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## Case Report

# Spontaneous uterine rupture in first trimester of pregnancy

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### ABSTRACT

This is a case of 30 years old female who presented in emergency at 11 weeks 3 days with acute abdomen and diagnosed as spontaneous uterine rupture. The defect was repaired and bilateral tubal ligation was done. This shows that uterine rupture can occur as early as that late first trimester and should be included in the differential diagnoses of acute abdomen.

**Keywords:** Spontaneous, Uterine rupture, First trimester

### INTRODUCTION

Spontaneous uterine rupture in the first trimester of pregnancy is a very rare event.<sup>1</sup> Usually, it is either associated with cases of trophoblastic tumor, or pathological invasion of the placenta through uterine wall, for example, placenta increta or percreta.<sup>2</sup> Uterine malformation associated with pregnancy located in a rudimentary horn may cause spontaneous perforation or rupture of the uterus at an early stage of pregnancy.<sup>3</sup> It may also happen in cases of uterus scarred due to previous myomectomy, in previous Cesarean section scars, or previous operative laparoscopy,<sup>4</sup> exceptionally, there are cases of spontaneous uterine rupture associated with red degeneration of fibroid in a gravid uterus.

### CASE REPORT

A 30 years old female, G6P5+OL3, presented in gynecological emergency at 11 weeks 3 days of pregnancy with pain in abdomen for 2 days, with one episode of syncopal attack one day back. She was 6<sup>th</sup> gravida with first 3 issues delivered vaginally at home who were all alive and healthy. She had a history of a male still born delivered by LSCS 3 years back for obstructed labour. She had a history of repair of rupture uterus 2 years back at 7 months of gestational age.

On examination, her vitals were stable. Abdomen was distended, diffusely tender and free fluid. There was no vaginal bleeding and os was closed.

With the diagnosis of rupture uterus with hemoperitoneum, she was immediately shifted for emergency exploratory laparotomy. There was one liter of hemoperitoneum with clots. The amniotic sac with fetus and the detached placenta were lying in the peritoneal cavity. The uterus revealed a large defect in the upper segment upto the fundus. The cervix, vagina and bladder were intact. The defect was repaired and bilateral tubal ligation was done. The abdomen was closed in layers after normal saline lavage. The post-operative period was uneventful. The patient was discharged on the 7<sup>th</sup> post-operative day in a healthy condition.

### DISCUSSION

Rupture uterus is not uncommon following LSCS. Most of these occur during labor. Surgeries involving upper segment like hysterotomy, classical cesarean section, myomectomy, previously repaired uterine rupture, metroplasty, and LSCS with upward or inverted T-shaped extension are more prone to uterine rupture early during pregnancy and at term even before labor ensues.<sup>5</sup>

In this case, there was rupture involving the upper segment at approximately 11 weeks 3 days of gestational age. The cause was obvious as there was history of repair of rupture uterus in the previous pregnancy without undergoing tubal ligation.

## CONCLUSION

The lesson learned from this case is that, although, uterine rupture is very rare in the first trimester of pregnancy; it should be taken into consideration in the differential diagnosis of acute abdomen, especially if there is a predisposing factor. Secondly, repair of rupture uterus should always be accompanied by bilateral tubal ligation.

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