

A Rare, Complicated Busoga Hernia

Dr. Arnab Mohanty (✉ dramab81@gmail.com)

Saint Stephen's Hospital <https://orcid.org/0000-0003-0407-9660>

Dr. Aditya Rajpal

Saint Stephen's Hospital

Research Article

Keywords: Busoga, inguinal herniae, Gill-Ogilvie, laparotomy, resection, anastomosis

Posted Date: May 13th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-517495/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Inguinal herniae are the most common herniae encountered in the Surgical OPD or even the emergency setting. The indirect variety has a higher rate of bowel obstruction due to the constriction of the sac at the superficial ring. Direct herniae, owing to the larger defect, are relatively safe from complications. Busoga hernia ⁽¹⁾ is a rare subtype, which is prone to strangulation of contents, owing to the extremely narrow neck under continual tension within a tough fascial sling.

Introduction

Busoga Hernia is a funicular direct inguinal hernia ⁽¹⁾. It is indigenous to the Busoga province of Uganda, Southern Sudan and Ghana, where it is common in women. It usually contains pre-vesical fat and sometimes a part of the urinary bladder, but not often bowel. The hernia protrudes through a narrow defect in the medial part of conjoint tendon or transversalis fascia cranial to the pubic tubercle. Since it has a tight neck within the fascial sling, it is prone to strangulation. Also, the neck of the sac being small, it does not often allow a large loop of bowel to completely herniate, so that when strangulation occurs, often only part of the circumference of the gut is involved causing what is known as a Richter's hernia. This hernia is also known as Gill-Ogilvie's Hernia in Europe. Statistical data regarding this subtype of hernia and its complication rates is anecdotal, at best. We describe a classical presentation of this rare hernia in a middle aged Indian lady.

Case Report

A 43 year old lady presented with sudden onset severe pain abdomen that started in the lower abdomen and rapidly worsened. The pain was particularly severe in the left groin where a hernia had been noted 2 years ago, progressively increasing in size. On examination, she had an irreducible, tender left inguinal hernia with signs of bowel strangulation.

She was taken up for emergency exploration under G.A., after due resuscitation and with the proper informed consent.

A left inguinal crease incision was given, and deepened further. On separating the external oblique flaps, a medially placed large sac, tensely distended with altered blood, was identified. No indirect sac could be separately identified. The posterior wall seemed relatively intact, except for a 1x1cm tight defect in the medial aspect of the conjoined tendon, just cephalad and to the left of the pubic tubercle. The sac was incised and the fluid was drained. A 10cm segment of ileum was identified within the sac, having undergone gangrene and partly retracted back within the peritoneal cavity. There was faecal contamination within the peritoneal cavity.

Hence, a formal laparotomy, segmental ileal resection and end-end anastomosis was performed. The round ligament was excised and the deep ring suture-closed. The posterior wall was strengthened by darning, including the defect.

No mesh was placed in view of the gangrenous nature of contents and the presence of significant effluent at the surgical site. She recovered well and was discharged on the 5th postoperative day.

Discussion

Busoga herniae are anecdotal in their occurrence. The diagnosis is most often made intraoperatively. They may confuse the unwary novice surgeon: the herniated loop of the bowel may migrate under the skin and simulate other conditions. Ogilvie and Gill (2,3) felt that this type of hernia is probably acquired and that its cause differs from that of the diffuse bulge of the fascia transversalis usually seen in direct inguinal herniae. It is likely that the fascia transversalis defect is traumatic in origin and, because its margins are strong, the sac tends to be tubular and its neck small. Strangulation of contents is the most fearful complication, and resection anastomosis is required in those cases. The key lies in the identification of the sac and careful dissection to prevent inadvertent injury to the contents. The management is otherwise similar to other inguinal herniae. We have not come across any other case report of this hernia in an Indian origin woman, and hence, the importance of reporting the case.

Conclusion

It is important to look thoroughly for trapped bowel. Excision of the sac and identifying a Richter or Maydl's type strangulation is of paramount importance. Addition of a diagnostic laparoscopy or laparotomy is advisable in dubious cases. Repair with or without mesh is likely to have similar outcomes, though data is scarce.

Declarations

Funding: No funding was obtained from any organization or person for the conduct of this study.

Conflict of interest: There was no conflict of interest among the authors or with another body.

Ethics approval: Appropriate approval was obtained from the (I.R.B.) Internal Research Board of St. Stephen's Hospital for the conduct of this study.

Consent to participate: Prior informed consent was obtained from the patient and her family for the surgery and the use of her data for research purpose.

Consent for publication: We, the authors consent for this article to be published in this journal.

Availability of data and material: Not applicable.

Code availability: Not applicable.

Authors' contributions: Arnab Mohanty - corresponding author (surgeon who performed the procedure, involved in proof reading, corrections, communication with the editor). Dr. Aditya Rajpal – Assistant

surgeon in the procedure, collection and initial compilation of data.

Ethical clearance

Ethical clearance for the write-up was obtained from the Internal Research Committee of the Hospital.

Informed consent

Due informed consent was obtained from the patient prior to the surgery, for both the procedure as well as the publication of data and/or pictures collected from her during her hospitalization and subsequent follow-up.

References

1. King M, Bewes P, Cairns J, et al. Primary Surgery, Vol 1: Non-trauma. Oxford: OxfordUniversity Press; 1990. page 199.
2. Ogilvie H, ed. Maingot R. Post-Graduate Surgery. Vol. 3. London: Medical Publications; 1937. p. 3.620.
3. Gill WG. (1939): Brit. Med. Journal. p. 1,263.

Figures

Caudal end



Left lateral side

Figure 1

Intraoperative photo revealing the cord structures inferiorly and the sac with gangrenous ileum cranio-medially.