

Emergency Laparoscopic Orchiectomy for Intra-Abdominal Testicular Torsion- A Case Report

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INTRODUCTION

Undescended testis (UDT) occurs in 1-4% of full-term neonates and in up to 45% of preterm neonates.¹ Despite increased susceptibility of torsion in undescended testes, this is a rare condition and a high clinical suspicion is needed to diagnose this emergency. Ultrasound and other imaging modalities are not absolutely reliable for evaluation of torsion in UDT. In this case report we used laparoscopy to diagnose torsion in the patient with UDT and find a cure.

CASE REPORT

The patient was an eighteen-year-old male, a known case of left abdominal UDT, who was admitted to emergency service with left lower abdominal pain. The pain had started suddenly seventeen hours before arrival to hospital. The pain was sustained, localized in the left lower quadrant of abdomen, without radiation to other areas. The patient had nausea and vomiting. There was no change in the color of the abdominal skin and no visible mass in the pain area. Vital signs were normal and no fever was detected. In deep palpation, there was moderate tenderness without rebound at the left lower quadrant of abdomen. Digital rectal examination was normal and there was no evidence of gastrointestinal bleeding. Cell blood count revealed no leukocytosis and there was no pyuria or microscopic hematuria in the urine analysis. Plane and upward abdominal X-rays did not show any positive findings for gastrointestinal prob-



Figure 1. Gangrenous feature of intraabdominal testis



Figure 2. The gangrenous intraabdominal testis and spermatic chord

lems. Ultrasound evaluation of abdomen revealed an intra-abdominal testis in the left side, close to the internal inguinal ring. Arterial blood flow which was suggestive of torsion of the intra-abdominal testis was not detected in the organ. After primary preparation, the patient underwent laparoscopy and an intra-abdominal testis appeared posterior to the internal inguinal ring with gangrenous appearance (Figures 1, 2). Laparoscopic orchiectomy was conducted. The pathology report confirmed our primary diagnosis and indicated necrotic testicular tissue.

DISCUSSION

There is a greater risk of testicular malignancy and infertility for UDT.⁽¹⁻²⁾ Intra-abdominal testes are more susceptible to malignancy than inguinal UDTs.⁽³⁾ Torsion occurs more commonly in the UDTs and it has been mentioned to be even up to 13 times higher than normal testes in some studies.⁽⁴⁻⁵⁾ Malignancy is common in those UDTs manifested with torsion.

Torsion of UDT was described by Delasiauve in 1840, Curling in 1857, and Ormond in 1923.⁽⁶⁾ Undescended testes are susceptible to torsion perhaps by mechanism of abnormal contractions of cremaster and the greater relative broadness of testis than its mesentery,^(7,8) but the mechanism of torsion has not been clearly defined yet.

Laparoscopy is the golden standard method for the diagnosis and treatment of intra-abdominal testis. It is wise to use laparoscopy to diagnose torsion in emergency situations. According to this idea, we used laparoscopy for such purpose in this

case. As far as we are aware, there are two reports of using laparoscopy for this purpose up to now.^(9,10) However, before using laparoscopy, we should rule out other surgical causes of abdominal pain such as acute peritonitis. By laparoscopy, we can get a direct surgical view and better vision of the intra-abdominal pathology, and additionally, if the testis is viable, therapeutic management will be a possibility by performing laparoscopic orchiopexy. Prophylactic orchiopexy of testis in the contralateral side is controversial though recommended in some articles.

Unfortunately, the majority of cases of torsion in intra-abdominal testis are diagnosed when the golden time for saving testis has passed and such patients usually undergo orchiectomy because of nonviable testis. Teaching the warning signs of torsion to the patients and their parents, will help with early diagnosis and pave the way to save at risk testicle.

CONFLICT OF INTEREST

None declared.

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