

Sigmoid volvulus and Uterine Torsion complicating pregnancy

Hatav Ghasemi Tehrani¹, Azar Danesh Shahraki², Zeinab Hamoush³

ABSTRACT

Sigmoid volvulus and uterine torsion complicating pregnancy are extremely rare. Only 73 cases of sigmoid volvulus and fewer cases of Uterus torsion were reported world-wide. We report here a case of both sigmoid volvulus and uterus torsion complicating pregnancy in a preterm pregnancy in a multi-parous patient. Both uterus and sigmoid were preserved, neither Hysterectomy nor sigmoid resection were done. The patient had a successful recovery, and invasive management was taken to reduce both maternal and fetal morbidity and mortality.

KEY WORDS: Sigmoid volvulus, Uterine torsion, Pregnancy, Fetal Distress, Abdominal pain.

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INTRODUCTION

Intestinal obstruction complicating pregnancy is an extremely rare complication. Volvulus of sigmoid colon is the most common cause of intestinal obstruction complicating pregnancy accounting for up to 44% of cases.¹ Since the initial report by Braun in 1885, 73 cases were reported in world literature.¹⁻³

We present a case report of both sigmoid volvulus and uterine torsion complicating pregnancy to emphasize clinical presentation of the condition, its progressive nature and deleterious effect on the fetus and the importance of early interventions. Diagnosis requires high index of suspicion in a patient who presents with complaints of abdominal pain and evidences of bowel obstruction.

1. Hatav Ghasemi Tehrani, Assistant Professor,
 2. Azar Danesh Shahraki, Associate Professor,
 3. Zeinab Hamoush, Resident,
- 1-3: Department of Obstetrics and Gynecology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran.

Correspondence:

Azar Danesh Shahraki,
Associate Professor,
Department of Obstetrics and Gynecology, School of Medicine,
Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: danesh@med.mui.ac.ir

CASE REPORT

A thirty years old, multi gravid patient with previous normal vaginal delivery was admitted to Beheshti Hospital during 34 weeks of gestation with complaints of intermittent abdominal pain, labor pain, loss of appetite and constipation since two days. She had a previous history of appendectomy, and right oophorectomy. On physical examination, abdomen was tender and distended. Lab data were normal. Per-vaginal examination revealed 1 cm cervical dilation without cervical effacement, rupture of membrane or vaginal bleeding. Fetal heart rate was in normal range. After admission and during observations of the patient, abdominal pain worsen and fetal distress was reported. As such a decision to do an emergency cesarean section was taken.

Due to unknown diagnosis and existing pathology a midline vertical incision was made. After dissecting the abdominal wall layers a view of abnormal uterus was seen at a 180 degree to the right, after moving it to the left a healthy baby was delivered by kerr incision on the anterior side of the uterus. During operation a four loops sigmoid volvulus in its early stage with 15 cm diameter was also detected in the abdominal cavity and an immediate detortation was done and sigmoid was preserved. Elective sigmoidectomy was suggested later if needed in the postpartum period.

DISCUSSION

Sigmoid volvulus and uterus torsion should always be considered in a pregnant woman with signs and symptoms of abdominal pain and intestinal obstructions.⁴ It is important to be aware of these conditions which have significant maternal and fetal mortality.^{4,5} Unfortunately, pregnancy itself clouds the clinical picture and diagnosis in this period is mostly delayed since the symptoms mimic typical complications of pregnancy.

In addition, hesitation in obtaining radiography contributes to delayed diagnosis. Aim of management is to reduce morbidity and mortality of both mother and fetus. In both sigmoid volvulus and uterus torsion cases hesitation in diagnosis may lead to fatal complications.⁵ In most of the cases as in our case definite diagnosis was made during cesarean-sections. Though the diagnosis is unknown in most cases standard midline abdominal incision is performed. In our case also a midline incision was made to allow maximal exposure to both abdomen and uterus with minimal manipulation.^{5,6}

Viable sigmoid should be detorted and deflated by sigmoidoscopic placement of rectal tube and resection must be postponed.³⁻⁵ In our case, sigmoid loops were not ischemic or necrotic so detorsion was enough for its preservation. In most cases Uterus torsion which is a rare obstetric complication⁷, was reported as in our cases to be rotated to the right and detorsion to the left was acquired.^{8,9}

The main complications reported was fetal demise^{8,10}, which did not happen in our case. Delay in diagnosis and treatment result in colonic necrosis which occurs beyond 48 hours and increased fetal, maternal morbidity and mortality.¹¹

CONCLUSION

Although uncommon, diagnosis of both sigmoid volvulus and uterine torsion in pregnancy requires

high index of suspicion in a patient who presents with abdominal pain and symptoms of bowel obstructions. Prompt surgical interventions, skilful surgeon and appropriate decision could reduce related fetal and maternal morbidity and mortality.

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REFERENCES

1. Allen Jr, Helling TS, Langenfeld M. Sigmoid volvulus in pregnancy. *JR Army Med Corps*. 1990;136:55-56.
2. Harer WB Jr, Harer WB Sr. Volvulus complicating pregnancy and puerperium; report of three cases and review of literature. *Obstet Gynecol*. 1958;12:399-406.
3. Alshawi JS. Recurrent sigmoid volvulus in pregnancy: report of a case and review of the literature *Dis Colon Rectum*. 2005;48(9):1811-1813.
4. Joshi MA, Balsarker D, Avasare N, Pradhan C, Subramanyan P, Shirahatti RG, et al. Gangrenous sigmoid volvulus in a pregnant woman. *Trop Gastroenterol*. 1999;20:14-12.
5. Lazaro EJ, Das PB, Abraham PV. Volvulus of sigmoid colon complicating pregnancy. *Obstet Gynecol*. 1969;33:553-557.
6. Keating JP, Jackson DS. Sigmoid volvulus in late pregnancy. *J R Army Med Corps*. 1985;131:72-74.
7. Perdu PW, Johnson HW Jr, Stafford PW. Intestinal obstruction complicating pregnancy. *Am J Surg*. 1992;164:384-388.
8. Albayrak M, Benian A, Ozdemir I, Demiraran Y, Guralp O. Deliberate posterior low transverse incision at cesarean section of a gravid uterus in 180 degrees of torsion: a case report. *J Reprod Med*. 2011;56(3-4):181-183.
9. Redlich A, Rickers S, Costa SD, Wolff S. Small Bowel Obstruction in pregnancy. *Arch Gynecol Obstet*. 2007;275:381-383.
10. Connolly MM, Unti JA, Nora PF. Bowel obstruction in pregnancy. *Surg Clin North Am* 1995;75:101-111.
11. Ribeiro Nascimento EF, Chechter M, Fonte FP, Puls N, Valenciano JS, Fernandes Filho CL, et al. Volvulus of the Sigmoid Colon during Pregnancy: A Case Report. *Case Rep Obstet Gynecol*. 2012;2012:641093.