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SPONTANEOUS RUPTURE OF INCISIONAL HERNIA – A RARE ENTITY

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ABSTRACT

Incisional hernia occurs in 11-23% of laparotomy cases. Incisional hernia Complicates only 2%-10%. Incisional hernia eviscerates spontaneously very rarely; but imposes serious threat to patient's bowel and life when they eviscerate. It demands emergency surgery, to prevent further obstruction, strangulation of bowel and to cover its contents. The hernial contents can be covered primarily by mesh repair if the general condition of the patient and local condition of the operative site allows or can be covered by skin followed by delayed mesh repair. We report case of 58 years old male with history of spontaneous evisceration of bowel after bout of cough. Emergency laparotomy with hernia repair done after primary resuscitation. Neglect for early operative intervention or delay in seeking the treatment for an incisional hernia increases the risk of rupture.

KEYWORDS: Spontaneous evisceration, Incisional hernia.

INTRODUCTION

An incisional hernia is a partial internal abdominal wall defect that is in close proximity to the scar of a previously closed full thickness ventral abdominal wall incision.[1]

Spontaneous evisceration of abdominal viscera is a rare complication of incisional hernia which could pose a serious threat to life if intervention is delayed.[2–4] Particularly, thin-walled large incisional hernia may ulcerate at its fundus so that omentum /bowel content protrudes through the defect.[5] Incisional hernias also hampers daily routine of the patient by decreasing quality of life, work opportunities, skin related complications.

We reported a case of spontaneous rupture of an incisional hernia in a 58-years-old male who underwent feeding jejunostomy 4 years prior to presentation.

CASE REPORT

58-year-old gentleman presented to the emergency department of Grant medical college, Mumbai with spontaneous evisceration of bowel through the abdominal wall swelling after bout of cough since last 24 hours. Patient was referred from primary health center for definitive management. Patient was diagnosed with esophageal carcinoma in 2018. He underwent feeding jejunostomy prior to chemotherapy in private hospital. Following which patient noticed swelling over feeding jejunostomy scar since past 1 year. Swelling increased over past one year; but he did not seek any treatment for the same. On admission, he did not have fever or features of intestinal obstruction. He was hemodynamically stable.

On abdominal examination revealed about 30 centimeters of bowel loop outside hernial sac protruding through anterior abdominal wall. Bowel loop was healthy but slightly edematous.

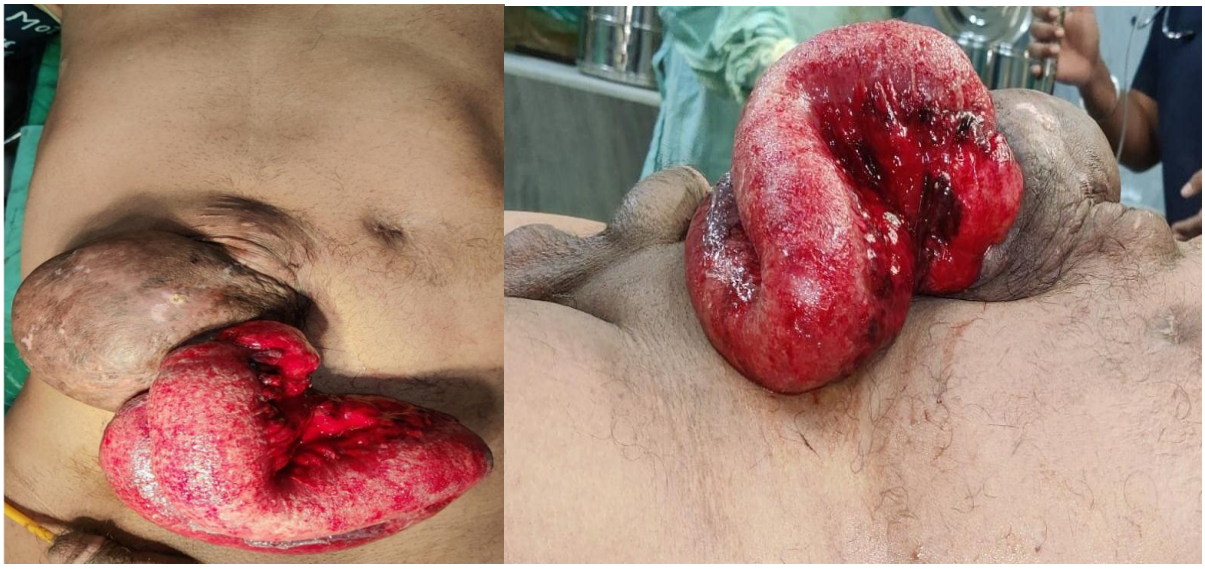

Figure 1 & Figure 2:- Preoperative images showing evisceration of small bowel through abdominal wall defect.

Just superior to the eviscerated bowel was an intact incisional hernia, about 10 cm diameter. A hernia was nontender and was reducible through a wide, easily palpable defect (about 4 cm) in the anterior abdominal wall. The skin overlying the hernia was thinned out and atrophic. His blood investigations including full blood count, serum electrolytes, renal functions, and clotting profile were normal.

