CASE REPORT

CAECAL BASCULE: A RARE CAUSE OF INTESTINAL OBSTRUCTION

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ABSTRACT: Caecal volvulus is a rare condition and caecal bascule, a variant of caecal volvulus is even rarer. Despite similar clinical presentation, initial vigil during clinical examination helps in furthering the diagnosis. The objective of treatment in case of caecal volvulus is to avoid any complication such as gangrene with resection being the only choice if gangrene has already developed. The present case of a 53 year old male, is a typical representation of a caecal volvulus complicated by presence of gangrene confirmed on laparotomy. Resection of 5.7 cm of involved gangrenous part averted any further complication. Follow-up and reversal of ileostomy was done after 6 weeks with an ileo-ascending anastomosis. No complication was reported during the follow up.

INTRODUCTION: Cecal volvulus is a rare condition, and its incidence is reported to range from 2.8 to 7.1 per million people per year [1]. It is characterised anatomically by the axial twisting that occurs involving the caecum, terminal ileum, and ascending colon [2, 3]. Caecal bascule is a variant of this condition associated with the upward and anterior folding of the ascending colon and accounts for about 10% of all caecal volvulus case sp [3]. Despite anatomical differentiation, the clinical profile of caecal volvulus and caecal bascule is very similar and is often manifested in terms of intestinal obstruction and strangulation [2, 3].

Clinical presentation of volvulus cases is very diverse and is characterized by intermittent episodes of abdominal pain to unbearable pain leading to medical emergencies [3, 4]. Owing to its rare occurrence, it is difficult to diagnose. In this paper, we report a case of cecal volvulus with extremely rare caecal bascule variant seen in a 55-year-old man, diagnostic method, treatment planning and management of the case is discussed

CASE REPORT: A 55 year old male presented with complaints of pain for the last 5 days followed by distension of abdomen for the last 2 days. He was also vomiting for the past 24-hours. On examination, generalized distension with tenderness was felt. Tympanic note over left upper quadrant was noticed. There were no bowel sounds and no evidence of sepsis.

Erect X-Ray of abdomen showed dilated small bowel loops with a large gas-filled loop with haustrations placed obliquely which are characteristic of caecal bascule.

On exploratory laparotomy, caecum & appendix were found to be gangrenous and lying over splenic flexure of colon. Resection of gangrenous segment 5.7 cm in length was done with exteriorization of ileum & ascending colon. Patient recovered and was discharged with ileostomy in situ on day ____.

Follow-up and reversal of ileostomy was done after 6 weeks with an ileo-ascending anastomosis.

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DISCUSSION: Age of patient was 55 years, however, the age of patients has been seen to be varying across location and time. Gupta and Gupta [5] reported the average age at presentation in Western countries to be 53 years, whereas for Indians they reported it to be 33 years. However, Katoh et al. [6] were of the view that patients' age at the presentation may be affected by cultural and dietary influences. Pousada [7] considered to be an entity common to elderly age group with personal habits such as alcoholism as a risk factor. In present case, no relevant personal history of alcohol or any other addiction was recorded.

Cecal bascule is a variant of volvulus in which the cecum "folds" anteromedially in front of the ascending colon and thus produces a flap-valve occlusion at the site of flexion. It is a torsion in the transverse plane, and causes cecal distension [8]. The other form of cecal volvulus, axial torsion, is a classic volvulus in which rotation occurs in the longitudinal plane [9]. Clinically, the two forms have similar presentations and treatments, so distinction generally is not made [8, 9]. Radiographically, however, bascule can be differentiated from axial torsion [8, 9]. In classic axial torsion, the cecum turns upward and usually lies in an ectopic location, often the left upper quadrant, giving the classic "kidney-bean" appearance. In present case too, clinical findings confirmed involvement of left upper quadrant which prompted a clinical diagnosis followed by its confirmation radiologically. On laparotomy the characteristic "kidney bean" appearance was confirmed.

Caecal bascule is not reported to cause torsion of the mesentery and blood vessels but it can lead to intestinal gangrene due to distension and bowel wall ischemia [10, 11], in present case too, intestinal gangrene was observed to be a characteristic presentation of caecal bascule.

In this case, gangrenous segment was resected. While the goal of nongangrenous cecal volvulus is to prevent the development of gangrene and address the anatomic abnormality, in gangrenous volvulus the need of the hour is resection of gangrenous loop immediately after adequate resuscitation [3,10,11,12].

No subsequent complication or morbidity was observed during 6 weeks' follow up. The outcome of resection of gangrenous cecal volvulus depends on the overall fitness of the patient including the age and associated comorbid conditions with a reported mortality ranging between 23 to 48% [3, 10, 11, 12].

Thus early diagnosis and management with good general health of patient averted any eventuality. Despite low prevalence, clinical profile is helpful in diagnosing the patient further. An early intervention is suggested both for prevention and management of complications.

REFERENCES:

1. Consorti ET, Liu TH Review Diagnosis and treatment of caecal volvulus. Postgrad Med J. 2005 Dec; 81(962):772-6.
2. Rabinovici R, Simansky DA, Kaplan O, et al. Cecal volvulus. Dis Colon Rectum 1990; 33: 765-9.
3. Madiba TE, Thomson SR. The management of cecal volvulus. Dis Colon Rectum 2002;45:264-7.
4. Habre J, Sautot-Vial N, Marcotte C, Benchimol D. Caecal volvulus. Am J Surg. 2008;196:e48-e49.
5. Gupta S, Gupta SK. Review Acute caecal volvulus: report of 22 cases and review of literature. Ital J Gastroenterol. 1993;25:380-384.
6. Katoh T, Shigemori T, Fukaya R, Suzuki H. Cecal volvulus: Report of a case and review of Japanese literature. World J Gastroenterol. 2009 May 28; 15(20): 2547-2549.

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7. Pousada L. Cecal bascule: an overlooked diagnosis in the elderly. J Am Geriatr Soc. 1992 Jan;40(1):65-7.
8. Gray G, Tikotsky A. Radiological Case of the month. Applied Radiology Nov. 1999; 48-50.
9. Rabin M, Richter I: Cecal bascule: A potential clinical and radiological pitfall. S Afr Med J 54:242-244, 1978.
10. Balthazar E: Congenital positional anomalies of the colon: Radiographic diagnosis and clinical implications. Gastrointest Radiol 2:49-56, 1977.
11. Bystrom J, Backman L, Dencker H, Medin-Brith G. Volvulus of the cecum. An analysis of 40 cases and the value of various surgical measures. Acta Chir Scand. 1972;138(6):624-7.
12. Tejler G, Jiborn H. Volvulus of the cecum. Report of 26 cases a and review of the literature. Dis Colon Rectum. 1988; 31: 445-90.
13. Majeski J. Operative therapy for cecal volvulus combining resection with colopexy. Am J Surg.2005;189(2):211-13.

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