Göztepe Tıp Dergisi 24(1):35-37, 2009 **ISSN 1300-526X**

Transverse kolon volvulusu - barsak tıkanıklığının seyrek nedeni

Oktay YENER (*), Gökhan DEMİRAL (*), Fikret AKSOY (*), Canan ERENGÜL (*)

SUMMARY

Volvulus of the transverse colon: a rare cause of intestinal obstruction

This is a case report of a patient with a transverse colon volvulus and acute obstruction of the large intestine. A case is presented with emphasis on incidence, predisposing factors, clinical presentation and radiologic examination. Volvulus of the transverse colon continues to be relatively rare medical problem and is infrequently included in the differential diagnosis of the acute abdomene.

Key words: *Volvulus, transverse colon, bowel obstruction*

Anahtar kelimeler: *Transvers kolon, volvulus, barsak tıkanıklığı*

INTRODUCTION

Volvulus is defined as an abnormal twisting of a segment of bowel on itself, along its longitudinal axis. This results in occlusion of the proximal bowel and a closed loop obstruction within the segment. Compromised blood supply to the involved segment, together with the increase in intraluminal pressure, leads to gangrene and perforation if unrelieved [1,2]. Worldwide, the incidence of volvulus of the large bowel varies widely, according to the population studied. In an advanced Western population large bowel volvulus accounts for 1-5 % of all large bowel obstructions [3,4]. In these populations, the most common site of large bowel torsion is the sigmoid colon (80 %), followed by cecum (15 %) transverse colon (3 %) and splenic flexure (2 %). The condition is common in regions of Africa, Southern Asia and South America. Volvulus of the transverse colon is a rare condition requiring early diagnosis and treatment [5,6]. In the absence of ischaemic changes within the redundant bowel, success can be anticipated with conservative fixation procedures [7].

CASE REPORT

This is a case report of a patient with a transverse colon volvulus and acute obstruction of the large intestine. A 67-year-old male patient was admitted to the emergency surgery department with gradual onset of abdominal pain and distension lasting for a few days. Clinical examination revealed rigidity

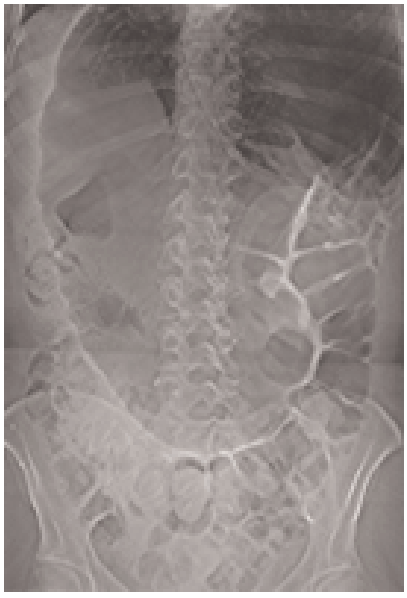

Figure 1. Plain abdomene X-Ray showed multiple air-fluid level.

Geliş tarihi:12.1.2009
Kabul tarihi: 03.3.2009
S.B. Göztepe Eğitim Araştırma Hastanesi 2. Cerrahi Kliniği, Dr.*

and tenderness in the abdomene. Routine hematologic testing revealed leukocytosis, and abdominal x-ray multiple air-fluid levels in the large intestine (Figure1). Clinical diagnosis was acute bowel obstruction. Based on the clinical findings, we decided to perform an explorative laparotomy. A transverse colon volvulus was detected. The proximal parts of the large intestine were severely distended and an abnormal twisting of a segment of transverse colon on itself, along its longitudinal axis was seen (Figure 2-3). It was treated by reduction, decompression and parallel colopexy.

