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CASE REPORT

A Rare Case of Giant Inguinoscrotal Hernia- Case Report

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ABSTRACT
Giant inguinal hernias are uncommon and pose a challenge in surgical management. They tend to pose various problems to the patient. The main concern of hernia reduction to the abdominal cavity is the development of abdominal compartment syndrome. There are various surgical methods adopted for the prevention of ACS, as well the myriad of complications that may occur postoperatively in such patients.
Keywords: Giant Hernia, Inguinoscrotal Swelling, Surgical Mesh, Abdominal Compartment Syndrome.

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INTRODUCTION

Giant inguinoscrotal hernia is defined as hernia extending below the midpoint of inner thigh of a patient in erect position. They are a rare occurrence in modern surgical practice, due to which there is no standard surgical procedure in place for their treatment. Due to various reasons like patient's neglect, inaccessible medical services in rural areas as well as faith of patient's in alternate medicine, this purely preventable disease prevails.

Case Report

We report a case of a 40 year old male who presented with a right inguinoscrotal swelling with progressive growth since the last 10 years associated with pain for the same duration. He first noticed it 10 years ago but did not visit any hospital as it was painless and reducible. Later, after the swelling gradually progressed in size with no aggravating or relieving factors associated with pain in the right inguinoscrotal region, the patient presented to our OPD seeking treatment. The pain was of dragging type, aggravated on exertion, relieved on rest and analgesics localized to the right inguinoscrotal region.

The swelling had reached the patient's knees, and was non-reducible. He had history of constipation, no h/o prostatism. Patient is a known hypertensive and diabetic on oral medications since 4 years; has had no surgeries in the past.

On Examination

On inspection, patient had a huge right sided complete irreducible inguinoscrotal swelling extending upto knees, of size 25x15cm. Skin over the swelling showed hyperpigmentation in

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the skin creases, no scars or sinuses. On palpation, all inspectory findings are confirmed. It is not possible to get above the swelling. It was irreducible and doughy in consistency. Palpable cough was absent.

Opposite inguinoscrotal region showed no abnormalities.

Surgical profile was unremarkable. USG Abdomen and Scrotum was done to reveal, a large hernial defect of 5 cm in the right inguinal region with contents small bowel, large bowel, omentum, along with interbowel fluid. Bilateral testes normal.

Patient underwent right inguinal hernioplasty with right orchidectomy. Incentive spirometry started 4 weeks prior to surgery. Foley's catheterization done preoperatively. Right testis was found to be atrophied, and not viable, hence decision was made to perform right orchidectomy. Prolene mesh was placed. Scrotoplasty was done. 1 intrabdominal drain and 2 suction drains. Tension free closure done with abdominal wall performed.

Postoperatively, there was early return of bowel sounds. Patient developed bilateral mild pleural effusion most probably due to basal atelectasis, he was kept on oxygen support and incentive spirometry was encouraged. Drains were minimal. Scrotal support given. The patient was treated with a course of IV Antibiotics and discharged on the 7th postop day after drain removal. On discharge, the wound was healthy and vitals stable. No complications were noted during his follow ups on POD 10 on which suture removal was done.

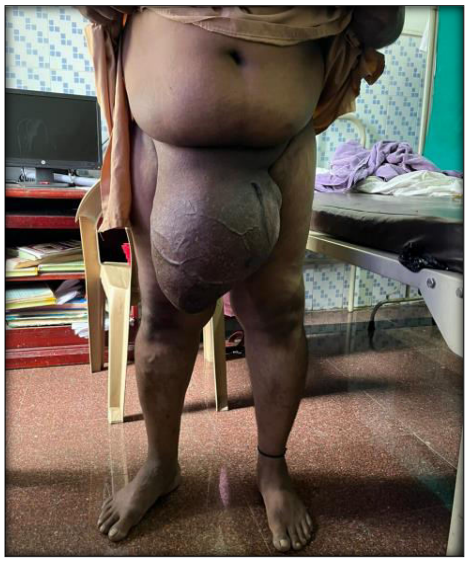

Figure 1: Preoperative picture

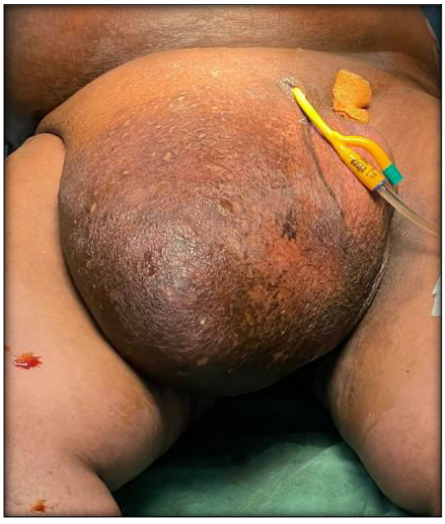

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Figure 2: Foley's Catheterization done preoperatively

