17 Week Non-Communicating Rudimenter Uterine Horn Pregnancy and Uterine Rupture: Case Report

Serkan Kahyaoğlu, İnci Turgay, Oktay Kaymak, Şenol Kalyoncu, Leyla Mollamahmutoğlu

Department of Perinatology, Zekai Tahir Burak Training and Research Hospital, Ankara

Abstract

Background: The review of diagnostic and therapeutic requirements of a non- communicating uterine horn pregnancy case as a rare situation according to the existing literature.

Case: A 26 years old, G4 P3 L2 A0 D&C 0 pregnant woman introduced to emergency unit of our hospital with serious abdominal pain and fainting. Arterial blood pressure of the patient was 90/40 mmHg and her heart beat count was 110 beats per minute at admission. Intraoperatively, a dead fetus at 17 weeks of gestation has been seen in the abdominal cavity as a result of non-communicating uterine horn rupture.

Conclusion: Rudimentary horn pregnancy is a rare pregnancy presentation that can not always be diagnosed sonographically and excision of the rudimentary horn is the advised management.

Keywords: Rudimentary, rupture, uterine anomaly, diagnostic difficulty, management.

Onyedi haftalık nonkomunike redimenter uterin horn gebeliği ve uterin rüptür: olgu sunumu

Amaç: Nadir bir durum olan nonkomunike rudimenter uterin horn gebeliğinin ruptürü ile karşılaşıldığında tanı ve tedavide yapılması gerekenlerin varolan literatüre göre bir olgu sunumu ile değerlendirilmesi.

Olgu: Yirmi altı yaşında, G4 P3 Y2 A0 D&C0 olan gebe hastanemiz acil servisine şiddetli karın ağrısı ve baygınlık şikayeti ile başvurdu. Arterial kan basıncı 90/40 mmHg, nabız 110 atım/dakika olarak tespit edildi. Transvajinal ultrasonografide bir tarafı rüptüre olmuş çift uterus görünümü görüldü. İntraoperatif değerlendirmede nonkomunike rudimenter horna yerleşim gösteren 17 haftalık fetüsün, uterin rüptür sonucu batına çıktığı görüldü.

Sonuç: Rudimenter horn gebeliği tanısı ultrasonografi ile her zaman konulamayan, maternal ve perinatal mortalite riski yüksek olan nadir bir gebelik şeklidir. İlerleyen gestasyonel hafta ile beraber uterin rüptür riski önemli oranda artmaktadır.Tanısı konulduğunda eksize edilerek çıkartılması uygun yaklaşım olarak kabul edilmektedir.

Anahtar Sözcükler: Rudimenter, ruptür, uterin anomali, tanısal zorluk, yönetim.

Background

Overall incidence of congenital Mullerian duct anomalies is 0.1-3.8% in women. Unicorniate uterus is the least frequent Mullerian anomaly and seen 4.4%.[1] It is assumed that there is a migration defect to proper location of one of Mullerian ducts.[2] American Society for Reproductive Medicine (ASRM) divided unicorniate uterus into 4 groups; communicating rudimentary horn unicorniate uterus, noncommunicating rudimentary horn

Correspondence: Dr. Serkan Kahyaoğlu, Zekai Tahir Burak Kadın Hastalıkları ve Doğum Hastanesi, Perinatoloji, Ankara
e-mail: kralytmer@yahoo.com

unicorniate uterus, isolated unicorniate uterus and noncommunicating rudimentary horn unicorniate uterus with no cavity.[3] Unicorniate uterus may cause spontaneous abortus, ectopic pregnancy, abnormal presentation, intrauterine growth restriction and preterm labour. Implantation in rudimentary horn is related with high rate of pregnancy loss and tubal pregnancy. Most of them are noncommunicating and do not contain functional endometrium therefore asemptomatic. 40% of patients have urinary system anomalies. Myometrium in rudimentary horn is thin. Therefore, the risk of uterine rupture is high in pregnancies in that location.[4] Due to potential problems prophylactic excision is recommended when it is met.[5]

