Coffee Bean Sign

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This case is of a 29-year-old man who consulted for abdominal distension without bowel movement for three days. There was no fever, nausea, or vomiting. On physical examination, the body temperature was 36.9℃. The abdomen was ovoid in shape. There was diffuse tenderness over whole abdomen without rebounding pain. The bowel sound was hypoactive. Laboratory data showed no significant abnormality.

Kidney-ureter-bladder radiograph (Fig. 1) revealed a distended ahastral sigmoid loop, which is the “coffee bean” sign (right lower corner of Fig. 1), with the apex of the distended bowel loop directed towards the right shoulder.

Fig. 1  Kidney-ureter-bladder radiograph showed a distended ahastral sigmoid loop, which is the “coffee bean” sign (right lower corner), with the apex of the distended bowel loop directed towards the right shoulder.
Contrast enhanced abdominal computed tomography revealed a “bird’s beak” sign (Fig. 2), indicating a volvulus. Sigmoidoscopy could not reduce the sigmoid volvulus and fever developed after three days of medical treatment. The patient underwent Hartmann’s procedure and surgical findings showed a twisting point and a markedly dilated sigmoid colon 15 cm in diameter. The patient underwent closure of the colostomy and colo-rectal anastomosis three months later.

Volvulus occurs when a segment of the bowel twists around the axis of its mesentery, resulting in intestinal occlusion. The “coffee bean” sign demonstrates a typical sigmoid volvulus. The sigmoid volvulus can be decompressed by a flexible or rigid sigmoidoscope and the placement of a rectal tube. Ballantyne et al.\(^1\) reported that sigmoid volvulus can be successfully reduced by sigmoidoscopy in 70-80% attempts. The recurrence rate of endoscopic reduction is 25-50\(^{(1-2)}\). Therefore, surgical resection or coloproctostomy is indicated in medically compromised patients.

References