JEJUNAL BLOW OUT AFTER TRIVIAL ABDOMINAL TRAUMA IN A YOUNG BOY
MUHAMMAD FAISAL MURAD, SAIRO KHALID, ALVEENA ISHTIAQ, MYRA LIAQAT,
SADAF MEHBOOB, QASIM ALI, IDREES ANWAR

ABSTRACT

Isolated jejunal injuries are not very common after blunt abdominal trauma. Usually at the time of presentation these are missed because the abdominal signs and laboratory data is not very conclusive. This leads to delay in surgical intervention which is responsible for higher morbidity and mortality. We report here a rare case of young boy who had jejunal perforation after trivial abdominal trauma.

KEY WORDS: Jejunal Perforation, Blunt Abdominal Trauma, Morbidity, Mortality.

INTRODUCTION

Any abdominal organ can be injured by blunt abdominal trauma but isolated jejunal perforation is extremely rare even. Majority of gut injuries are caused by motor vehicle accidents, fall from height, injured by bicycle handle bar or as a result of physical assault by animals or human beings. Isolated jejunal perforation occur in less than 1% of patients who sustained blunt abdominal trauma. During blunt trauma, a sudden increase in intraluminal pressure in fluid and air present in gut causes a punctate or slit like perforation on anti mesenteric border. Diagnosis of isolated jejunal perforation is an unconscious post traumatic patient is a dilemma, because it can be missed especially if patient is haemodynamically stable. This delay in diagnosis leads to significant morbidity and mortality.

CASE REPORT

A 7 years old boy had a strike to the abdomen from the edge of sofa while he was playing in his house. He presented in the ER with pain in abdomen. Examination revealed tenderness in upper abdomen, he was afebrile and hemodynamically stable. On investigation, his CBC was unremarkable but ultrasound showed minimal fluid in the peritoneal cavity. He was advised overnight observation but the parents took the patient home. After about 40 hours, patient presented in ER early morning with severe abdominal pain, vomiting and distension. There were obvious signs of peritonitis on clinical examination. Repeated FAST scan revealed moderate ascites in peritoneal cavity. He underwent emergency exploratory laparotomy and was found to have 1 liter of purulent fluid in the abdominal cavity. There was a single perforation 1x1cm at the antimesenteric border of the jejunum at about 20cm from DJ. The perforation was primarily repaired along with thorough peritoneal lavage. The patient remained critical post operatively and was managed with ventilatory support but expired 12 hours postoperatively.

DISCUSSION

Most of the injuries after blunt abdominal trauma are because of high velocity motor vehicle collisions, fall from heights or because of fall of heavy weight on the abdomen. These are often associated with multiple injuries. Hollow viscus injury occurs less than 1% of all blunt trauma admissions. The injury to hollow viscus is usually confined to DJ junction, ileocaecal junctions and transverse tears to mesentry. Delays in the diagnosis of small bowel injury are directly responsible for almost half of the deaths. Even relatively brief delays as little as 8 hours results in morbidity and mortality directly attributable to missed small bowel injuries.

In our patient, there was localized blunt force to the mid abdomen which led to blow out of jejunum most likely because of direct compression against the lumbar vertebrae. In our patient, there are two things that need consideration. First the site of perforation, mid jejunum, is not a usual site, secondly, the mode of injury was trivial. The external signs of trauma on the abdominal wall were not evident. Similarly there were no convincing signs of peritonitis and surgical intervention. There was marked clinical deterioration within two days leading to mortality. Injuries to the hollow viscous are not very common in blunt abdominal trauma but they are difficult to diagnose and usually lead to a delay in the intervention. When these injuries are associated with other injuries to the solid organs then the diagnosis is usually straight forward based on the clinical signs. In isolated hollow viscous injury especially after trivial abdominal trauma, the intervention is delayed because of equivocal signs in early post trauma patients. The minimal abdominal signs are usually correlated with injury to abdominal wall. This whole scenario leads to a delay in intervention which at times is associated with catastrophic complications. Jejunal rupture secondary to trivial abdominal trauma is not common with only few cases reported in medical research. Its subdued clinical presentation and nonspecific laboratory findings make diagnosis very difficult. High index of suspicion and serial evaluation in expert hands are required to prevent this delay. Small bowel rupture should be considered in any patient with history of abdominal trauma and persistent abdominal pain.

1. Assistant Professor of Surgery,
   Rawalpindi Medical College, Rawalpindi
2. Holy Family Hospital, Rawalpindi
3. Professor of Surgery
   Rawalpindi Medical College, Rawalpindi

Correspondence to:
Muhammad Faisal Murad
Assistant Professor of Surgery,
Rawalpindi Medical College, Rawalpindi
E-mail: faisaldoc@yahoo.com
even if mode of injury is apparently not severe. We conclude that because of high mortality associated with small bowel injuries after blunt abdominal trauma an aggressive approach to the diagnosis and surgical intervention is justified even when the injury is evidently trivial and the clinical signs and lab investigations at presentation are not very convincing.

CONCLUSION

Diagnosis of small bowel injuries secondary to trivial blunt abdominal trauma needs strong clinical suspicion and close monitoring. Diagnostic Delays in such cases are associated with increase in morbidity and mortality.

REFERENCE