

Septic Shock Secondary To Strangulated Stomach In Giant Inguinoscrotal Hernia With Loss Of Domain: A Case Report.

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We present a clinical case of a complicated giant inguinoscrotal hernia, its surgical management, and literature review.

Material & methods



A 42-year-old male patient with **loss of domain inguinoescrotal hernia**.



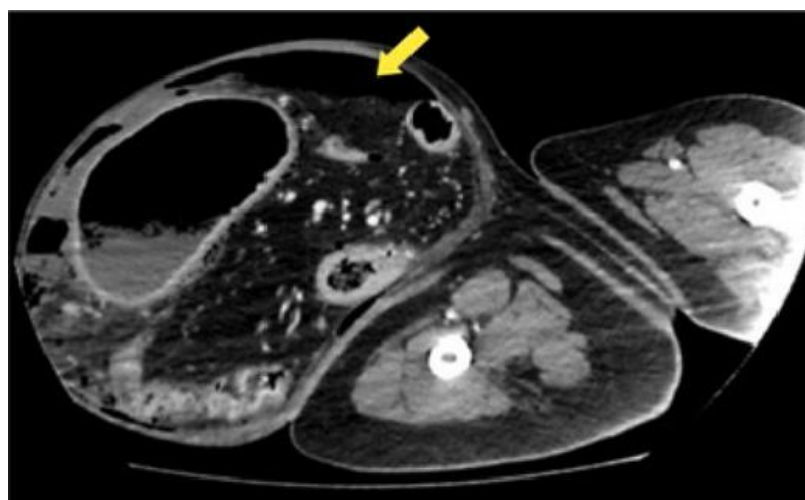
A computed tomography (CT) scan reveals an **inguinal hernia containing intestinal loops and part of the gastric chamber**, along with the presence of pneumoperitoneum consistent with a **hollow viscus perforation**.



Presented to the emergency department with abdominal pain and **septic shock**.



Prompting the decision to proceed with **urgent surgical intervention**.



Results

An urgent exploratory laparotomy was indicated, revealing an **hourglass-shaped dilated stomach with signs of necrosis** in the lesser curvature and posterior wall of the gastric body, associated with **gastric perforation**.

A total gastrectomy was performed. Due to hemodynamic instability, it was decided to conclude the procedure by leaving the **abdomen open using a sandwich technique**.

After 48 hours the patient was reintervened. Given the previous hemodynamic situation, hypoproteinemia and marked edema of the small intestine loops, it was decided not to perform an anastomosis. **An esophagostomy and feeding jejunostomy at the proximal jejunum were created.** At this time, **wall closure was completed with a dual mesh prosthesis**.

Postoperatively, the patient experienced a left pleural effusion, catheter-related bloodstream infection, and right basilic vein thrombosis. These complications resolved uneventfully.

At 4 months, surgical intervention was performed for the **reconstruction of gastrointestinal continuity via Roux-en-Y esophagojejunostomy**. **Hernial sac plication was carried out to elevate intestinal loops and avoid tension on the anastomosis.** Two Vycril mesh implants were placed for tissue reinforcement, along with a titanium mesh in contact with the intestinal loops.

48 hours after the reconstruction, a reoperation was required due to an **inadvertent perforation at the level of the biliary limb**, which was repaired with suture closure. 7 days later, a second reoperation was performed due to an **abdominal wall hematoma**, which was successfully managed without complications. The subsequent postoperative course was favorable, with no further complications. The patient was discharged home 11 days later.

Discussion

Giant inguinoscrotal hernias presenting as surgical emergencies pose a significant challenge in clinical practice due to loss of intra-abdominal domain and the risk of severe complications such as bowel obstruction and strangulation. **Surgical intervention in these cases must be prompt and effective** to prevent associated morbidity and mortality.

In emergency settings, hernia repair may require a combined surgical approach, such as laparotomy and inguinal incision, along with component separation and release of the transversus abdominis muscle. This strategy allows for a rapid and effective repair, suitable for urgent surgical intervention.[1]

Furthermore, **the use of negative pressure drainage in the preperitoneal space can reduce the incidence of postoperative seromas**, which is crucial in the management of giant inguinoscrotal hernias.[2]

Chen et al. (2021) described a **one-stage repair approach using a combination of laparotomy and inguinal access**, demonstrating its suitability for emergency surgery in giant inguinoscrotal hernias.[3]

Additionally, Gaedcke et al. (2013) reported a case of emergency repair of a giant inguinoscrotal hernia in a **septic patient, employing a two-stage approach that enabled successful recovery**. [4]

These studies and case reports provide evidence for **various strategies and techniques in the urgent management** of giant inguinoscrotal hernias, underscoring the importance of a **multidisciplinary and individualized approach** based on the patient's condition.

References

- [Single Stage Repair of a Giant Inguinoscrotal Hernia by a Combined Laparotomy and Inguinal Approach](#). Chen KL, Ong F, Phan-Thien KC. ANZ Journal of Surgery. 2021.
- [Laparoscopic Transabdominal Preperitoneal Approach With Negative Pressure Drainage for Giant Inguinal Hernia](#). Luo H, Zhang H, Sun J, et al. Journal of Laparoendoscopic & Advanced Surgical Techniques. Part A. 2021.
- [Single Stage Repair of a Giant Inguinoscrotal Hernia by a Combined Laparotomy and Inguinal Approach](#). Chen KL, Ong F, Phan-Thien KC. ANZ Journal of Surgery. 2021.
- [Emergency Repair of Giant Inguinoscrotal Hernia in a Septic Patient](#). Gaedcke J, Schüller P, Brinker J, Quintel M, Ghadimi M. Journal of Gastrointestinal Surgery : Official Journal of the Society for Surgery of the Alimentary Tract. 2013.

Conclusion

Giant inguino-scrotal hernias **are a rare condition in developed countries**. They are challenging surgical condition characterized by the protrusion of abdominal contents into the scrotum, often resulting in significant loss of intra-abdominal domain.

Management of these hernias **may involve various techniques to facilitate the safe return of herniated contents to the abdominal cavity** without compromising cardiorespiratory function.

We present this case due to the rarity of such hernias in young patients, as well as the increased morbidity and mortality in case of complications in this patient due to perforation and gastric necrosis secondary to incarceration.