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Case Report

A Rare Complicated Case of Pregnancy, Sigmoid Volvulus

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Abstract

Gastrointestinal symptoms are common in pregnancy, but bowel obstruction is rarely seen and late diagnosis results in serious complications for the mother and the baby. Among the causes of bowel obstruction reported during pregnancy; adhesions, intussusception, hernia and carcinoma are all involved and they all require surgical intervention. Sigmoid volvulus (SV) is also a condition requiring emergency surgery. Surgical intervention can be performed as endoscopic decompression or laparotomically. Successful endoscopic decompression in pregnancy is difficult due to the enlarged uterus. Endoscopic decompression may be tried in cases without intestinal ischemia, necrosis and perforation and successful interventions have been reported. Early diagnosis and decompression are important to prevent the formation of intestinal ischemia. Emergency surgery is mandatory in pregnant women with intestinal obstruction. Ischemic or perforated bowel, resection and anastomosis is the gold standard for treatment. In order to avoid possible adverse outcomes, clinicians should be aware of such rare cases. Although sigmoid volvulus is a very rare condition during pregnancy, morbidity and mortality are very high for both mother and fetus. Delayed diagnosis and treatment cause serious complications such as intestinal ischemia, perforation, peritonitis and sepsis. Fetal complications include preterm labor, intrauterine death and neonatal sepsis. A 26-year-old patient was admitted to the emergency department at 32 weeks of gestation. Relatives reported that they had reached a 2-day range in Somalia and reported that she had not had any defecation and gas outflow for 45 days and had not eaten for about 15 days. In the MR imaging, dilatation of the intestinal segments. There was no free air in the abdomen. She underwent emergency surgery due to intestinal obstruction. Baby delivered by cesarean section. It was observed that the sigmoid column behind the uterus was 180° torsion counterclockwise but there was no problem in the vascularization. The entire colon including the transverse colon was distance. Intraoperative spontaneous defecation after de-torsion. The patient was discharged on the 28th day due to hypotensive attacks that caused long-term loss of consciousness.

With this study, we wanted to draw attention to sigmoid volvulus which is rarely seen in pregnancy and misdiagnosis puts the life of mother and baby in danger under literature knowledge.

Keywords: *Volvulus; Pregnancy*

Introduction

With this study, we wanted to draw attention to sigmoid volvulus which is rarely seen in pregnancy and misdiagnosis puts the life of mother and baby in danger. Although sigmoid volvulus is a very rare condition during pregnancy, morbidity and mortality are very high for both mother and fetus. Delayed diagnosis and treatment cause serious complications such as intestinal ischemia, perforation, peritonitis and sepsis. Fetal complications include preterm labor, intrauterine death and neonatal sepsis [1].

Case Report

A 26-year-old patient with gravida 6 para 5 was admitted to the emergency department at 32 weeks of gestation. Relatives reported that they had reached a 2-day range in Somalia and reported that she had not had any defecation and gas outflow for 45 days and had not

eaten for about 15 days. In the cachexic appearance, the patient was half-indwelling, hypotensive (70/40 mmHg) with severe abdominal distention and palpation (Figure 1). Laboratory results showed WBC 13000, HGB 12.3 g/dL and normal liver enzymes and kidney function. Ultrasound examination of 32 weeks of vital pregnancy could not be evaluated due to the patient's pain. In the MR imaging, dilatation of the intestinal segments to 15 cm was observed (Figure 2). There was no free air in the abdomen. She underwent emergency surgery due to intestinal obstruction.

Figure 1

Figure 2

Under general anesthesia, a midline vertical incision was made in the abdomen. Due to the size of the uterus, 1840g male baby was delivered as Apgar 7 and 8 by cesarean section. It was observed that the sigmoid column behind the uterus was 180 ° torsion counterclockwise but there was no problem in the vascularization (Figure 3). The entire colon including the transverse colon was distance (Figure 4). Intraoperative spontaneous defecation after de-torsion.

