

External supravesical hernia is a rare type of abdominal wall hernia: A case report

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Abstract

The first case of external supravesical hernia was made in 1804; but it is so rare that it is very difficult to find any case reported in Bangladesh. Here a case of external supravesical hernia is described in a male who was presented with a left sided direct incomplete reducible inguinal hernia. This report aims to review and discuss the surgical anatomy of these rare supravesical hernias and calls attention to the confusing presentation and treatment of this condition.[J Shaheed Suhrawardy Med Coll, 2015;7(1):40-41]

Key Words: External; supravesical hernia; abdominal wall hernia

Received: July 2014; **Revised:** October 2014; **Accepted:** November 2014

Introduction

Supravesical hernia is a rare variety of abdominal wall hernia¹. There is protrusion of abdominal content through supravesical fossa². It has two types - external Supravesical hernia and internal Supravesical hernia¹⁻³. External one is more common and difficult to differentiate from inguinal hernia³⁻⁵. It is very difficult to diagnosed pre-operatively and most of the case was diagnosed during operation^{1,5,6}. We were reporting this case who presented with groin hernia that was identified as external variety of supravesical hernia on laparoscopy and treated successfully with transabdominal preperitoneal (TAPP) repair.

Case report

A 45 years gentleman came to us on August 2013 with history of swelling in the left groin for 8 months. On examination, the patient was found in good general condition with a pulse rate of 90/ min, a blood pressure of 120/80 mmHg and a temperature of 37.5°C. An uncomplicated inguinal hernia was also found. The patient's renal function and other blood tests were all normal. Our working diagnosis was left sided direct incomplete reducible inguinal hernia. We prepared the patient for laparoscopic repair and our planned was transabdominal preperitoneal repair (TAPP). During

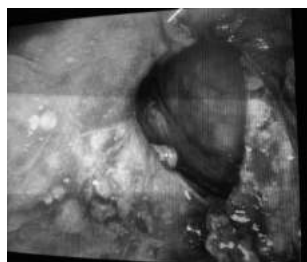


Figure 1: Large Defect at the supravesical fossa

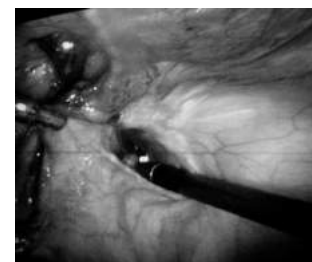


Figure 2: Grasping forceps on Defect

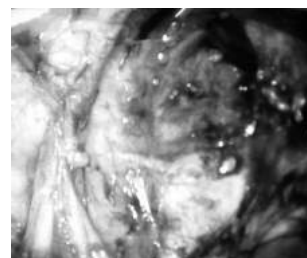


Figure 3: Defect after dissection



Figure 4: Placement of Mesh

laparoscopy we found it was not an inguinal hernia. There was a big gap between median and medial umbilical ligaments on the left sides. It was an external type of supravesical hernia. Then sac was reduced into the peritoneal cavity and a mesh was placed to cover the

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opening and TAPP was completed successfully. Post operative period was uneventful and the patient was discharged on 2nd postoperative day.

Discussion

The first case of external supravescical hernia was reported by Sir Astley Cooper in 1804^{1,4}. There have been fewer than 100 cases reported in the literature and probably this is the 1st reported case in Bangladesh. The supravescical fossa is a triangular area of the abdominal wall bounded medially by the remnants of the urachus (median umbilical ligament), laterally by the left or right umbilical artery (medial umbilical ligament) and inferiorly by the peritoneal reflection passing from the anterior abdominal wall to the urinary bladder^{3,7-8}. Thus there are two supravescical fosse, one on each side of the urachal ligament^{6,8}. As a result of loss of the integrity of transverses abdominis muscle and fascia transversalis a hernia is developed^{3,8}. The sac may protruded through abdominal wall and form an external supravescical hernia or pass downward into space around bladder and form an internal supravescical hernia^{1,3,8}.

The internal hernia in turn can be prevesical, paravesical, lateral or intravesical. Internal hernia usually presented with intestinal obstruction or chronic abdominal pain and may also present with urinary symptoms^{1,3,8}. But most patient with External supravescical hernia presented with inguinal swelling and commonly diagnosed as direct inguinal hernia or femoral hernia^{3,4,6}. Presenting case also preoperatively diagnosed as left sided direct incomplete reducible inguinal hernia. A preoperative diagnosis of these conditions is very unusual^{1,6}. Most of the cases were diagnosed per-operatively^{1,5-6}. In 1995 first time a external supravescical hernia was diagnosed by laparoscopy^{1,9}. Diagnosis of presenting case was also made by laparoscopy.

CT scan may suggest the diagnosis by showing the herniated loop so near the bladder that it actually distorts the wall^{3,6}. Magnetic resonance imaging (MRI) and cystoscopy may also help in preoperative diagnosis¹.

Treatment of supravescical hernia is surgical and its objective is to reduce the herniated viscera and then close the defect with non absorbable suture. Most of authors are against the attempts of excision. There is some report on laparoscopic repair of external supravescical hernia. In this case the hernia was repaired by laparoscopically with proline mesh.

Conclusions

External Supravescical hernias are rare variety of abdominal wall hernia and commonly confused with inguinal or femoral hernia. The diagnosis is often made intraoperatively. Some investigation such as a CT scan or MRI may help for preoperative diagnosis. But Laparoscopy can confirm the diagnosis and also used for treatment.

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