Case

26-year-old G4, P3, L2, A0, D&C0 pregnant woman introduced to emergency unit of our hospital with severe abdominal pain and fainting. In respect of her history, she had irregular menstrual cycle and was 13 week pregnant according to her last menstrual period. Left lower quadrant pain and tenderness in servical movements determined in pelvic examination. Uterine enormity was not evaluated due to voluntary defence. Arterial blood pressure was 90/40 mmHg and heart rate was 110 beats per minute. Free fluid and an extrauterine dead fetus at 17 week 5 day of gestation has been seen in right upper quadrant by abdominal sonography. Transvaginal sonography revealed bicornuate uterus (Figure 1). Preoperatively ruptured horn with echogenic plasenta and echolugent myometrium around plasenta revelaed by sonography but did not differentiated from abdominal pregnancy (Figure 2). Hemoglobin level was 8.1 g/dl before operation and she was admitted to laparatomy. Intraoperatively a dead fetus at 17 weeks of gestation has been seen in the abdominal cavity as a result of noncommunicating uterine horn rupture (Figure 3). Fetus has taken and 1500 cc hemorrhagic fluid drained from abdominal space. Rudimentary horn has excisied with its point connected to uterus. Then uterus sutured with baseball technique (Figure 4). 2 units of blood transfused to patient and there was no any complication in postoperative follow up.

Discussion

Rudimentary horn pregnancy is a rare pregnancy presentation with high maternal and perinatal mortality risk and cannot always be diagnosed sonographically. There are a few term pregnancies

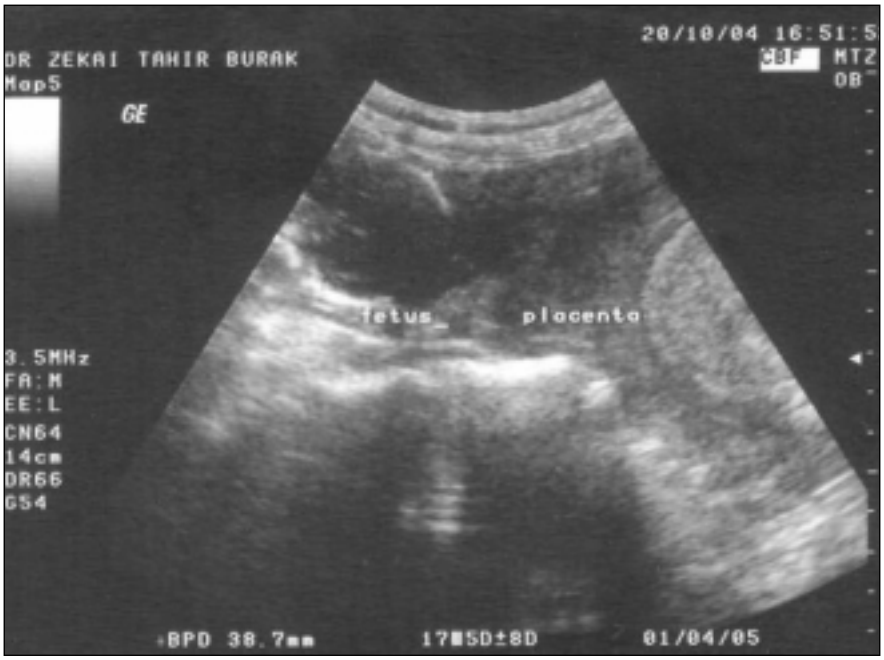

Figure 1. Sonographic appearance of fetus and plasenta located in abdominal cavity just near to uterus.

