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CASE REPORT PROF-4073

CAECAL VOLVULUS;
A RARE CAUSE OF INTESTINAL OBSTRUCTION.

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ABSTRACT… Caecal volvulus is a rare cause of intestinal obstruction. In this report, we present a 35 year-old old Female patient with Caecal volvulus, and we discuss this very rare entity.

Key words: Cecum, Obstruction, Volvulus.

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INTRODUCTION

Caecal volvulus is a rare cause of intestinal obstruction that occurs 1-1.5% of all intestinal obstructions. Although it generally present as a small bowel obstruction, clinical symptoms, signs, and routine laboratory tests are not specific to the disease, while CT is more diagnostic. It is surgical emergency & Surgical intervention is the only treatment of Caecal volvulus.[1] The prognosis of the disease may be poor with a 0-40% mortality rate depending on the bowel viability or gangrene.[1,3]

In this report, we present a 35 year-old female patient with Caecal volvulus with mobile Caecum and incomplete visceral rotation.

CASE REPORT

A 35 year-old female patient presented in emergency ward with a three-day history of abdominal colicky pain, distension and vomiting. Clinical Examination demonstrated a distended abdomen with increased bowel sounds & Tenderness. Laboratory tests revealed an increased leucocyte count. Plain abdominal x-ray graph showed multiple air-fluid levels (Figure-1). The diagnosis was intestinal obstruction.

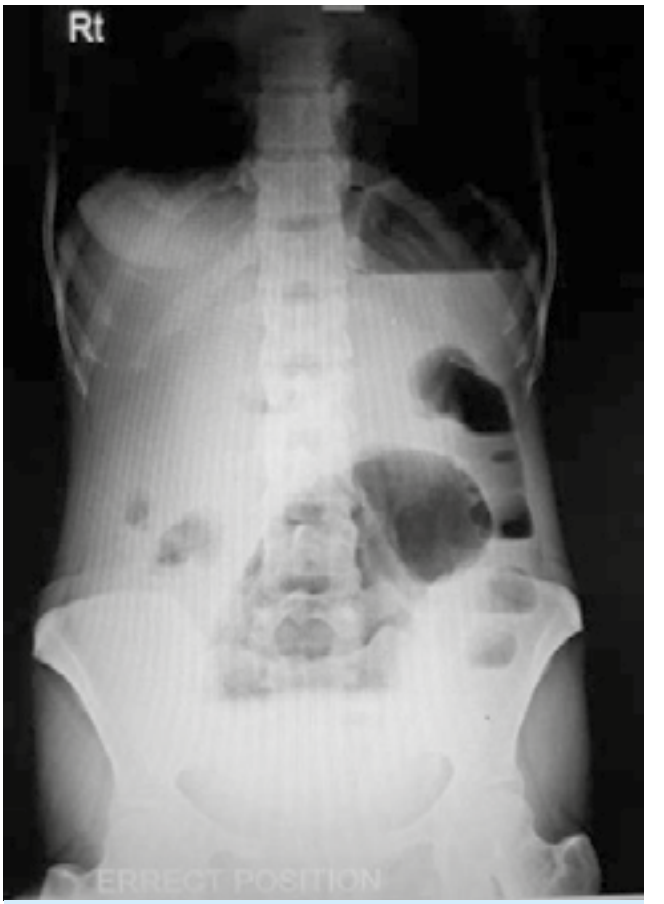


Figure-1. X-ray graph showed multiple air fluid levels.

An urgent exploratory laparotomy through median incision done after a proper resuscitation. Operative findings demonstrated a Caecal volvulus

with terminal ileum and right colon gangrene (Figure-2). Caecum was mobile and visceral rotation was incomplete. After the resection of gangrenous bowel segments, intestinal continuity was provided by an ileotrasvers anastomosis. The patient revealed an uneventful recovery. Histopathological examination reported acute gangrenous ileitis, colitis and appendicitis.

Figure-2. Operative appearance shows torsioned and gangrenous terminal ileum and cecum/ascending colon.

DISCUSSION

Caecal volvulus is caused by axial twisting of the Caecum along with the terminal ileum and ascending colon.[2] It is responsible for approximately 1-1.5% of all intestinal obstructions, while 11% of all volvulus-related intestinal obstructions, and its incidence is 2.8-7.1 cases per million annually.[1] Most of the Caecal volvulus reports are from Asia[1], and the disease occurs less frequently than sigmoid volvulus[2], which is also common in Asia, as well as in Turkey, particularly in our region,.[5] The present patient is our only Caecal volvulus case in the recent 10 years.

