

INGUINAL SWELLING DUE TO RARE EXTERNAL SUPRAVESICAL HERNIA - A CASE REPORT

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ABSTRACT

BACKGROUND

Supravesical hernia is rare. The first case of supravesical hernia, according to Keynes, was reported by Sir Astley Cooper in 1804. It is of two types: internal and external supravesical hernia. Here we are presenting a 76-year-old male presented with a left inguinal swelling, which was diagnosed as external supravesical hernia per-operatively.

KEYWORDS

Supravesical Hernia, Inguinal Swelling.

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BACKGROUND

Supravesical hernia is a rare phenomenon where the intra-abdominal content either intestine or omentum protrudes through the supravesical fossa, a triangular area bounded laterally and above by median and medial umbilical ligaments and below by the peritoneal reflection that passes from the anterior abdominal wall to the dome of the bladder. A hernia starting in this fossa may protrude through the abdominal wall as a direct inguinal hernia (External supravesical hernia) or it remains within the abdomen, passing into spaces around the bladder (Internal supravesical hernia).

CASE REPORT

A 76-year-old male presented with complaints of painful swelling over left groin for the past 2 weeks. No history suggestive of intestinal obstruction, urinary abnormalities, malignant or inflammatory pathology. On examination patient was conscious, oriented, afebrile and well hydrated; BP 190/110 mmHg, PR 72/min. CBC, RFT, Serum electrolytes, LFT were within normal limits. A swelling over left inguinal region 5 X 5 cm present ½ inch above and lateral to pubic tubercle, no warmth with mild tenderness, irreducible, no cough impulse with restricted mobility. USG Abdomen showed left-sided inguinal hernia. Provisionally diagnosed as left-sided irreducible indirect inguinal hernia/left-sided encysted hydrocele of the cord. Under local anaesthesia left inguinal incision was placed, incision deepened in layers, on opening external oblique a 3 X 3 cm external supravesical hernia sac identified 2 cm above and lateral to pubic tubercle. The hernia sac was inadvertently opened, which contains small intestine as content which was healthy with a narrow neck of 1.5 cm in diameter. Content was reduced, sac closed with 2-0 vicryl and peritonealised, defect closed with 1-0 prolene. Left

herniorrhaphy done and wound closed in layers. Post-operative period was uneventful and patient discharged on fourth post-op day.

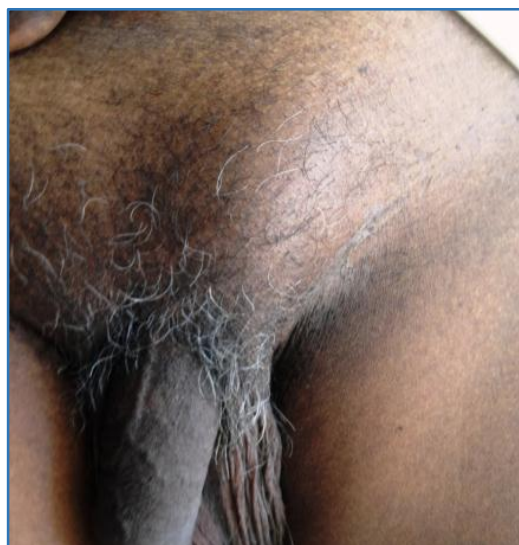


Figure 1. Pre-Op Picture

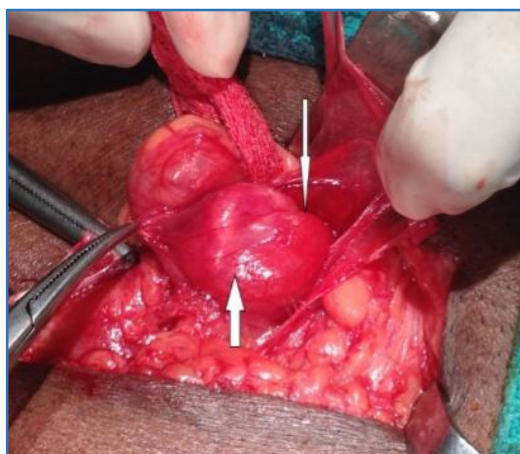


Figure 2. Intra Op. Picture showing Opened Sac with Narrow Neck (Thin Arrow), Small Intestine as Content (Thick Arrow)

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DISCUSSION

The supravescical fossa is the area of abdominal wall between remnant of urachus (Median umbilical ligament) and remnant of left or right umbilical artery (medial umbilical ligament). The inferior boundary is formed by a peritoneal fold, part of which is the transverse fold of the bladder (Fig. 3). The fossa may go on to form a deep diverticulum. These supravescical diverticula may herniate in several directions. Those in the superior portion of the supravescical fossa usually result in external hernias, while those arising in the inferomedial part may become lodged in the prevesical space of Retzius to form an internal hernia. The internal hernia in turn can be prevesical, paravesical, lateral or intravesical.¹⁻³ When the bladder apex is weakened by a defective closure of the urachus, the diverticulum may herniate directly into the bladder forming intravesical type of internal supravescical hernia.^{2,3}

Pre-operative diagnosis of this condition is very difficult. In our case, the diagnosis was made only during laparotomy. In patients presenting with small bowel obstruction without any history of previous abdominal operations and no obvious external hernias are detected, pre-operative investigations may be very helpful in diagnosing this condition. CT⁴ or MRI⁵ scan may possibly diagnose this condition.

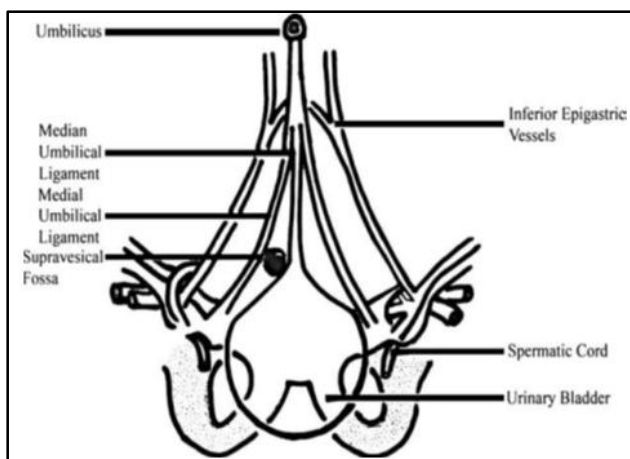


Figure 3. Diagram showing Anatomical Location of Supravescical Hernia

Cystoscopy² may show a tunnel shaped deformity in the bladder wall. Supravescical hernia can be seen on herniography⁶ and in the consecutive series of 1000 cases Gullmo described 183 external and 1 internal supravescical hernia. However, this method of investigation is relatively new and not widely available, which may explain the paucity of reports of supravescical hernias. This condition has been reported to be diagnosed and treated laparoscopically.⁷ The

majority of the recorded cases have been subjected to an exploratory laparotomy. The treatment is release of the intestinal obstruction and closing the hernial defect. Most authors advise against attempts to excise the hernia sac and think that freshening the edges of the ring with closure of the defect using continuous or interrupted stitches with non-absorbable sutures is sufficient.^{2,8}

CONCLUSION

The present case illustrates the diagnostic dilemma in an inguinal swelling that is difficult to diagnose pre-operatively.⁸⁻¹¹ We suggest that a supravescical defect incidentally found during routine surgical exploration of the pelvis should be sutured to avoid incarceration of the bowel. The case reiterates the difficulty in diagnosing this rare hernia and calls attention to the entity as an unusual cause of inguinal swelling.

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