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Case Report

A rare complication of spontaneous rupture of incisional hernia: case report

Nimesh B. Thakkar*, Abhesinh Chauhan

Department of General Surgery, GMERS Medical college, Gandhinagar, Gujarat, India

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***Correspondence:**
Dr. Nimesh B. Thakkar,
E-mail: rangdatt@yahoo.com

ABSTRACT

Incisional hernia Complicates only 2%-10%. Spontaneous evisceration of content is very rare but whenever it occurs, 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. Authors report such rare case of spontaneous evisceration of omentum in 35 years old female patient who was known case of incisional hernia for 2 years. Neglect for early operative intervention or delay in seeking the treatment for an incisional hernia increases the risk of rupture.

Keywords: Incisional hernia, Mesh Repair, Spontaneous evisceration, Rare complications

INTRODUCTION

A large incisional hernia is usually contained by a thin hernia sac and atrophic avascular skin. 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.[1]

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.[2]

In this report, the factors that contributed to the formation of ventral hernia were reopening of previous scar, use of non-absorbable suture for fascia repair, and unrecognized complete dehiscence that was dressed to epithelialization an inadvertent open-abdomen-like therapy. Before this case, authors had not encountered spontaneous rupture of an incisional or ventral hernia in our practice, but in the future, authors suspect that authors may encounter more of such cases because the inadvertent management of complete dehiscence with daily dressing until epithelialization that led to an incisional hernia with a thin covering in this patient is now intentionally employed in the management of some critically ill patients that develop complete abdominal wound dehiscence.

CASE REPORT

A 35 years old female laborer patient presented to emergency department of tertiary care Center from private hospital with complaint of something coming out of her lower abdomen. On evaluating patient, it comes to our knowledge that patient had undergone laparotomy 8 years back for abdominal condition.

Later on, she developed an incisional hernia and has not taken any treatment in last 2 years due to economic

issues. On the day of presentation patient noticed something coming out of swelling spontaneously while she lifted heavy weight and not going back. Then she consulted nearer hospital where dressing with sterile gauze pieces was done and patient was referred to us. On examining the patient, authors found that part of Omentum was coming out of the anterior abdominal wall with surrounding skin changes and ulceration.

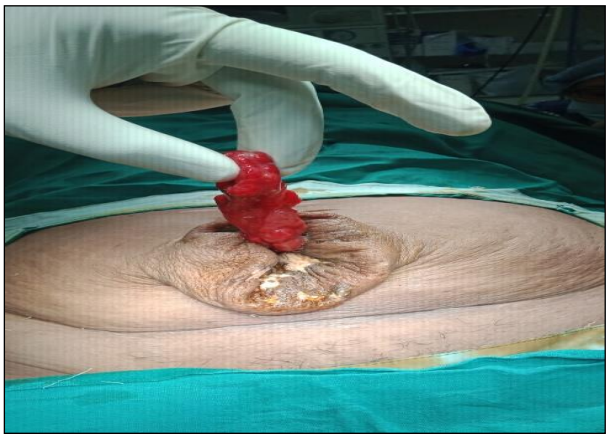

Figure 1: Exposed contents of ruptured hernial sac.

As shown in pictures, presenting condition of patient was like (Figure 1), where the omentum was coming out of incisional hernia with surrounding skin changes.

There was ulceration in the middle of swelling through which omentum was coming out on exploring the wound, authors found central part of thinned out sac and sheath (Figure 2).

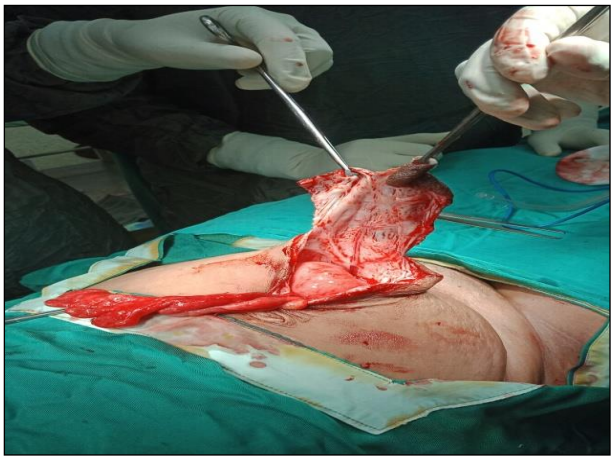

Figure 2: Hernia sac margins after exploring.

After removing the omentum, abdomen viscera were examined which was found normal.

After thorough wash given, authors started creating plane for meshplasty from virgin area and final anterior sheath view was gained as in (Figure 3).

Primary closure of the sheath was done as shown in (Figure 4).

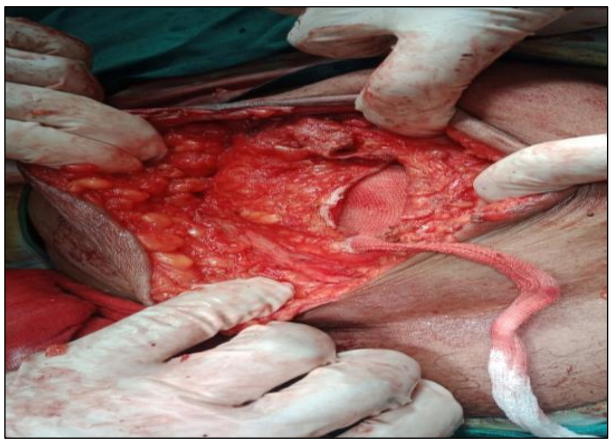

Figure 3: Defect in anterior abdominal wall.

