

INCARCERATED INGUINAL HERNIA WITH ADHERED ILEAL LOOP: A CASE REPORT

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ABSTRACT

About one-tenths of inguinal hernias become incarcerated, mainly secondary to benign causes. Incarcerated hernias are irreducible with intact blood supply to the contained part but might develop strangulation if not timely managed. Traditionally, open technique has been used to repair incarcerated or strangulated inguinal hernias, as it is probably the safest and the most expedient approach. A case of incarcerated inguinal hernia with adhered ileal loop, which is a rare finding, is reported in this article.

KEYWORDS

Adhesions, inguinal hernia, primary healthcare, surgery

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INTRODUCTION

The inguinal hernias constitute about three-fourths of abdominal wall hernias and their repairs represent one of the most widely performed operations.¹ The main objectives of the surgery are relief of symptoms (e.g. pain) and reduction of the risk of strangulation.² The mesh repair has been considered the current gold standard of care for most patients with inguinal hernias.³

Approximately 10.0% of the inguinal hernias present with incarceration without compromised blood supply to the herniated bowel, mostly due to benign entities.^{4,5} Ileum is the most common herniated bowel. However, the hernia sac occasionally includes atypical content that affects surgical management.^{6,7} A rare case of incarcerated inguinal hernia containing adhered ileal loop is reported here.

CASE REPORT

A 57-year-old male patient, presented to the emergency department with complains of increased size of right inguinal mass with mild

pain on right groin for four hours. He had a history of right inguinal mass whose size decreased on lying down, and increased on prolonged standing and coughing. He had no history of pain, vomiting or constipation prior to that presentation. The patient did not have any history of comorbidities or past surgeries.

On examination, the patient had a soft-to-firm (6 x 8 cm²), mildly tender mass over right inguinal area without erythema. The mass did not transilluminate and could not be reduced. There were hyperactive bowel sounds over the mass on auscultation. The rest of the abdominal examination was unremarkable. The x-ray abdomen did not exhibit any signs of bowel obstruction. The point-of-care ultrasound confirmed the herniated bowel loops with intact vascularity and without evidence of free fluid.

The patient was planned for emergency inguinal exploration and mesh hernioplasty for incarcerated right inguinal hernia. After inguinal incision, the bowel was assessed for the viability. The herniated bowel loop had adhered ileal loop as its contents as shown in Fig. 1 (a-d). The adhesiolysis was done and

