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CASE REPORT / OLGU SUNUMU

Rupture of a rudimentary uterine horn at the 19th week of pregancy subsequent to an earlier normal vaginal delivery

Daha önce vaginal doğum yapan bir kadında 19. gebelik haftasında rudimenter boynuz gebelik rüptürü

Tevfik YOLDEMİR

ABSTRACT

A 29-year-old woman at 19 weeks and 1 day in gestation gravida 2 para 1 was admitted with the complaints of sudden onset of lower abdominal pain and syncope. During her abdominal ultrasonographic examination the fetus was floating in the abdomen. No amniotic sac was seen surrounding the fetus nor any myometrial image around it. The fetal cardiac activity was not detected. An emergency exploratory laparotomy was performed via a low midline incision. The fetus was lying free in the abdomen. 2000 ml of free and fibrinated blood was drained from the peritoneal cavity. There was a rupture in the right part of the uterus considered to be a rudimentary horn exposing the placenta and part of the umbilical cord. The rudimentary horn and the right tube were excised. The patient discharged on the third postoperative day.

Keywords: Rudimentary horn pregnancy, Ruptured pregnancy, Laparotomy

ÖZET

İkinci gebeliğin 19.haftasında olan ve daha önce vaginal doğum yapan 29 yaşındaki hasta alt karın ağrısı ve bayılma şikayetleriyle yatırıldı. Abdominal ultrasonografide fetüsün yüzdüğü görüldü. Çevresinde amniotik kese veya myometrial görünüm izlenmedi. Fetal kalp aktivitesi izlenmedi. Acil göbekaltı kesi ile laparotomi yapıldı. Batında 2000 cc serbest kan ve fetüs izlendi. Rahimin sağ tarafında rudimenter boynuz olduğu düşünülen bölgede rüptür vardı. Sağ tüp ve rudimenter boynuz eksize edildi. Hasta postoperatif 3. gün taburcu edildi.

Anahtar kelimeler: Rudimenter boynuz gebeliği, Ruptüre gebelik, Laparotomi

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Introduction

A unicornuate uterus with a rudimentary horn is a rare Müllerian duct abnormality which may cause many gynecological and obstetrical complications. Reported incidence of ectopic pregnancy in a rudimentary horn varies 1 per 76000 to 1 per 140000 pregnancies [1]. Early diagnosis of this rare form of pregnancy prior to rupture is essential for successful management in order to prevent maternal morbidity and mortality [2]. We present a case of rupture of a rudimentary horn pregnancy in a woman who had delivered vaginally previously at term.

Case Report

A 29-year-old woman at 19 weeks and 1 day in gestation gravida 2 para 1 was admitted to our university hospital with the complaints of sudden onset of lower abdominal pain and syncope. When she came to the emergency department at 03:00 p.m. the patient was in hypovolemic shock, with intense pallor and poor peripheral perfusion. Her previous obstetric history revealed that she had delivered a 2650 gr baby boy at term, transvaginally. The ultrasonographic findings were consistent with viable intrauterine singleton pregnancy with biometric measurements of 19 weeks of gestation. No other obstetrical problem was detected. The pulse rate was 130/minute and the blood pressure was 70/30 mmHg. Her extremities were cold and sweaty. Laboratory values were as follows: hemoglobin, 7g/dl; hematocrit, 20%; WBC, 19,000/ mm3; platelets, 210,000 / mm3. There was a severe pain with cervical motion. A speculum examination revealed one cervix with one cervical opening and no external bleeding. During the abdominal ultrasonographic examination the fetus was floating in the abdomen. No amniotic sac was seen surrounding the fetus

nor any myometrial image around it. The fetal cardiac activity was not detected. There was a big amount of free fluid in the abdomen. An emergency exploratory laparotomy following the resussitation was performed via a low midline incision for the presumptive diagnosis of intraperitoneal hemorrhage.

The fetus was floating freely in the abdomen. 2000 ml of free and fibrinated blood was drained from the peritoneal cavity. The uterus was in levo-version, had normal size and a normal communication with left tube and ovary. There was a rupture in the right part of the uterus considered to be a rudimentary horn exposing the placenta and part of the umbilical cord. The condition of the Müllerian duct anomaly was as unicornuate uterus with non-communicating horn (Figure 1). The non-communicating horn and the right tube were excised from the unicornuate uterine wall (Figure 2). The excised area was repaired in two layers with absorbable sutures.

In the post-operative period, the patient recovered uneventfully and discharged on the third day of the operation after hemoglobin value had reached 10.3g/dl after a 4 units of fresh frozen plasma and 4 units of erythrocyte suspension transfusion.

