

## CASE REPORT

### CAECAL BASCULE AS A CAUSE OF ACUTE INTESTINAL OBSTRUCTION

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**ABSTRACT:** Caecal bascule is a variety of caecal volvulus which can present with features of intestinal obstruction and subsequent gangrene and perforation. This is a young male who presented with features suggestive of acute intestinal obstruction. On exploration caecum was found to be rotated over ascending colon in a flap valve like manner and was dilated with gangrenous changes. So, a right hemicolectomy with ileotransverse anastomosis was performed with uneventful postoperative recovery of the patient.

**KEYWORDS:** Caecal bascule.

**INTRODUCTION:** Intestinal volvulus is defined as a complete twisting of a loop of intestine around its mesenteric attachment site. Caecal volvulus is next to sigmoid volvulus in terms of incidence. Wienstein in 1899 reported caecal bascule as folding of caecum anterior to ascending colon producing a flap valve occlusion to caecal emptying.<sup>[1]</sup> It accounts for about 10% of cases of caecal volvulus.<sup>[2]</sup> We report a case of caecal volvulus with a rare variant of caecal bascule in a young 20 year old male.

**CASE REPORT:** A 20 year old male presented with a 2 day history of abdominal pain and distension. He had high grade fever with chills. He had tachycardia and was normotensive. His examination revealed abdominal distension with generalized tenderness and rebound tenderness. There was tympanic note over right upper quadrant and bowel sounds were absent. He had leukocytosis (TLC=25,000). Abdominal x ray revealed large bowel dilatation in right hypochondrium without small bowel dilatation and paucity of gas in rest of large bowel.



**Fig 1**

On exploratory laparotomy, caecum was found to be gangrenous and was lying over hepatic flexure of colon along with excessive redundant sigmoid colon. A right hemicolectomy with

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ileotransverse anastomosis with sigmoidopexy was performed. Patient recovered successfully and was discharged on day 7.



**Fig. 2**



**Fig. 3**

**DISCUSSION:** Caecal volvulus was 1<sup>st</sup> described by Rokitansky in 1837.<sup>[3]</sup> The average age of presentation of caecal volvulus in Indians has been reported to be 33 years.<sup>[4]</sup> It is of 3 types. Type 1 and 2 involves axial rotation of caecum in either clockwise or anticlockwise direction respectively. However, in type 3 that is caecal bascule, there is anterior and upward folding of caecum over ascending colon.<sup>[5]</sup> This anterior folding of caecum leads to flap valve occlusion at the site of flexion.<sup>[6]</sup> This eventually leads to decreased caecal emptying and caecal distension. With progressive distension, bowel ischemia ensues leading to gangrene and subsequent perforation. An abdominal x-ray shows caecal distension disproportionate to rest of large bowel. Barium enema used to be diagnostic modality of choice. However, due to fear of its extravasation it is now rarely employed, especially, in whom gangrene or perforation is suspected. CECT abdomen is the preferred modality of choice.

In cases of caecal bascules endoscopic decompression is of limited value. The treatment of choice is surgical decompression and caecopexy. However, if gangrene ensues resection is required.<sup>[7]</sup>

### REFERENCES:

1. Weinstein, Mandel. "Volvulus of the caecum and ascending colon." *Annals of surgery* 107.2 (1938): 248-259.
2. Madiba, T. E., S. R. Thomson, and James M. Church. "The management of cecal volvulus." *Diseases of the colon & rectum* 45.2 (2002): 264-267.
3. Rokitansky, C. "Intestinal strangulation." *Arch Gen Med* 14 (1837): 202-204.
4. Gupta S, Gupta SK. Review Acute caecal volvulus: report of 22 cases and review of literature. *Ital J Gastroenterol.* 1993; 25: 380- 384.
5. Oza, Veeral, Andrea Johnson, and Sheryl Pfeil. "Cecal bascule: an unusual pathology of cecal dilation. Case report and brief review." *Journal of interventional gastroenterology* 3.4 (2013): 143-144.
6. Saleem T, Raza W, and Kanaujia S. "Caecal Bascule: A Rare Cause of Intestinal Obstruction." *Journal of Evolution of Medical and Dental Sciences* 2.49 (2013): 9525-527.
7. Majeski J. Operative therapy for cecal volvulus combining resection with colopexy. *Am J Surg.* 2005; 189(2): 211-13.

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