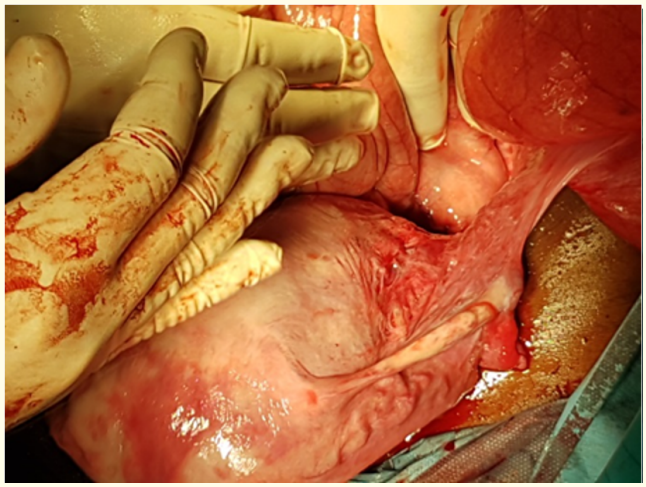

Figure 3

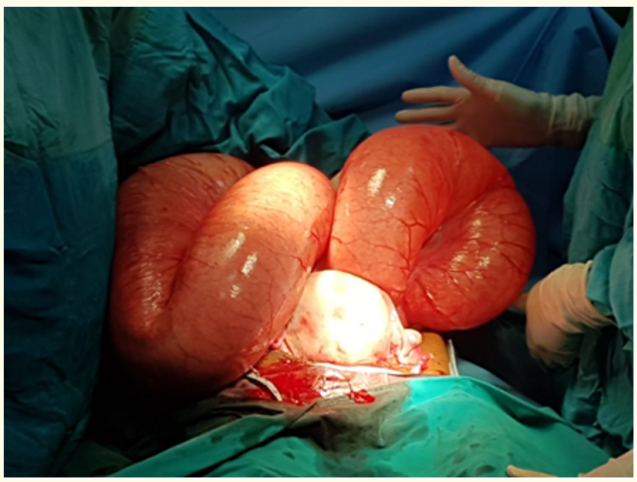

Figure 4

The patient was discharged on the 28th day due to hypotensive attacks that caused long-term loss of consciousness.

Discussion

Sigmoid volvulus is very rare in pregnancy and a multidisciplinary approach is required in the diagnosis and treatment of a gynecologist, general surgeon, radiologist and pediatrician. SV is the cause of 44% of cases of intestinal obstruction in pregnancy. The compression of the enlarged gravid uterus to the long sigmoid column may be the cause of sigmoid volvulus and this may explain the increased incidence of SV in the third trimester [1-3]. We use radiological methods to diagnose and to exclude other causes of abdominal pain. Radiation is avoided in pregnant patients due to chromosomal mutation in the first and second trimesters and hematological abnormalities such as leukemia in the third trimester. For safe radiation, the limit is 5 to 10 rad. Even though the radiation dose is within this limit in abdominal CT scan, CT is avoided [1,4,5]. For this reason, we chose MRI for both the right decision and the safety of the fetus. Water-soluble enema,

such as gastrografin, may be useful in some patients. Sigmoidoscopy or colonoscopy used for therapeutic purposes can be used to confirm the diagnosis. Atamanalp and colleagues treated recurrent volvulus with sigmoidoscopic decompression in pregnancy [6]. Endoscopic decompression can be performed in the absence of peritonitis or intestinal perforation. Although endoscopic success rate is high in nonpregnant patients, success is limited due to uterus growing in the third trimester of pregnancy [7,8]. Maternal mortality from SV was reported to be 5%, but it increased to over 50% when perforation occurred. It is important to note that almost all maternal deaths are due to delayed intervention of more than 2 days. The fetal mortality rate in SV is approximately 30%. Fetal death may be due to a decrease in placental blood flow due to hypovolemia or increased intra-abdominal pressure as a result of massive sigmoid dilatation [1,2,8]. From these results, the importance of early diagnosis and timely surgical intervention in terms of maternal and fetal outcomes is understood.

Conclusion

Sigmoid volvulus should be considered if there is a complaint of abdominal pain, tension and constipation in a pregnant patient. Although there is no common cause of intestinal obstruction, early diagnosis and treatment is important for severe maternal and fetal complications in sigmoid volvulus. Emergency surgery is mandatory in pregnant women with intestinal obstruction. Ischemic or perforated bowel, resection and anastomosis is the gold standard for treatment. In order to avoid possible adverse outcomes, clinicians should be aware of such rare cases.

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