



TRAUMATIC RETROCECAL PERFORATION PRESENTING AS SUBCUTANEOUS EMPHYSEMA -a rare case study

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Abstract : Traumatic bowel perforation usually is diagnosed by history, physical signs and symptoms and abdominal radiogram. Here we present a case which presented with abdominal wall subcutaneous emphysema as the only sign of a traumatic cecal perforation without obvious clinical signs of peritonitis or radiological evidence of air under the diaphragm.

Keyword : Traumatic retrocecal perforation-subcutaneous emphysema

Case report:

A 21 yr old male was admitted in our trauma ward with a history of road traffic accident where the patient rammed his bike into the back of a slowly moving tractor. Patient was brought to the ward 6 hours after the accident. During the initial survey patient was found to be hemodynamically stable, had multiple mid face lacerations, multiple small abrasions over the limbs, a circular 3 cm by 3 cm imprint abrasion in the right lower abdomen. Patient was evaluated for head injury, facial injuries, chest and blunt abdominal injuries and was found to have a fractured maxilla. Initial abdominal ultrasound and erect abdominal x rays (fig 1) were normal. Five hours after the admission, the patient developed subcutaneous emphysema of the right side of the abdominal wall extending from right flank to the umbilicus and from the inguinal region to just above the right costal margin. A search for the source of the gas was made with CT imaging and interestingly CT abdomen revealed gas tracking from the caecum through the posterolateral abdominal walls to the subcutaneous plane without any evidence of intra abdominal air (fig 2).



Figure 1

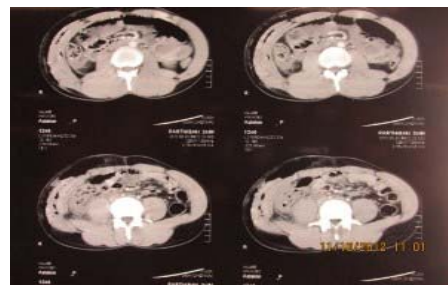


Figure 2

patient was immediately taken up for exploratory laparotomy. A midline incision was made. Intraoperatively a contused caecum, ascending colon with retrocecal fecal spillage without peritoneal breach was found (fig 3). On mobilising the caecum and ascending colon, a 1*1 cm retrocecal perforation was identified (fig 4). As the viability of the ascending colon was in doubt, a right hemicolectomy with end to side ileotransverse anastomosis was done. Laceration of anterior abdominal wall muscles under the site of abrasion of the skin was found and was sutured (fig 5). A drain was kept in the right paracolic gutter.



Figure 3



Figure 4



Figure 5

Post operative recovery was uneventful with a minimal wound infection at the drain site. Culture revealed e-coli (fig 6). Patient was started on oral fluids on day two and was discharged on day ten and was referred to the department of plastic surgery for management of maxillary fracture



Figure 6

Discussion: Malignant colonic /cecal perforation presenting as retroperitoneal abscess, necrotising fascitis of the thigh, anterior abdominal wall with paucity of abdominal signs is well known. However a traumatic cecal perforation presenting as subcutaneous emphysema has not been documented so far. This case depicts how misleading initial presentation of a patient can be and stresses the importance of CT imaging in locating the source of pathology. If surgical intervention were not done, the natural course would have been a retroperitoneal abscess, necrotising fascitis of the thigh or the anterior abdominal wall.

References:

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