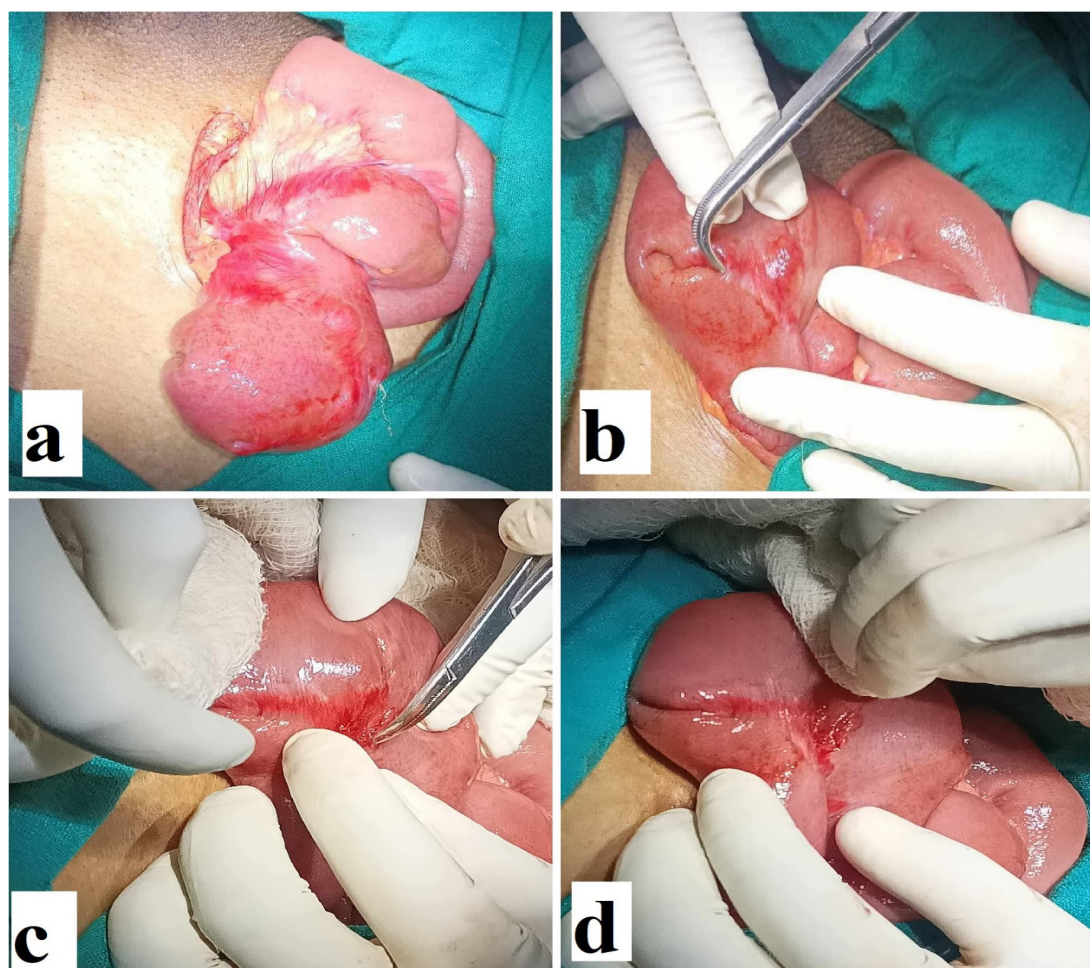


Fig. 1 (a-d): Intraoperative finding of adhered ileal loop as hernia content

hemostasis was achieved. The bowel was thoroughly explored proximally for 600-800 cm from ileocecal junction and then reduced into the abdomen after normal findings and peristalsis. Subsequently, mesh hernioplasty was performed.

Patient was admitted in post-operative ward for two days. His pain was managed with intravenous paracetamol and ketorolac. His diet included oral liquids, gradually transitioned to solid food over the period of hospital stay. Once the patient was comfortable in mobilization and diet, he was discharged.

The patient was thankful to the Lamahi Hospital for receiving such humane treatment. Initially, he was unsure of availability of surgical treatment of his condition at that hospital. Nevertheless, the dedicated clinical care team provided him the best possible treatment. He has expressed gratitude to the hospital care team.

DISCUSSION

Inguinal hernia is considered one of the most common surgery-requiring condition.⁸ Though the prevalence of inguinal hernias is lower than expected, a huge proportion of people in Nepal are currently in need of surgical management.⁹ The primary healthcare centers in Nepal are inadequately staffed, under-resourced, and far too frequently overworked.¹⁰ The surgical management of hernia is a huge challenge in such a setup.

The incarcerated inguinal hernia is a surgical emergency, requiring prompt operative intervention.¹¹ Among the complications of inguinal hernias, strangulation is considered

the most serious and potentially lethal sequelae, occurring in approximately 1.0-3.0% of all groin hernias.¹² The content of inguinal hernias varies widely. In most cases, the small bowel and omentum are usually the main contents in the hernia sac.

In this case, the content of hernia sac was the incarcerated, adhered loop of ileum. The fibrous intra-abdominal adhesion is typically a complication of abdominal surgery.¹³ Although the various studies have pointed to the inflammation or injury during the surgery as the cause of postoperative adhesion, the reason for adhesion in a patient without a prior operation is still unanswered.

The adhesiolysis of ileal loop was performed and the content of hernia was reduced. The right inguinal mesh hernioplasty was then done. In emergency incarcerated inguinal hernias, mesh repairs can be safely performed without increase in the rate of local complications.¹⁴ Despite the limited resources in a primary care center, the challenges were dealt with diligence and dedication from the healthcare team.

Inguinal hernia is a common surgical condition with a narrow breadth of differential diagnosis. The herniorrhaphy/hernioplasty is a simple procedure for many experienced surgeons. However, the repair of a hernia may pose great difficulty due to not only its content but also its management. The management of such cases requires rigorous efforts and skilled expertise.

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Consent: Case Report Consent Form was signed by the patient and the original article is attached with the patient's chart.

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