



Scrotal Abdomen As We See It! Our Experience of a Case of Large Inguinal Hernia

Authors

Rahul Singh R, Naveed Ahmed Khan, Srinivasan D, Sreeramulu P.N, Lakshmi Reddy

Department of General Surgery, SDUMC, Karnataka 563101, India

Abstract

Giant inguinal hernia is rare. These may be asymptomatic or present with the complications. Contents vary from colon, small gut, vermiform appendix, mesentery, to omentum. We present a case of giant inguinoscrotal hernia in a 80-year-old male without any complications. Surgery via inguinoscrotal approach revealed that contents were small and large intestines, omentum and mesentery. Reduction of contents into abdominal cavity through the internal ring with a double layer closure of wall was done. To our surprise, there was no single adhesion either to the sac and its contents or in between the contents.

Keywords- *hernia, giant hernia, inguino-scrotal hernia, adhesion.*

Introduction

Scrotal abdomen/ massive Inguino- scrotal hernia are those which extend below the mid- point of thigh in the standing position.¹ An older definition puts it as that bigger than the average human head.² These patients usually present late either due to the fear of surgery (or) lack of knowledge for those living in rural areas. Large Inguino-scrotal hernias pose a serious complication if not intervened. Surgical repair is often challenging and difficult because of loss of domain (King et al. 1986 and Veihelmann et al. 2001). Reduction of contents in giant inguinal hernia may lead to cardiopulmonary arrest due to elevation of intra-abdominal pressure and elevation of diaphragm.⁷ Hence, an extra cautious approach is needed in managing these patients.

Here, we present a patient with Giant Inguino-scrotal Hernia where simple reduction with

Hernioplasty was successful with no post-operative complications

Case Report

A 80year male patient presented to us with a large Inguino-scrotal swelling which he was accustomed to live with for 6years. He presented to us with complications of the increasing size of the swelling and difficulty to walk. He had no history of difficulty In voiding, constipation or prostatism and was generally in good health. He was a known smoker and alcoholic however with no significant Cardio-respiratory illness.



Fig 1: Giant Hernia with penis buried inside

On examination he had left Inguinal Hernia with dilated veins on the scrotum with penis buried in the scrotum. Expansile cough impulse was noted, both testis palpable. As the swelling was not completely reducible it was difficult to know whether it was a direct or indirect hernia. Ultra-sound revealed it to be Bilateral Inguino- scrotal hernia with grossly distended scrotal sac. Renal function testing revealed no abnormalities. ECG was normal. Physician fitness was obtained and patient was taken up for surgery. Left inguinal incision was given. Intra- operatively left sliding hernia with greater omentum, small intestine as the content Indirect sac was noted, and posterior wall tone was weak. Hernial contents (Bowel+ omentum) were reduced easily. To our surprise, there was no single adhesion either to the sac and its contents or in between the contents.



Fig 2: Intra-operatively showing the sac



Fig 3: Intra-operatively showing the sac and contents



Figure 4: Hernial sac after reducing the contents

Hernioplasty was done after reinforcing the posterior wall. Urinary catheterization was done to avoid abdominal compartment syndrome or to prevent any abdominal distension. Post- operative period was uneventful. Respiratory exercises were encouraged. Patient recovered well and was discharged on the 10th post-operative day.

Discussion

Giant hernias dramatically impair the patients quality of life. The affected patients mobility is restricted, and they often suffer from voiding difficulties as the penis is buried in scrotum. The size of the hernia leads to social, psychological, and economical impact on the patient apart from severely disturbing the quality of life. Since hernia attains a large size mainly because of the neglect, other neglected co-morbid conditions like COPD,

prostate hypertrophy, etc., might also be present. Complications of giant inguinal hernias can even be fatal.⁶ Due to rarity of the condition, repair of giant inguinal hernia is always challenging, demanding to the surgeon and stressful to the patient. Surgical management has to be tailored according to the individual situation of the patient using all therapeutic options (Zippel et al. 2001).

Repair of these hernias is a big task, because of the size of the hernia recurrence rate is high.³ The patient is likely to develop abdominal compartment syndrome and intra abdominal hypertension due to “loss of domain” in the abdomen.^{1,4,8} Stoppa advised preoperative abdominal stretching by progressive pneumoperitoneum.⁵ Our patient did not have this complication probably due to good preoperative and postoperative management. The contents commonly found in inguinal hernias are omentum, and small bowel, though stomach, caecum, appendix, sigmoid colon, urinary bladder, ovaries and entire mesenteric small bowel and colon have been reported.⁶⁻⁸ In general, the specific problems associated with the management of such giant inguinal hernias are threefold.

Firstly, the loss of domain within the abdominal cavity leads to difficulty in reduction of the contents. Diaphragmatic splinting decreases tidal volume and vital capacity and can cause respiratory compromise. Postoperative increased abdominal tension heightens the risk of wound dehiscence and can cause respiratory distress.

Secondly, as the hernial defect is large, the risk of recurrence is high. Lastly, the large residual scrotal skin might need excision for cosmetic reasons. To decrease the bulk of the contents, two methods are proposed. Moss has suggested the use of elemental diets to reduce fecal residue and gastrointestinal secretions.¹⁰ However, a more effective and commonly used method is resection of parts of omentum, small bowel or colon.

Zuvela et al. (2003) described the Rives technique (direct inguinal approach) in the treatment of large inguinoscrotal and recurrent hernias. Merret et al. (2009) advocated a technique for giant inguinal

hernia involving the reduction of hernia; the repair of hernial orifices with Marlex mesh and the creation of a midline abdominal wall defect to increase the intra-abdominal capacity followed by covering the defect with Marlex mesh with a rotation flap of inguinoscrotal skin.

Surgical treatment in complicated cases may require debulking the contents of the hernia sac by performing a right hemicolectomy and a small bowel resection and reconstruction of the abdominal wall using Marlex mesh and a tensor fasciae latae flap (Mehendal et al. 2000 and Goonetilleke et al. 2010). Inguinal incision aided by midline infraumbilical incision aids in the reduction of contents into abdominal cavity in giant inguinal hernia (Tahir et al. 2010).

Recurrence rate is high if such giant hernias are treated by conventional repairs. Repair of defects without the use of mesh graft has been described but most authors in the recent past have preferred the use of mesh.

We are presenting this case as inspite of having such a huge hernia and the patients increasing age, he did not have any intra op or post op complications.

Conclusion

Giant Inguino- scrotal hernia are rare and this usually happens due to the neglect from the patient. Proper pre-operative evaluation anticipating cardio- respiratory compromise and raised intra- abdominal pressure has to be taken care. Careful intra-operative manipulation of Hernia contents and adequate post- operative care can reduce the incidence of cardio respiratory problems, wound infection and recurrence later.

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