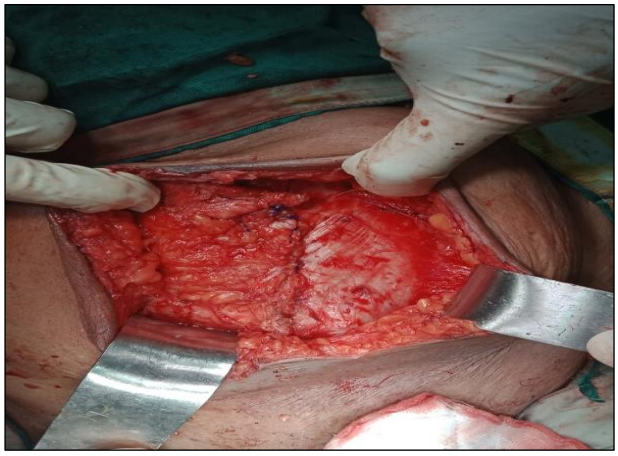

Figure 4: Closure of defect in anterior abdominal wall.

As patient presented early and showing less infective etiology, authors planned meshplasty with prolene mesh (Figure 5) and drain was kept, and closure done (Figure 6).

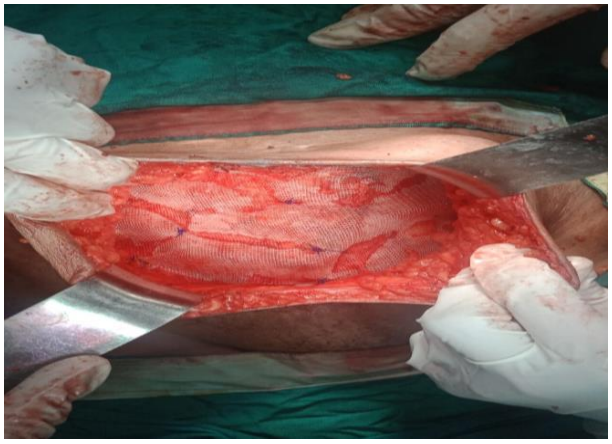

Figure 5: Large mesh to strengthen abdominal wall.

Post-operative period was uneventful. Sutures were removed on the 10th post-operative day. Wound healed well without any infection.

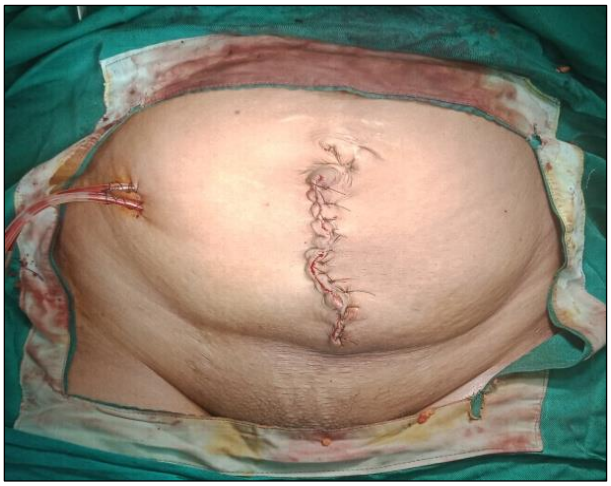

Figure 6: Final picture after closure.

DISCUSSION

In adult surgical practice, the common causes of evisceration are burst abdomen, stab, and gunshot abdominal injuries. Rarely, spontaneous rupture of hernia also presents with evisceration.[3] This report is one of such rare cases. There are only few cases reported like this. Complications such as adhesions, incarceration of bowel and intestinal obstruction are well documented in association with incisional hernia, but spontaneous rupture very rarely reported in literature. Although theoretically spontaneous rupture can occur with any type of abdominal hernia, but it is more commonly reported with incisional.

The large incisional hernia is contained only by its sac and thin atrophic avascular skin. 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.[4] Neglect for early operative intervention or delay in seeking the treatment for incisional hernia increases the risk of rupture.[5] The rupture may be sudden following any event which can increase the intra-abdominal pressure like coughing, lifting heavy weight, straining at defecation and micturation or it may be gradual after developing an ulcer at the fundus.[6] 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.

Irrespective of the pathogenesis of the ventral hernia, a factor that increases the risk of rupture is delayed repair of the defect.[7] In our patient, the cause of the delay was medical.[8,9] The more common causes of delay are neglect of the defect, fear or unwillingness to undergo another major surgical operation, and financial constraints. The delay in repair leads to worsening of the protrusion and attenuation of the covering from pressure, stretching and ischemia.[10,11]

CONCLUSION

Spontaneous rupture of abdominal hernia is a very rare complication and it usually occurs in incisional and recurrent groin hernia. The rupture of abdominal hernia demands emergency surgery This report adds to the scarce literature about spontaneous rupture of hernia; it reiterates the importance prompt repair and the use of non-absorbable sutures for abdominal fascia closure.

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