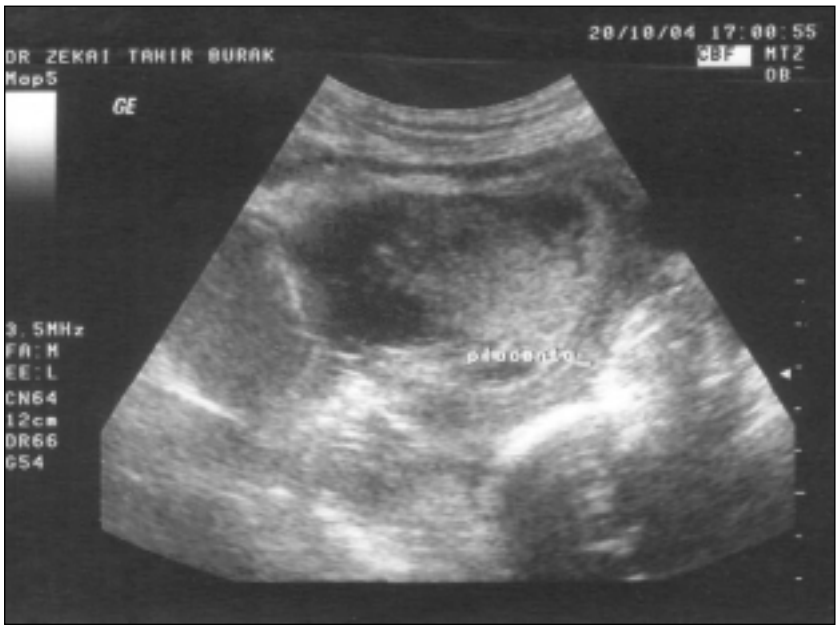

Figure 2. Ruptured rudimentary uterine horn with echolucent myometrium layer around echogenic placenta just near to fetal head in abdomen

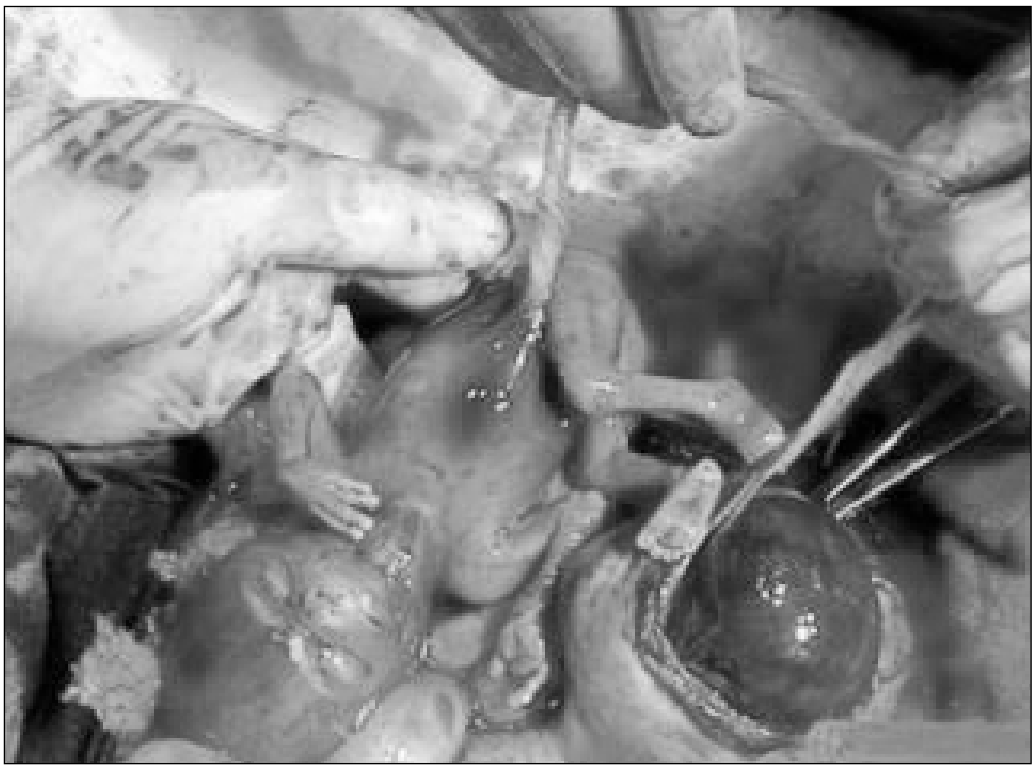

Figure 3. Intraoperative digital photograph of fetus and placenta that rupture rudimentary horn and go to abdomen.

