively suspected as mucocele of appendix and histologically confirmed to be malignant undescended right testis with torsion. The diagnostic dilemma is the prior history of scrotal surgery.

**CASE REPORTS:** A 30 year –old man, married father of two children presented with history of recurrent lower abdominal pain, anorexia, on and off vomiting for 1 month. The symptoms were not relieved by the conservative management. The bowel and bladder habits were normal. The patient had history of scrotal surgery at the age of 5 year. On examination patient was febrile, pulse rate 92/min, regular, no lymphadenopathy. There was an ill-defined tender lump of 8 cm x 8 cm palpated at right iliac fossa and hypo gastric region. Liver and spleen was not palpable.

A scar mark was present over right hemiscrotum with absent right testis. Digital rectal examination revealed no abnormality. Routine blood investigation shows leucocytosis and high neutrophil count. Abdominal sonogram and contrast-enhanced computerized Tomography of abdomen (fig-1) demonstrated a well-defined iso to hyper dense mass of size 8.7cm x 8.5cm with air within the mass, extending from right iliac fossa to pelvis, lying superior and anterior to the bladder. The impression was a solid mass/bowel mass with the possibilities of Mucocele of appendix or Mesenteric cyst. Diagnostic laparoscope and then lower midline laparotomy was done. The laparotomy finding was twisted cystic-well circumscribed mass present over right iliac fossa extending to pelvis with a stalk attached to appendix. The operative diagnosis was mucocele of appendix. (fig- 2) The twisted mass along with appendix was removed (fig 3). Excised specimen was subjected for histopathological examination. The histological picture was in favor of seminoma testis

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developing in twisted undescended right testis. The appendix also showed features of acute appendicitis. The Final diagnosis was torsion of intra-abdominal malignant right testis. Post-operatively the patient was reevaluated. The levels of alpha fetoprotein and beta HCG were within normal limits. The X-ray Chest showed no evidence of metastasis and CECT scan whole abdomen revealed no evidence of paraaortic lymphadenopathy or liver metastasis. The patient was referred to the medical oncology for further evaluation.

**DISCUSSION:** The increased susceptibility of the abdominal testis to undergo torsion is the result of a developmental anatomic abnormality between testis and its mesentery.<sup>2</sup> Malignancy and torsion are recognized complications of torsion of testis. However torsion of intra abdominal testis is rare<sup>3,4</sup>.

The acute torsion of an intra abdominal testis may mimic clinically appendicular mass, mesenteric cyst, or carcinoma caecum<sup>5,6</sup>. The previous history of right scrotal surgery, without right testis made a diagnostic dilemma in our present case.

CECT abdomen did not clarify the issue sufficiently to establish a definite preoperative diagnosis.<sup>7</sup> Hence a high index of suspicion must be maintained whenever there is abdominal pain, mass and undescended testis. The surgical history and imaging studies may not clarify a confusing clinical picture.<sup>7</sup> Review of literature revealed 64 % adults with torsion in an undescended testis had an associated germ cell tumor, usually seminoma.<sup>8</sup> Although the clinical presentation varied, most patients had recent onset of lower abdominal pain associated with tenderness and a mass. Patients almost always present with an absent scrotal testis on the involved side, and not infrequently reported previous surgery thought to be an orchidectomy.<sup>9</sup>

**CONCLUSION:** Diagnosis of an intra-abdominal testicular torsion is rare. A high index of suspicion must be maintained whenever there is abdominal pain and undescended testis even with history of prior scrotal surgery. The clinical history and radiology may not clarify a confusing clinical picture.

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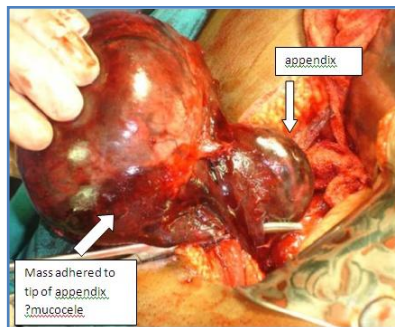
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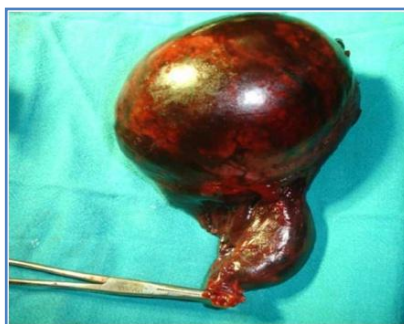
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**Fig.1: Contrast enhanced CT lower abdomen showing the mass lesion**



**Fig. 2: laparotomy- appendix with the mass**



**Fig. 3: Resected specimen-postop HPE- seminoma testis**

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