

CASE REPORT

TRAUMATIC VENTRAL WALL HERNIA

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INTRODUCTION: Lesion of the abdominal wall leading to symptomatic herniation is a rare entity. Traumatic abdominal hernia is described by Damschen et al as herniation through disrupted musculature and fascia associated with adequate trauma without skin penetration and no evidence of a prior hernia defect at the site of the injury⁽⁴⁾. The present report describes a large traumatic abdominal hernia detected 5 days following blunt trauma abdomen by horn of bullock.

KEYWORDS: Traumatic abdominal hernia, muscle avulsion, horn injury.

CASE REPORT: A 55yrs old male farmer presented to the surgery OPD, V.S.S. Medical College Hospital, Burla with complain of lower anterior abdominal wall swelling which was increasing in straining and decreasing in lying down position following a blunt trauma by horn of a bullock which happened 5days earlier. He had no history of pain, vomiting, distention, constipation and fever. His bowel and bladder habits were normal. He had no previous history of swelling in that region before the trauma.

On examination, a swelling of size 6cms vertically & 4cms horizontally in infra umbilical region which was reducible, impulse on coughing was positive, there was no guarding, rigidity, tenderness or rebound tenderness over the swelling, liver dullness was present and rest of the systemic examination were normal.

Ultrasonography & Computerized Tomography scan of abdomen & pelvis revealed no other pathology other than a defect in anterior abdominal wall.

Under spinal anesthesia through transverse skin incision abdomen was opened and a defect of size 6cms vertically & 4cms horizontally was found. Polypropylene mesh repair was done by inlay technique. Post-operative period was uneventful and stitches were removed on 7th post operative day.

DISCUSSION: Several different mechanisms of the traumatic herniation of the abdominal wall hernia have been described. As mentioned by Damschen et al & others:

- In car crashes and wearing seat belts is a shearing force that passes above the iliac crest thus causing avulsion of the muscles from their insertion in the pelvis called 'seat belt hernia'^(1, 8)
- Direct blow to the abdominal wall by small object like handle bar, hockey stick or horn which disrupts the muscle, fascia causing hernia.^(7, 9)
- Herniation due to fall causing acute elevation of intra-abdominal pressure.

In our case herniation was due to horn of bullock which was not powerful enough to penetrate the skin but powerful enough in its kinetic energy leading to disruption of the anterior wall. The exact mechanism of the phenomenon can't be explained in biological term.

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SUMMARY: A traumatic abdominal wall hernia is a rare entity following a horn injury and may be missed in the initial period of presentation. It may be the cause of pain or swelling of patient. So a possibility of traumatic abdominal wall hernia must be kept in mind while managing a case of blunt trauma abdomen in past.

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Figure 1 showing abdominal wall defect



Figure 2 after mesh placement

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