## A Cause of Sudden Abdominal Pain in Elderly Woman: Sigmoid Volvulus: Letter to the Editor

İleri Yaştaki Kadın Hastada Şiddetli Abdominal Ağrı Nedeni: Sigmoid Volvulus

Adnan TAŞ, MD,<sup>a</sup> Neşe ASAL, MD,<sup>b</sup> Hacer ÇELİK, MD,<sup>c</sup> Vildan KÜÇÜKTERZİ, MD,<sup>b</sup> Seyfettin KÖKLÜ, MD<sup>a</sup>

Departments of 

Gastroenterology,

Radiology,

Ankara Training and Research Hospital,

Department of Chest Diseases,

Atatürk Chest Disease and Chest Surgery

Training and Research Hospital, Ankara

Geliş Tarihi/*Received:* 27.02.2011 Kabul Tarihi/*Accepted:* 05.04.2011

Yazışma Adresi/Correspondence: Adnan TAŞ, MD Ankara Training and Research Hospital, Department of Gastroenterology, Ankara, TÜRKİYE/TURKEY dradnantas@gmail.com

## Key Words:

Intestinal volvulus; abdominal pain; abdomen, acute

## Anahtar Kelimeler:

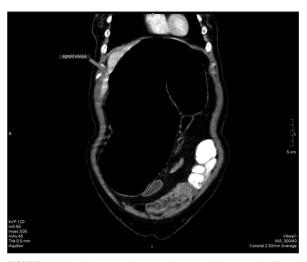
Bağırsak volvulusu; karın ağrısı; karın, akut

Turkiye Klinikleri J Gastroenterohepatol 2011;18(2):104-5

Copyright  $\ensuremath{\mathbb{C}}$  2011 by Türkiye Klinikleri

olonic volvulus is defined as the torsion of the large intestine around its mesenteric axis, which leads to an acute colonic obstruction. The risk factors implicated in sigmoid volvulus are chronic constipation, age, use of psychoactive drugs, neurologic disease, megacolon and a history of abdominal surgery. We report here a volvulus case occurred in a patient with Alzheimer dementia.

A 65-year-old woman with Alzheimer dementia presented to the emergency department with a 4-day history of abdominal distension, pain and constipation. She developed distended abdomen progressively. Her past medical history revealed constipation for 2 years. She had no history of cancer, abdominal surgeries, or colon screening studies. She was a nonsmoker and nondrinker. Her vital signs were normal. Abdominal examination revealed marked distention with diminished bowel sounds and severe discomfort with deep palpation of the left lower quadrant, but no peritoneal irritation signs. Laboratory findings including a full blood count were normal. She had a serum sodium of 124 mEq/L (135-145 mEq/L), a potassium level of 2.8 mmol/L (3.6-4.8 mmol/L). A plain radiograph of the abdomen showed a markedly distended sigmoid loop with an inverted Ushape also known as the "coffeebean sign," consistent with sigmoid volvulus and abdominal computed tomography (CT) reveals dilated colon with an air/fluid level, as well as the "whirl sign" composed of mesentery (Figure 1,2). The patient was hospitalized and hydrated with intravenous saline with potassium supplementation. After preparing the patient with fleet enema, flexible sigmoidoscopy was performed with minimal air insufflation, which showed normal mucosa in rectum and sigmoid colon till the level of the splenic flexure. No abnormality, such as ischaemic colitis, mucosal necrosis, or a "twist" in the colonic mucosa, was noted endoscopically. A repeat abdominal radiograph was done a day later showing resolution of the volvulus, and the patient was able to eat and pass motion normally after the sigmoidoscopy. She was discharged two days later.



**FIGURE 1:** Abdominal computed tomography coronal plane reveals dilated colon with an air/fluid level, as well as the "whirl sign" composed of mesentery.

Sigmoid volvulus is a common and potentially life-threatening condition occurring in the elderly. A volvulus of the colon occurs in the sigmoid region about 40% of the time, as in our patient.<sup>3</sup> Patients usually have symptoms of continuous abdominal pain, distention, nausea, and constipation. On plain radiography, severely distended sigmoid loop is the classic finding. Some authors describe the dilated twisted sigmoid loop as an "inverted U" or "omega sign", as in the present case.

Although sigmoid volvulus can often be diagnosed fairly accurately on abdominal radiographs, CT offers the added advantage of excluding other

causes of intestinal obstruction in uncertain cases, such as presence of intra-abdominal abscesses, as well as diagnosing complications such as perforation.<sup>4</sup> In most instances, decompression can be done non-operatively with insertion of a rectal tube, or performing flexible sigmoidoscopy. However, sigmoidoscopy should not be performed in patients who have developed clinical evidence of bowel gangrene (such as those with sepsis, fever, or peritonitis).<sup>5</sup>

In conclusion, sigmoid volvulus should be considered in elder patients with chronic constipation and using psychoactive drugs who admitted with severe abdominal pain. Sigmoidoscopy is the easiest and cheapest procedure for both confirming diagnosis and treatment.



FIGURE 2: Abdominal computed tomography axial plane.

## REFERENCES

- Friedman JD, Odland MD, Bubrick MP. Experience with colonic volvulus. Dis Colon Rectum 1989;32(5):409-16.
- 2. Alshawi JS. Recurrent sigmoid volvulus in pregnancy: report of a case and review of the
- literature. Dis Colon Rectum 2005;48(9):1811-3.
- Ballantyne GH, Brandner MD, Beart RW Jr, Ilstrup DM. Volvulus of the colon. Incidence and mortality. Ann Surg 1985;202(1):83-92.
- Frager D. Intestinal obstruction role of CT. Gastroenterol Clin North Am 2002;31(3):777-99.
- Brothers TE, Strodel WE, Eckhauser FE. Endoscopy in colonic volvulus. Ann Surg 1987; 206(1):1-4.