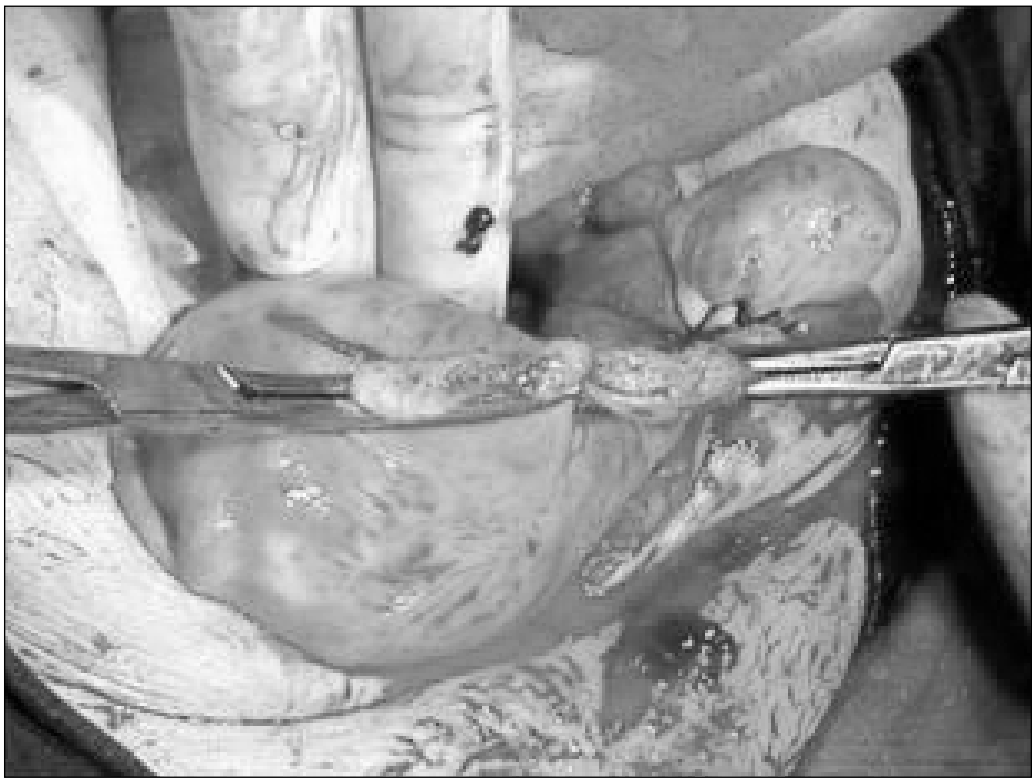

Figure 4. Apperance of uterus after intraoperative excision of rudimentary uterine horn

in rudimentary horn in the literature and they have high maternal and perinatal mortality rates. In communicating rudimentary horn cases mechanism of pregnancy is clear but in noncommunicating type, transperitoneal migration of sperms is assumed. In both conditions there is a thin myometrial layer and noncomplete uterine cavity development.[6] The risk of uterine rupture increases with advanced gestational age. It is a rare condition but due to clinical outcome and effect on fertility of patient it causes important gynecological and obstetric problems.[7] Acute abdomen, dysmenorrhea, dyspareunia or chronic pelvic pain may be clinical outcome, when there is hemometria, pyometria, torsion, endometriomas with retrograde menstruation in rudimentary horn. Rupture in noncommunicating rudimentary uterine horn pregnancy is a frequent outcome. A concomitant heterotopic pregnancy should be considered with rudimentary horn intrauterine pregnancy.[8] Therefore excision assumed a proper approach when pregnancy diagnosed.

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