



## TRAUMATIC ABDOMINAL WALL HERNIA

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### ABSTRACT

Traumatic abdominal wall hernia remains a rare clinical entity despite an overall increase in blunt abdominal trauma. Early and correct diagnosis helps in prevention of associated visceral complications. Reported here is one such unusual case that presented at our tertiary care trauma center.

**KEYWORDS** : traumatic; abdominal wall; hernia.

### Introduction

Traumatic abdominal wall hernia is an unusual injury that follows blunt abdominal trauma. [1] Differing patterns of muscular and fascial disruption can result due to the different types of force involved, as well as the tensile properties of the various parts in the abdominal wall. [1] The resultant anatomical defect varies from small tears to large disruptions. [1]

### Case Presentation

A 33-year-old male manual labourer presented to us with one-day-old history of blunt abdominal trauma, which he sustained as a result of direct impact by a handcart to the abdomen. On examination patients pulse rate was 110/minutes and B.P of 100/70 mm of Hg. Abdominal examination showed the presence of a tender irreducible 3 by 2 cms intraparietal swelling in the left lumbar region. (Fig.1) Rest of the abdomen was guarded. Plain x-ray of the chest and abdomen were normal. Abdominal USG was essentially normal.

Patient underwent an emergency exploratory laparotomy to rule out hollow viscus injury. At laparotomy the ileum 1.5 feet from the IC junction had herniated through the defect in the anterior abdominal wall. (Fig 2) On reducing the ileum from the abdominal wall defect a through and through perforation in the ileum was noted with surrounding wall oedema. The patient underwent an ileo-ileal resection anastomosis, with the anatomical closure of the 3 by 3 cms defect in the abdominal wall with 1.0 vicryl. (Fig.3) Patient made an uneventful post-operative recovery.

### Discussion

Traumatic abdominal wall hernia occurs after blunt trauma. [2] It can be classified into low or high energy injuries depending on the mechanism of injury. Whether sustained following impact on a small blunt object or motor vehicle accident. [2]

Clinical features of varying degrees of abdominal tenderness can be present. [2] Presence of either abrasion or ecchymosis sometimes makes the diagnosis difficult. [2]

CT scan of the abdomen is the investigation of choice. [2, 3] The anatomic location, contents and features of complications can be demonstrated with CT scan. [3]

Low energy injuries usually have no associated abdominal injuries and can be repaired after local exploration through an incision overlying the defect. [2] High energy trauma should undergo

exploratory laparotomy through a midline incision to rule out associated hollow viscus injury. The defect preferably should be repaired primarily and use of prosthesis should be avoided because of high incidence of postoperative infections. [2]

### Acknowledgements

None

### Conflict of Interest

Declaration no financial interest or any conflict of interest exists.

### Figures

#### Figure Legend 1:

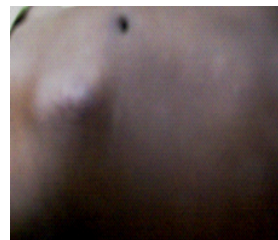


Fig 1



Fig 2

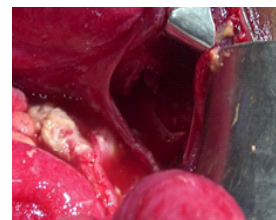


Fig 3

#### Figure Legend 2:

- 1. Fig.1.** Showing the presence of swelling in the left lumbar region.
- 2. Fig.2.** Showing the herniation of the ileum through the defect in the abdominal wall.
- 3. Fig.3.** Showing the abdominal wall defect.

### References

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