

Spontaneous Rupture of the Bicornuate Uterus During 12th Week of Pregnancy

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To report a case of spontaneous rupture of right horn of the bicornuate uterus, at 12th week of gestation. The presented case was diagnosed and treated at Celal Bayar University Faculty of Medicine Department of Obstetrics and Gynecology. A multiparous patient at 12 weeks of pregnancy, aged 34 presented with acute abdomen and hypovolaemic shock. Upon laparotomy rupture of the right horn of a uterus bicornis was diagnosed. The fetus and placenta were found in the abdominal cavity. Spontaneous rupture of the pregnant uterus generally occurs in congenitally malformed uteri like unicornuate or bicornuate uterus with or without rudimentary communicating-noncommunicating horn. It can be life threatening and should be diagnosed and treated immediately.

Key Words: Spontaneous rupture, Bicornuate uterus

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Case Report

A 34-years-old multigravida presented with the symptoms of acute abdomen who was sent to our university hospital from the emergency service of the local maternity hospital. On general examination, she showed signs of hypovolaemic shock, pallor of the extremities. On abdominal examination, she had severe abdominal tenderness. Vaginal inspection revealed no bleeding. Her blood pressure and heart rate were 80/60 mmHg and 96 per minute, respectively. Laboratory values were as follows: β -Hcg: 47074 mIU/mL, hemoglobin: 10.1 g/dl, hematocrit: 29.6%, WBC: 7100 mm³, platelets: 107.000 mm³. By transabdominal ultrasonography we detected a dead fetus whose fetal pole found to measure 53mm (CRL), (equivalent to 12 weeks), in the pouch of douglas and a bicornuate uterus. Ultrasonography also demonstrated massive intraabdominal collection.

Following initial evaluation, she was transferred to the operation room urgently for an exploratory laparotomy. She had 2000 ml of free and fibrinated blood within the peritoneum, the uterus was bicornuate, in normal size with a normal communication between left and right tubes and ovaries (Figure

1). There was a rupture in the right part of the bicornuate uterus (Figure 2).



Figure 1: Fetus in the abdominal cavity



Figure 2: Uterus bicornis

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The 12-week-old fetus and the placenta with the umbilical cord were found in the abdominal cavity. Both ovaries, left and right tubes had normal size and shape. The abdominal cavity was cleared of the haemoperitoneum. The fetus and the placenta were exerted from the abdomen. The ruptured segment was sutured in layers via primary sutures. Bleeding was controlled, the abdomen was washed with 1 lt warm saline and the sutured segment was wrapped with cellulose. Because the family had no future fertility desire, bilateral tubal ligation was performed. The patient was transfused with two units of blood. No complication was observed in the postoperative period and the patient was discharged on day four. She was called for a control visit at 6 weeks after the operation. Intravenous pyelogram (IVP) revealed normal findings during the control visit.

Discussion

Spontaneous rupture of the uterus during pregnancy is a very rare complication, occurring mostly during the third trimester.¹ However, rupture of the pregnant uterus during the second trimester has been demonstrated in patients usually with a previous operation¹ or endoscopic intervention.² Rupture in primigravida in first or second trimester occurs also in congenitally malformed uteri like unicornuate or bicornuate uterus with or without rudimentary communicating-noncommunicating horn.³ In case of a rudimentary horn, the myometrial part of the horn is thinner and non-functional endometrium may lead to pathological location of the placenta both of which may cause placental adherence anomalies. Time of rupture depends on the structure of the horn. In our case it was a bicornuate uterus, with rupture of the right horn. Similar cases have been reported.^{3,4,5} Rupture occurs rather at the fundus than the lower segment rupture during labour. The haemorrhage caused by the rupture is massive and can be life threatening, unless diagnosed and treated promptly.

Ultimately, rupture of the gravid uterus is a rare but serious problem. The most important issue seems to diagnose the

uterine malformation before any gestation and to reconstruct it properly.

Gebeliğin 12. Haftasında Bikornuat Uterusun Spontan Rüptürü

Bikornuat uterusun gebeliğin 12. haftasında spontan rüptürünü sunmak. Sunulan vaka Celal Bayar Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum Bölümünde tanı ve tedavi almıştır. Otuz dört yaşında, 12 haftalık gebeliği olan multipar kadın hasta akut batın ve hipovolemik şok tablosuyla başvurmuştur. Tanısal laparatomide uterus bikornisin sağ boynuzunda rüptür tesbit edilmiştir. Fetüs ve plasenta abdominal kavitede bulunmuştur. Gebe uterusunun spontan rüptürü genellikle konjenital anomalisi olan unikornuat veya bikornuat, rudimenter komünike-nonkomünike boynuzları olan uteruslarda meydana gelir. Hayatı tehdit eden bir tablodur ve derhal tanı konup tedavi edilmelidir.

Anahtar Kelimeler: Spontan rüptür, Bikornuat uterus

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