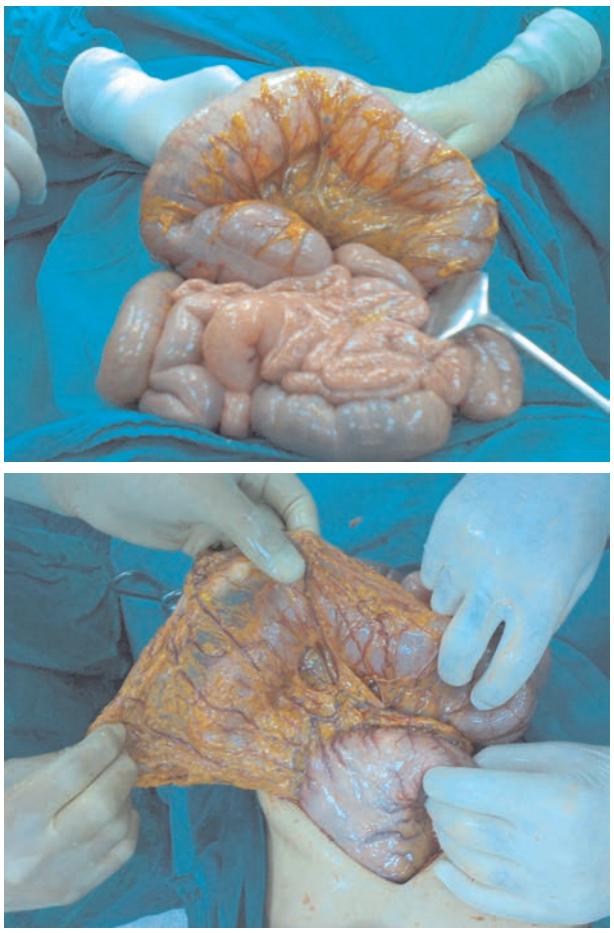

Figure 2,3. The proximal parts of the large intestine were severely distended and an abnormal twisting of a segment of transverse colon on itself, along its longitudinal axis was seen.

DISCUSSION

Volvulus of the colon represents the third most common cause of colonic obstruction after carcinoma and diverticulitis. The disorder is caused by a twisting of the intestine on its mesenteric axis, resulting in complete or partial obstruction. It may reduce spontaneously and recur chronically, but more frequently volvulus of the colon presents acutely. When the blood supply to the bowel is compromised, necrosis and perforation supervene.

Volvulus occurs in those portions of the colon possessing a mesentery, including the sigmoid, cecum, and transverse colon. Rarely, volvulus develops in the transverse colon because of congenital absence or surgical division of the normal fixation structures (the gastrocolic, phrenicocolic, and splenocolic ligaments) [8]. Volvulus of the transverse colon is an uncommon event but results in mortality or significant morbidity relatively more often then cecal or sigmoid volvulus. The diagnosis of colonic volvulus can generally be suspected on conventional abdominal radiography and can be confirmed with a barium enema. However, the latter offers no information about complications such as bowel ischemia or other abnormalities outside the bowel wall. In our patient, the markedly distended bowel loop depicted on radiography was suggestive of volvulus, but the exact level of obstruction was hard to identify with confidence. The treatment for volvulus depends on whether the bowel is strangulated. Fever, the presence of significant leukocytosis, or peritoneal signs suggest bowel strangulation or perforation. Strangulated volvulus demands immediate operative reduction and has a grave prognosis. The goals of therapy in non-strangulated volvulus are relief of torsion and prevention of recurrence

A cases is presented with emphasis on incidence, predisposing factors, clinical presentation and radiologic examination. The need for early diagnosis and surgical intervention is stressed. Volvulus of the transverse colon continues to be a relatively rare medical problem and is infrequently included in the differential diagnosis of the acute abdomene. volvulus of the transverse colon is an uncommon event but results in mortality or significant morbi-

dity relatively more often then cecal or sigmoid volvulus [8,9,10,11]. In the absence of ischaemic changes within the redundant bowel, success can be anticipated with conservative fixation procedures.

REFERENCES

1. Gumbs MA, Kashan F, Shumofsky E, Yerubandi SR. Volvulus of the transverse colon. Reports of cases and review of the literature. Dis Colon Rectum 1983;26:825-828.
2. Loke KL, Chan CS. Case Report: transverse colon volvulus: unusual appearance on barium enema and review of the literature. Clin Radiol 1995;50:342-344.
3. Yaseen ZH, Watson RE, Dean HA, Wilson ME. Case report: transverse colon volvulus in a patient with Clostridium difficle pseudomembranous colitis. Am J Med Sci 1994;308:247-250.
4. Zinkin LD, Katz LD, Rosin JD. Volvulus of the transverse colon: report of case and review of the literature. Dis Colon Rectum 1979;22:492-496.
5. Plorde JJ, Raker EJ. Transverse colon volvulus and associated Chilaiditi's syndrome: case report and literature review. Am J Gastroenterol 1996;91:2613-2616.
6. Anderson JR, Lee D, Taylor TV, Ross AH. Volvulus of the transverse colon. Br J Surg 1981;68:179-181.
7. Ballantyne GH. Review of sigmoid volvulus: history and results of treatment. Dis Colon Rectum 1982;25:494-501.
8. Mindelzun RE, Stone JM. Volvulus of the splenic flexure: radiographic features. Radiology 1991;181:221-223.
9. Fishman EK, Goldman SM, Patt PG, Berlanstein B, Bohlman ME. Transverse colon volvulus: diagnosis and treatment. South Med J 1983;76:185-189.
10. Wolf EL, Frager D, Beneventano TC. Volvulus of the transverse colon. Am J Gastroenterol 1984;79:797-798.
11. Organgio GR, Fazio VW, Winkelman E, McGonagle BA. The Chilaiditi syndrome and associated volvulus of the transverse colon: an indication for surgical therapy. Dis Colon Rectum 1986;29:653-656.