Sigmoid Volvulus Complicating Pregnancy: A Case Report

Gebelik ile Komplike Sigmoid Volvulus: Olgu Sunumu

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Abstract
Sigmoid volvulus during pregnancy is a rare complication, and as of 2012, fewer than 100 cases had been reported. In this report, we present a 30 year-old pregnant woman with sigmoid volvulus, and we discuss this rare entity.

Keywords: Sigmoid colon, volvulus, pregnancy

Introduction
Sigmoid volvulus (SV) during pregnancy is a rare complication, and as of 2012, fewer than 100 cases had been reported in the literature [1]. The disease is generally presented as a bowel obstruction, and the physiologic symptoms of pregnancy may cloud the clinical picture [1, 2]. Laboratory findings are not pathognomonic, X-ray is generally avoided, and ultrasonography is helpful providing information about foetus [1, 3]. The treatment requires a multidisciplinary approach, and surgical intervention is frequently needed [1, 4]. The prognosis of SV is relatively poor [1].

In this report, we present a 30 year-old pregnant woman with SV, who is the tenth pregnant SV case of our 974-total and 175-female patient series over a 48-year period between June 1966 and June 2014.

Case Report
A 30 year-old female patient with a two-day history of abdominal pain, distension, obstipation, nausea, and vomiting was admitted to the hospital. She had a 16 week-pregnancy, and she was multiparous. Clinical examination demonstrated a distended tender abdomen with hypokinetic bowel sounds. Laboratory tests revealed an increased leucocyte count. Abdominal ultrasonography showed a 16 week-healthy foetus. Abdominal MRI demonstrated whirl sign in sigmoid mesentery with enlarged sigmoid segments as well as small intestines (Figure 1). Flexible sigmoidoscopy showed bowel ischemia and necrosis in torsioned sigmoid colon.

An urgent laparotomy was performed after resuscitation. Operative findings demonstrated a volvulus in sigmoid colon with gangrene. After the resection of sigmoid colon, an end-to-end anastomosis was performed. The patient revealed an uneventful recovery. Histopathologic examination reported acute gangrenous colitis.

Discussion
Although intestinal obstruction during pregnancy is a rare complication with an incidence ranging from 1 in 1500 to 1 in 66431 deliveries, sigmoid volvulus (SV) is the first or second most common cause of intestinal obstruction complicating pregnancy [1, 5]. Affected women are generally 15 to 35 years of age, nearly 75% of them are multiparous, and approximately 66% are in the third trimester [1, 2, 4, 5].

Typical symptoms of SV in pregnancy are intermittent and severe abdominal pain, distention, and obstipation, which are known as SV triad, and additionally nausea and vomiting, while the common signs are abdominal tenderness, distention, hyperkinetic or hypo/akinetik bowel sounds, and empty rectum [1, 2, 4, 6]. Although abdominal pain, nausea, and vomiting, which are the physiologic findings of pregnancy, are generally thought to cloud the clinical picture [1, 6],
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Eurasian J Med 2015; 47: 75-6

our experience, abdominal pain in SV is severe, and nausea and vomiting are not prominent symptoms in the second and third trimesters of pregnancy.

The laboratory findings are not pathognomonic in pregnant SV cases [1, 4]. Although a single plain abdominal X-ray may be used in necessary cases [1, 3], it is generally avoided because of the radiation risk of foetus [1]. Abdominal and obstetric ultrasonography may provide information about the foetus, in addition to eliminating other pathologies [7]. Nevertheless, a nonspecific clinical diagnosis of intestinal obstruction is generally made, unless MRI or flexible endoscopy is used [1, 8, 9], as was in our case.

The management of SV in pregnancy requires a collaboration of general surgeons, obstetricians, and neonatologists in addition to a proper resuscitation [1, 7]. The usage of the tocolytics for uterine stability or steroids for foetal lung maturity, as well as the pursuance of the delivery or caesarean procedure in mature cases, or abortion in patients with a dead foetus are dependent on maternal and foetal conditions [1]. The prognosis is poor with a 6% to 12% of maternal mortality and a 20% to 26% of foetal mortality [1, 5, 6].

Ethics Committee Approval: Ethics committee approval was received for this study from the local ethics committee of Atatürk University Faculty of Medicine

Informed Consent: Written informed consent was obtained from the patient who participated in this case.

Peer-review: Externally peer-reviewed.


Conflict of Interest: No conflict of interest declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

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