



CUTANEOUS EXCORIATION WITH BOWEL AS A CONTENT IN CHRONIC NEGLECTED VENTRAL HERNIA: CASE REPORT

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ABSTRACT Excoriation of skin with exposure of hernia sac in chronic incisional ventral hernia is a rare complication of incisional hernia. Skin excoriation over the incisional hernia has a high risk of bowel evisceration which has high morbidity and mortality rates. We present a case of chronic incisional ventral hernia with skin excoriation exposing sac and content, who was managed with surgical mesh repair and discuss the spectrum of relevant surgical techniques for this unique group of patients.

KEYWORDS : Chronic incisional ventral hernia, skin excoriation, mesh repair

Introduction:

Skin excoriation with exposure of hernia sac with bowel as a content is a rare complication of incisional ventral hernia. This case report is one of such unusual occurrence.

Case Report:

A 65 year old male patient presented to surgery OPD with chief complaints of herniation of bowel through an excoriated skin in previous appendectomy scar site for past 6months. No symptoms suggestive of obstruction. Patient underwent appendectomy for appendicular abscess before 15 years. Patient was admitted and evaluated.

On examination: A hernia defect of about 15 x 8 cm noted in right iliac fossa over the previous incision scar with excoriation of over lying skin. 2x2 cm ulcer noted over the excoriated skin. Content of the hernia was bowel visible peristalsis of the bowel noted through the excoriated skin. Hernia is irreducible. Tenderness present over the hernia. Cough impulse present. Rest of the abdomen soft, non-tender, bowel sounds present.



Investigation:

USG abdomen of the patient shows evidence of herniation of omentum and bowel through a defect approximately 10cm in right iliac fossa at the previous surgical site. Herniated bowel loops shows normal peristalsis. Cough impulse present.

X-ray erect abdomen was normal no evidence of air fluid level or dilated bowel loops.

Other routine blood investigations, chest x-ray, 2decho and fitness for the surgery is done, and patient was posted for elective surgery.

Intraoperative findings: under spinal anaesthesia, Incision given 2 cm above the previous incision

- Bowel loops are adherent to the excoriated skin.
- Muscle layer couldn't be appreciated.
- Inter bowel adhesions noted, multiple adhesions noted between bowel and rectus muscle medially and to the inguinal ligament laterally.

Procedure: Excoriated skin is excised after releasing the adhesions

between the skin and bowel, adhesions of the bowel to the surrounding peritoneal layer, muscle and inter bowel adhesions are released. Content reduced and Closure of the abdomen done in 4 layers instead of component separation.



1. Peritoneum layer is separated from the muscle layer and peritoneum is closed with 2-0 catgut continuous suture.
2. Anterior Rectus is lateralised and sutured with the external oblique muscle with 1-0 prolene intermittent sutures.
3. Polypropylene mesh is placed over the muscle layer and fixed. Drain placed above the mesh.
4. Skin is sutured without tension by rising flaps.



Postoperative period is uneventful. POD 3 per abdomen soft, non-tender, bowel sounds present, patient passing flatus. Soft diet allowed on POD3. Drain removed on POD 5, wound healthy. Patient discharged on POD6.

Follow up: patient reviewed after one week, wound was healthy, suture removal done.

Discussion:

Incisional hernia refers to abdominal wall hernia at the site of a previous surgical incision. It is a type of ventral hernia. Midline incisional hernias are more common than other sites. It can be a definite hernia with all the hernia components of the defect, sac, and content. Or, it can be a weakness of the wall with shallow sac and occasional bulge of content. It is a common surgical problem. The classical presentation is a bulge with a positive cough impulse at the site of the incision. Patients with incisional hernias are also at risk for incarceration, obstruction (if the content is bowel), or strangulation.⁽⁶⁾

Patient-related factors that impair proper wound healing and affect the strength of the new tissue to support the abdominal wall increase the incidence of incisional hernia. Systemic chronic diseases like DM, renal failure, obesity, smoking, and malnutrition conditions; or systemic long term medications like steroids and immunosuppressants increase the likelihood of developing an incisional hernia.⁽⁵⁾

Incisional ventral hernia is not an uncommon postoperative complication. A variety of mechanical and nutritional factors, including improper wound closure, interposition of devitalized tissue, increased intra-abdominal pressure, infection, malignancy and malnutrition, have been implicated as the cause of impaired wound healing, tissue disruption and incisional hernia. Whatever the cause, Pareira and Serkes emphasized that the absence or incomplete presence of a "healing ridge", an area of induration beneath the incision, in the early postoperative period is a foreboding of wound disruption, infection or ventral herniation.⁽¹⁾

The presence of chronic dermatitis or frank ulceration in thin, devitalized skin overlying a rare incisional ventral hernia cannot be ignored as a warning that the complication of evisceration may occur. In these circumstances a casual conservative approach is insufficient, and serious consideration should be given to definitive surgical repair of the hernia.

Fascial reconstruction for the larger defects is a challenge in general surgery.⁽¹⁰⁾ The procedure may vary from primary closure, myofascial release, component separation and free tissue flap reconstruction depends on the technical and anatomical factors which includes morphology, extent of fascial defect, and degree of contamination. Synthetic mesh placement is preferred in the bridging approach to minimize recurrence.⁽⁴⁾

Comparison of the various surgical techniques found no significant differences, neither for reoperation rate nor for complication and recurrence rates. The best surgical technique for a patient has to be decided on an individual basis.

Post-operative complications such as compartment syndrome, surgical site occurrence, including mesh infection, bowel erosions, tissue-mesh take up failure, eventration, hernia recurrence should be explained to the patient and his attenders. Mesh repair is not preferred in contaminated cases due to high risk of infection.

Early surgical intervention is more safe and preferred approach to prevent complications and progression of life threatening emergencies.

Conclusion:

Surgical treatment of incisional hernia improves quality of life and satisfaction with the shape of the abdominal wall in patients. Early surgical intervention is more safe and preferred approach to prevent complications and progression of life threatening emergencies.

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