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Fatal Delay in Identification of Ileal Gangrene Following Blunt Trauma Abdomen After Road Traffic Accident

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ABSTRACT

A 21 year old male presented to our trauma center, 8 days after the blunt trauma abdomen following road traffic accident. For the first 8 days, patient was being managed at peripheral health care facility conservatively. Contrast Enhanced CT (CECT) scan of abdomen revealed right hemothorax with features suggestive of gastrointestinal perforation. Following laparotomy, gangrenous segment of ileum resected and ileostomy performed. Patient succumbed to death on post-operative day 26.

KEYWORDS | Road Traffic Accident (RTA), Contrast Enhanced Computerized Tomography (CECT), Burst Abdomen, Laparotomy

Introduction:
Blunt abdominal trauma may present itself in different ways. If there is injury to bowel loop, it may go in gangrene and its delayed recognition may lead to septicemia and increased rate of mortality.

Case Report:
A 21-year old male presented to our trauma center with history of blunt trauma abdomen, 8 days back, following road traffic accident. Initially patient was being managed conservatively at a peripheral health care facility and referred to us for worsening abdominal pain with breathlessness.

On arrival, patient was conscious, well oriented to time, place and person, pulse rate was 114/minute (right radial), SpO_2 90% on room air, blood pressure 92/62mm Hg (in right arm, supine position), respiratory rate 22/min thoraco-abdominal. After initial resuscitation patient was shifted to radiology and CECT thorax and abdomen was done, that revealed right sided hemothorax with peritoneal collection with free peritoneal gas.

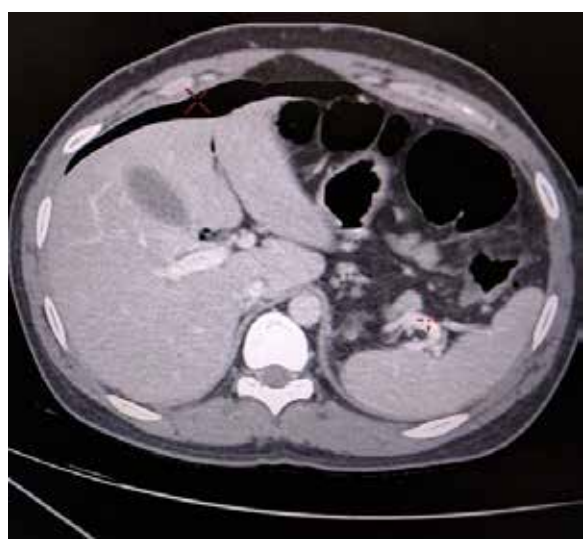

Figure: CECT abdomen of the same patient showing free peritoneal air

Immediate laparotomy was planned and patient was shifted to Operation Theater. Right sided intercostal tube drainage followed by laparotomy done. Intra-operatively 2 feet of gangrenous bowel segment found 4 feet proximal to ileo-cecal junction, which was resected and peritoneal lavage with double-barrel ileostomy done. Patient was transfused 2 units of blood intra-operatively.

Post-operatively patient was shifted to ICU for ventilator support. Ileostomy started functioning on postoperative day (POD)-4 and patient's general condition improved. Patient was weaned-off ventilator support on post-operative day 4. Patient developed burst-abdomen on POD-9 and high output entero-cutaneous fistula on POD-16. Patient was again put on ventilator support on POD-21 and expired on POD-26 due to multiple organ dysfunction.

Discussion:
Blunt abdominal trauma, as rightly said a Pandora box, is having a wide range of presentation. Unidentified bowel injury puts the patient on risk of severe peritonitis that may further advance to generalized septicemia. Associated nutritional de-

pletion and catabolic insult puts the patient into multiple organ dysfunction and ultimately death ensues. This patient definitely had a better outcome if ileal gangrene had been identified earlier and surgery has been done at an early stage.

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