

Spontaneous Rupture of Incisional Hernia: A Case Report

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Abstract: Introduction: Spontaneous rupture of incisional hernia is a very rare event. Case Presentation: A 76 - year old male admitted in our hospital with history of spontaneous rupture of incisional hernia. On physical examination, approximately 50cm of intestine was protruding through the lower anterior abdomen wall. Patient was operated & resection of gangrenous part of intestine and end to end anastomosis was done & discharged with uneventful recovery. Discussion: Complications such as adhesions, incarceration of intestine and intestinal obstruction are well documented in incisional hernia but spontaneous rupture is very rarely reported in incisional hernia. Early surgical intervention for incisional hernia is very helpful to prevent complications. Conclusion: Spontaneous rupture of incisional hernia is very rare complication. Spontaneous rupture of intestine may be sudden or gradual. Spontaneous rupture should be managed by primary repair if no contamination or gangrene segment or by delay repair if gross contamination is present.

Keywords: Incisional hernia, Spontaneous rupture, Anterior abdomen wall

1. Introduction

An incisional hernia is represented by escape of organs from their anatomical position through an area of weakness in the surgical scar. Incidence of incisional hernia approximately is 10 percent on long term follow up. Spontaneous rupture of abdominal hernia is very rare and mainly seen in recurrent groin and incisional hernia.² Here we report a case of spontaneous rupture of an incisional hernia in a 76 - year old male who underwent incision and drainage for lower abdomen wall cellulitis two year before presentation.

2. Case Presentation

A 76 - year old male attended the emergency department at Mahatma Gandhi Hospital, Dr. S. N. Medical College Jodhpur, Rajasthan, India, with protrusion of viscus through an incisional hernia following a bout of cough. Patient was conscious and oriented the time, place, person at presentation. Patient gave history of incisional hernia for last 6 month through the lower abdominal scar which was 3x3 cm in size. Three days prior to presentation, he noticed an ulcer on scar mark which was subsequently associated with foul smelling discharge. The past history revealed the patient

had incision and drainage for lower abdomen cellulitis two year prior to presentation. There was no history of trauma. On general examination, patient's vitals were found to be stable and afebrile. On examination of abdomen, approximately 50 cm of small intestine was protruding through defect 3x3 cm in lower anterior abdominal wall which was black in color, foul smelling. A transverse scar of incision was found just medial to the defect in lower anterior abdominal wall. The patient was diagnosed with a spontaneous rupture of incisional hernia and was planned for an emergency exploration after resuscitation. In hematological investigation, Hb was 16.4 g/dl and W. B. C. count was 10050/ul. Patient was initially treated with intravenous fluid and antibiotics. Patient shifted to Operation Theater after informed consent & operated under General anesthesia. At operation the defect was enlarged laterally, gangrenous part of ileum was removed and end to end anastomosis was done. A drain placed in pelvis cavity and fixed. After removing all the atrophic and scarred skin, defect was closed. Postoperative period was uneventful except for a minor stitch abscess that cleared in 3 days. The drain was removed on 5th postoperative day. Patient discharge with clinical satisfactory response on 8th postoperative day.



Figure 1: Pre - operative photograph showing rupture Of bowel through incisional hernia

3. Discussion

In incisional hernia, complications such as adhesions, incarceration of intestine and intestinal obstruction are well documented^{3, 4} but spontaneous rupture is very rarely reported in incisional hernia. Hartley and Hamilton found spontaneous rupture through lower abdominal incision, while Aggarwal reported spontaneous herniation after upper abdominal surgery following perforated duodenal ulcer.⁶ A large incisional hernia is usually contained by thin hernia sac and atrophic a vascular skin. The rupture may be sudden following an increase intra - abdominal pressure like coughing, straining at defecation and micturition, heavy weight lifting.⁷ Some patients may use herbal medicines to treat a hernia and these medication can cause inflammation, necrosis and gangrene of skin resulting In formation of ulcer which may contribute in spontaneous rupture of hernia.^{8, 9}

In our case, spontaneous rupture of incisional hernia was probably precipitated by thinned, ulcerated overlying skin. Delay of early surgical intervention for incisional hernia was also a risk factor for spontaneous rupture.

Spontaneous rupture of incisional hernia required emergency surgical intervention to prevent intestinal obstruction, strangulation of intestine and this may or may not be combined with definitive hernia repair. If general condition of patient and local condition of operative is good then defect can be close by mesh repair. In case of strangulation, primary repair is hazardous.¹⁰

4. Conclusion

Spontaneous rupture of incisional hernia is very rare complication. Spontaneous rupture of incisional hernia may be sudden due to increase intra - abdominal pressure or gradual because of ulceration of the overlying skin. Spontaneous rupture should be managed by primary repair if there is no contamination or gangrenous segment or by delayed repair if gross contamination is present.

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