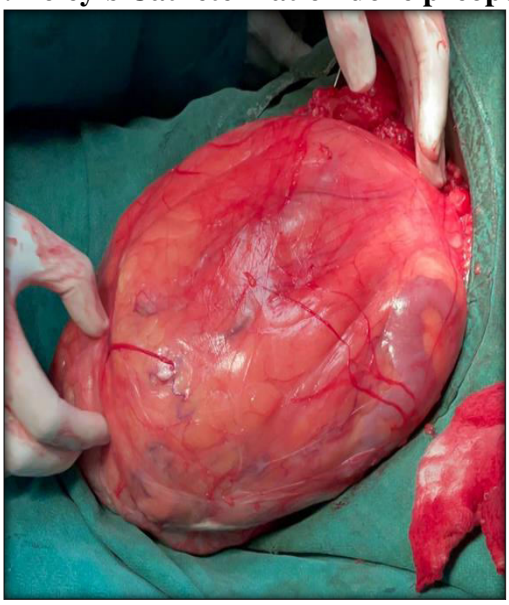

Figure 3: Sac of hernia

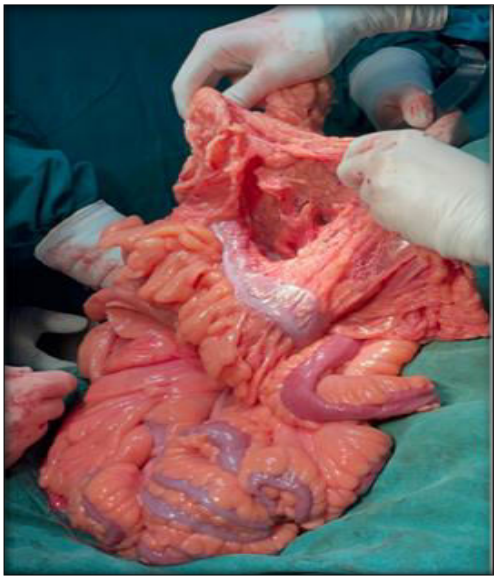

Figure 4: Contents of sac

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Figure 5: Omentectomy Specimen

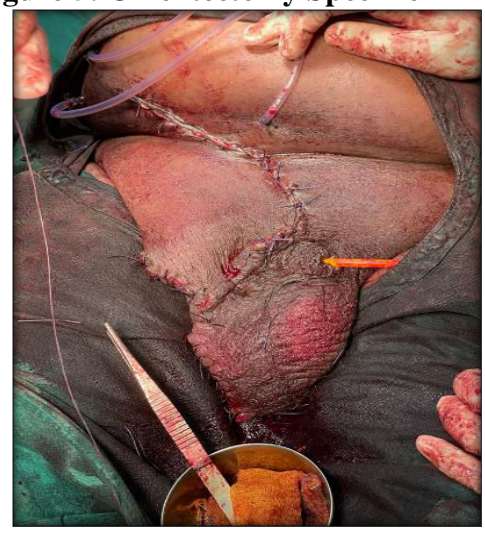

Figure 6: Postoperative picture

DISCUSSION

Giant Inguinal Hernia has an incidence of 2.8-5% of all inguinal hernia cases. There are certain challenges patients face due to this condition, - pre, intra and postoperatively.The specific issues which the patient may present with are difficulty in movement, routine work, cosmetic issues, and sometimes acute complications like obstruction, acute retention of urine as the scrotum tightens around the penis, among others. This decreases the quality of life of the individual.The penis can be buried inside the scrotum as in our case, causing urine to dribble over the scrotal skin, which is already congested by lymphatic and venous edema, causing excoriation, ulcerations, secondary infections and gangrene. As the ipsilateral spermatic cord is greatly elongated, and hence prone to torsion, the testis is often atrophic.

Contents commonly found in inguinal hernia are omentum and small bowel though stomach, cecum, appendix, sigmoid colon, urinary bladder even mesenteric small bowel as well as colon have been reported.Trakarnsagna A classified Giant Inguinal Hernias into 3 types based on the extent of the hernial sac, with Type 1 being upto mid inner thigh, Type 2 to extending midway between mid-inner thigh and suprapatellar line, and Type 3 upto superior border of patellar bone.Based on this, Type 1 is managed by hernioplasty with forced reduction with postoperative intrabdominal and intrathoracic pressure monitoring. Type 2 and 3 may require additional procedures to prevent Abdominal Compartment Syndrome like resection of hernia contents and procedures to increase intra-abdominal volume, e.g. Preoperative Progressive Pneumoperitoneum (PPP).There are 3 specific problems associated with the management of Giant Inguinal Hernias-

The loss of domain within the abdominal cavity leading to difficulty in the reduction of contents, the risk of recurrence being high as the hernial defect is large, and lastly the need for excision of large residual scrotal skin for cosmetic reasons.To address these issues, various approaches have been adopted. To increase intrabdominal volume, Preoperative Progressive Pneumoperitoneum (PPP), Creating a midline anterior abdominal wall defect covering both hernial and midline defect by marlex mesh and strengthening the midline mesh with a rotation flap, Preperitoneal Mesh Hernioplasty are methods adopted.Some studies suggest the use of elemental diets to decrease the fecal residue and gastrointestinal secretions. It is also advocated that the resection of small bowel, colon and part of omentum can decrease the bulk of contents.Scrotoplasty presents its own problems- as it may be safer to

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leave the skin intact as a safety precaution so that if early postoperative severe respiratory compromise occurs, the contents can be temporarily shifted back into the scrotum.

CONCLUSION

The management of giant inguinal hernias ranges from conservative to surgical, depending on the benefit it provides to the patient. It has its own challenges, and thorough preoperative preparation and vigilant postoperative monitoring is essential for its successful repair. Mortality and morbidity associated with surgical repair is high, and sometimes based on the patient's will and the risk it poses to life, conservative management may be adopted.

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