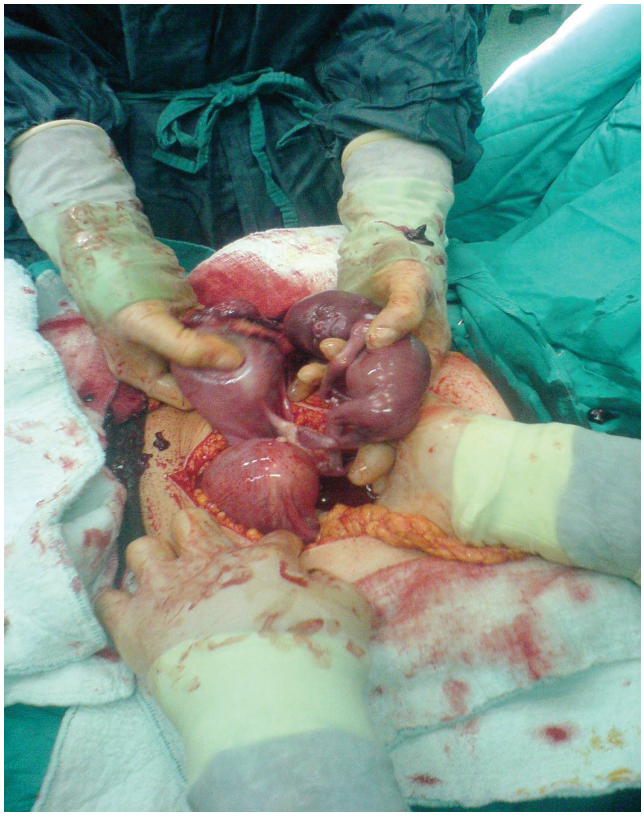

Figure 1. Intraoperative ruptured rudimentary horn uterus and the floating free fetus

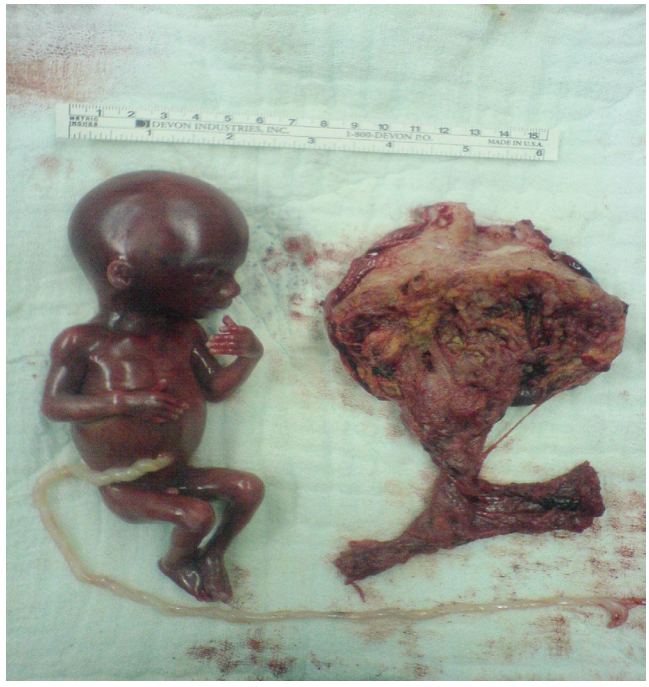

Figure 2. Excised right rudimentary horn

Discussion

Congenital uterine anomalies have been classified by the American Fertility Society [3]. They are relatively common, the incidence is 0.5–1.8% [3]. Urinary system malformations may also accompany Müllerian duct anomalies [4]. Pregnancy in a non-communicating rudimentary horn occurs through transperitoneal migration of sperm or fertilized ovum, and it is associated with a high rate of spontaneous abortion, preterm labour, intrauterine growth retardation, intraperitoneal haemorrhage and uterine rupture [5]. Meanwhile, liveborn fetuses were reported in rudimentary horn gestations [6, 7]. Unilateral hypoplasia may end up with rudimentary horn and the lumen may be either communicating or non-communicating with the normal cavity.

For the diagnosis of rudimentary horn pregnancy, the ultrasonographic criteria as suggested by Tsafrir et. al. [8] are a) a pseudo pattern of a asymmetrical bicornuate uterus, b) absent visual continuity tissue surrounding the gestation sac and the uterine cervix, and c) presence of myometrial tissue surrounding the gestation sac. Although, ultrasonography seems to be a useful tool for the diagnosis of unicornous uterus with a rudimentary horn, it may not be so due to inexperience and its rarity. 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. In the pathological examination, also in this patient placenta accreata was found.

Primary strategy of management of rudimentary horn is surgical removal [9]. There are instances of early diagnosis and laparoscopic excision of rudimentary horns [9]. Medical management with methotrexate and its resection by laparoscopy are also reported. Immediate surgery is recommended by most authors after the diagnosis even in unruptured cases [12]. Removal of the horn prior to pregnancy in order to prevent complications is also advised. However, conservative management, until viability is achieved, has been advocated in few selected cases if emergency surgery can be performed anytime and if the patient is well.

Conclusion

This report, like others [2,4,5], indicates that prompt diagnosis and immediate removal of the rudimentary horn is lifesaving. The important issue is to diagnose the rudimentary horn before a gestation and to remove it either by laparoscopy or laparotomy.

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