Caecal volvulus occurs predominantly in patient with poor right colon fixation & affects approximately 10% to 25% of population.[9]

Many factors have been referred as correlated to Caecal volvulus development, mainly anatomical predispositions such as incomplete intestinal rotation, and previous abdominal operations.[1,3,6,7] The disease predominantly affects female patients 30-60 years of age, as was in our case.[6]

Abdominal pain, distension, nausea, vomiting, and diarrhea or constipation are the main clinical features of Caecal volvulus[1-3,6,7], but unfortunately clinical symptoms, signs, and routine laboratory tests are not specific enough to lead to a prompt diagnosis.[3] Although abdominal radiography may show the features of an intestinal obstruction, including wide- spread small intestinal air-fluid levels and/or distended cecum in the right abdomen, making the Caecal volvulus diagnosis is difficult or impossible in most of the cases[2,3,6], as was in ours. Doppler USG may lead to make a definite diagnosis by showing twisted mesenteric vessels[6], and CT may be more diagnostic by demonstrating Caecal distension, Caecal apex in left upper quadrant, mesenteric whirl, ileocecal twist, an small bowel distension.[7] Despite the identified diagnostic features, Caecal volvulus is rarely diagnosed correctly at the time of presentation due to the low incidence of the disease.[2,3]

Surgical intervention is the only treatment of Caecal volvulus.[1] If there is intestinal gangrene, resection is inevitable, as was in our patient. In non- gangrenous cases, it is sufficient to simply untwist the Caecum or additionally to perform a Caecopexy by fixing it to the abdominal wall[1,3], Caecopexy provides a safe alternative to resection and primary anastomosis in suitably selective patients[10], and laparoscopic technique is preferred perioperative mortality of Caecal volvulus is approximately 0-40% depending on the bowel viability or gangrene, as well as the type of the therapeutic procedure.[1,3] Early diagnosis is essential in order to reduce the high mortality rate.[2]

REFERENCES

1 Bandurski R, Zareba K, Kedra B. **Caecal volvulus as a rare cause of intestinal obstruction.** Pol Przegl Chir 2011; 83: 515-7.

2. Khaniya S, Shakya VC, Koirala R, et al. **Caecal volvulus: a twisted tale.** Trop Doct 2010; 40: 244-6.

3. Pulvirenti E, Palmieri L, Toro A, Di Carlo I. **Is laparotomy the un- avoidable step to diagnose Caecal volvulus?** Ann R Coll Surg Engl 2010; 92: 27-9.

9. Rogers RL, Harford FJ. **Mobile caecum syndrome Dis Colon Rect.**1984; 27(6):399-402169-75.

5. Atamanalp SS, Ozturk G. **Sigmoid volvulus in the elderly: outcomes of a 43-year, 453-patient experience.** Surg To- day 2011; 41: 514-9.

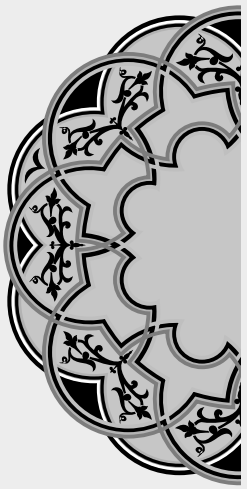
6. Takada K, Hamada Y, Sato M, et al. **Caecal volvulus in children with mental disability.** Pediatr Surg Int 2007; 23: 1011-4.

7. Arulmolichelvan A, Sivaraman A, Muthukrishnan A. **Caecal volvulus associated with intestinal malrotation presenting as postop- erative intestinal obstruction.** Med Princ Pract 2012; 21: 389-91.

8. Jones RG, Wayne EJ, Kehdy FJ. **Laparoscopic detorsion and Caecopexy for treatment of Caecal volvulus.** Am Surg 2012; 78: 251-2.

9. Rogers RL, Harford FJ. **Mobile caecum syndrome Dis Colon Rect.**1984; 27(6):399-402.

10. Grossman EM, Johnson FE, Enger KT. **Caecal volvulus: outcome of management by ceiliotomy Tech Coloproctol** 1999; 3(3): 139-43.



"A lie has many variations, the truth none."

African Proverb

AUTHORSHIP AND CONTRIBUTION DECLARATION

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