A 22-Week Ruptured Rudimentary Uterine Horn Pregnancy

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Rudimentary horn pregnancy is a rare but serious obstetric event. We presented a case of rudimentary horn pregnancy ruptured at 22 weeks. Rudimentary horn excision was performed during exploration.

Key Words: Rudimentary horn pregnancy, Rupture

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Introduction

Rudimentary horn pregnancy is an extremely rare and serious obstetric condition. Rupture of pregnant horn results in severe intraabdominal bleeding. With the use of ultrasound the diagnosis can be made before symptoms occur. Standard management consists of excision of the rudimentary horn with the pregnancy and the ipsilateral tube by laparatomy.

Case Report

A 26-year-old G2 P1 who was 21 weeks and 2 days pregnant came to our unit for lower abdominal pain of 5 h duration. She did not have any accompanying symptoms.

In this pregnancy on her triple test risk was high, amniocentesis was recommended, but patient refused it. She had no any other significant history about this pregnancy. Her previous pregnancy resulted with a healthy term fetus and spontaneous vaginal birth.

She was tachycardic with a pulse rate of 120/ min. Her blood pressure was 125/75 mmHg. She had lower abdominal tenderness but suspected defense and rebound. Her hemoglobin level was 8.7 g/dl. Ultrasound assessment showed intraabdominal diffuse hemorrhagic fluid on lower quadrants, around spleen and liver. Also in lower part of abdomen there was a solid appearance resembling to uterus and anhidramniotic 22 week living fetus in it. Then her hemoglobin level decreased to 7.6g/dl and her tension was 95/70 mmHg. Her differential diagnosis included acute surgical or gynecological intraabdominal catastrophes. After the patient gave fully informed consent, surgery was performed. The laparatomy revealed left-sided ruptured rudimentary horn pregnancy (Figure 1). It was seen that in abdomen there were 4 liters of hemorrhagic fluid, necrotic area on omentum and appendix near of ruptured horn. Bilateral ovaries and tubes were normal. We aspirated the hemorrhagic fluid, excised the blind horn, delivered the fetus, and we made appendectomy and partial omentectomy because of necrotic areas (Figure 2). After delivering 22 week fetus was death despite resuscitation (Figure 3). Intraoperative hemoglobin was 7.5 g/dl and we decided to infuse 3 unite erythrocyte suspension and 1 unite fresh freezed plasma.

Figure 1: Intra-operative photograph revealing the uterus with the rudimentary horn attached to its left superior border.

Figure 2: Excision of the rudimentary horn

Figure 3: 22 week fetus with placenta in the rudimentary horn

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Postoperative follow-up was uneventful. Hemoglobin level was 10 g/dl, vital findings were stable. She was discharged 5 days after surgery.

Diccussion

Rudimentary horn with a unicornuate uterus results from partial development of one uterine horn and incomplete fusion of the two mullerian ducts. More than 75% of unicornuate uterus cases have contralateral rudimentary horn.

Pregnancy in the rudimentary horn is extremely rare (approximataly 1/76000 to 1/150000 pregnancies).[1,2] It is associated with an increased risk of recurrent abortions, ectopic pregnancy, intrauterine growth retardation, preterm labor and malpresentation.[3] The risk of rupture due to poorly developed musculature is the most threatening complication of rudimentary horn pregnancy. Rupture occurs in 80-90% in second trimester.

Early diagnosis of rudimentary horn pregnancy is very important, because the risk of serious maternal morbidity and mortality is high. But early diagnosis of a rudimentary horn pregnancy is difficult. The delay in diagnosis is mainly due to difficulties in the clinical assessment and patients often have a history of previous normal pregnancies like our patient. Our patient presented only with complaint of abdominal pain. Abdominal pain and collapse with hemoperitoneum can occur suddenly.[4] Pelvic examination may suggest an adnexal mass causing deviation of the uterus to one side.[5]

In the article by Chopra et al.,[6] the diagnosis of rudimenter horn pregnancy was suspected by ultrasound only in two cases out of twelve. The following criteria have been suggested by Tsafrir et al for sonographic diagnosis of rudimentary horn pregnancy: (1) pseudopattern of an asymmetrical bicornuate uterus, (2) absent visual continuity between the cervical canal and lumen of the pregnant horn and (3) the presence of myometrial tissue surrounding the gestational sac. Additionally, hypervascularisation typical to placenta accreata may support the diagnosis of rudimentary horn pregnancy. This feature can be diagnosed with color flow Doppler and power Doppler sonography.

The advanced pregnancy can hide the main cavity so a diagnosis may not been made at ultrasonography as occurred in our patient. The sensitivity of ultrasound diagnosis of pregnancy in rudimentary horn is only 26-33%.[4,6] A more careful sonography to search for a second cavity or additional diagnostic techniques, such as magnetic resonance imaging (MRI) are to be performed to rule out complex uterine malformations.[8]

In most cases, the diagnosis of rudimenter horn pregnancy was only made intraoperatively as in our case. Second trimester rudimentary horn pregnancies have generally been managed by laparatomy. Laparotomy with excision of rudimentary horn and salpingectomy was done in all cases written by Chopra et al.[6] Laparotomic uterine horn resection was also performed in our patient. Laparoscopy can be used in unruptured cases but not in advanced pregnancies.

22. Gebelik Haftasında Rüptüre Rudimenter Uterin Horn Gebeliği

Rudimenter horn gebeliği nadir ama ciddi bir obstetrik olaydır. Bu yazıda, 22. gebelik haftasında rüptüre olan bir rudimenter horn gebeliği sunduk. Bu olguda eksplorasyon sonrası rudimenter horn eksizyonu uygulanmıştır.

Anahtar Kelimeler: Rudimenter horn gebeliği, Rüptür

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