Intravenous antibiotics and analgesics were given as the patient was prepared for surgical intervention. Patient was shifted for emergency laparotomy after initial resuscitation. Laparotomy was done by extending the defect in midline. The eviscerated loops of bowel were identified as ileum. About 30 centimeters of the bowel loop was found gangrenous about 60 centimeters from ileocecal junction. Constriction bands were seen at the both ends of the loop. Gangrenous bowel segment was resected and double barrel ileostomy was done. A defect of size 8 cm in the anterior abdominal wall was identified. Careful adhesiolysis was performed. Defect was closed primarily using prolene sutures without any mesh placement. Skin closure done after excision of atrophied scarred skin. Postoperative recovery of the patient was uneventful and discharged after suture removal.

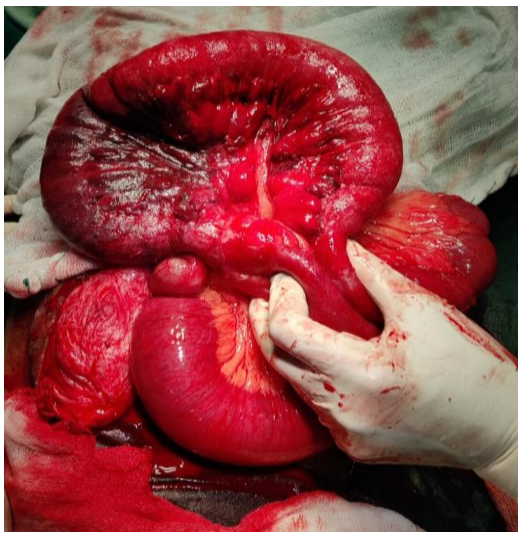

Figure 3: - Intraoperative image of gangrenous bowel.

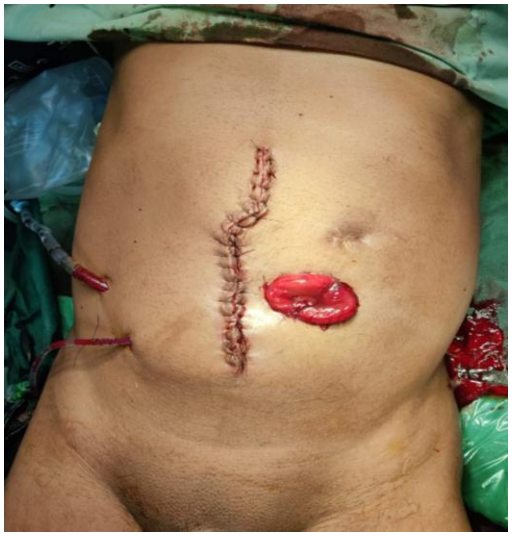

Figure 4:- Final picture after closure.

DISCUSSION

We report an unusual presentation of spontaneous rupture and evisceration of incisional hernia.

Spontaneous rupture of abdominal hernia is very rare and usually occurs in incisional and recurrent groin hernia. Only few cases of spontaneous rupture of abdominal hernia are reported in the literature.

Large incisional hernia is contained only by its sac and thin avascular skin.[6] Larger the hernia, more atrophic and avascular is the overlying skin and this along with thin sac leads to higher chances of rupture of Incisional hernia. Neglect for early operative intervention or delay in seeking for treatment increases the risk of rupture.

The continuous friction between a hernia and the abdominal wall, the hernia and external garments, in combination with moisture and warmth, is likely to cause dermatitis and lead to ulceration. In addition, some patients may apply traditional herbal medicines in an attempt to treat a hernia, and this often causes inflammation, necrosis and sometimes gangrene of the skin resulting in ulcers which may precipitate spontaneous rupture of a hernia.[6– 9]

The rupture may be sudden following any event, which can increase intra-abdominal pressure such as coughing, lifting heavy weight, straining at defecation and micturition or it may be gradual after developing an ulcer at its base.

Other factors which can contribute to rupture of a hernia are friction by the patient's external corset or abdominal support, lack of adhesions between the bowel and the hernial sac allowing the bowel to act as a hammerhead upon the skin.

In our case, rupture of incisional hernia occurred due to the sudden rise in intra-abdominal pressure following a sudden bout of cough. The hernia contents can be covered primarily by mesh repair if the general condition and condition of the operative site permits or can be covered by skin followed by delayed mesh repair. In our case, we had done resection of the gangrenous bowel segment and followed by double barrel ileostomy due to contamination by gangrenous bowel loop. Irrespective of the pathogenesis of the ventral hernia, a factor that increases the risk of rupture is delayed repair of the defect.[10]

The more common causes of delay are neglect of the defect, fear or unwillingness to undergo surgical intervention, and financial constraints. The delay in repair leads to worsening of the protrusion and attenuation of the covering from pressure, stretching and ischemia.

CONCLUSION

Primary treatment of incisional hernia is surgical repair even when asymptomatic because of it's potential to develop complications. Early surgical treatment can prevent life threatening complications that include adhesions, intestinal obstruction / strangulation or rarely rupture. This case is presented for its rarity and to emphasize the need for early intervention to prevent this avoidable rare complication.

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