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Case Report

Ruptured ectopic pregnancy in non-communicating right rudimentary horn: A case report

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ABSTRACT

Rudimentary horn is a developmental anomaly of the uterus, and pregnancy in a non-communicating rudimentary horn is very difficult to diagnose before it ruptures. As the fetus enlarges in the rudimentary horn, the chances of rupture in the first or second trimester are increased. Catastrophic hemorrhage results in increased maternal and perinatal mortality and morbidity. To date, management of such cases remains a challenge due to diagnostic dilemma. Expertise in ultrasonography and early resort to surgical management are lifesaving in such cases. A case of undiagnosed rudimentary horn pregnancy presented to our department in shock with features of acute abdomen, and the diagnosis was confirmed at laparotomy that revealed ruptured rudimentary horn pregnancy. And excision of the accessory horn was done.

1. Introduction

Congenital uterine malformations are the result of abnormal Mullerian duct development, fusion, canalization and septal resorption. The prevalence of congenital uterine anomalies among fertile women is reported as 1:200–1:600. Where there is atresia of one of the Mullerian duct, there is a unicornuate uterus with a single tube. Its true incidence is unknown and is approximately estimated at a rate of about 1 in 250. Unicornuate uterus may also have a rudimentary horn. Rudimentary horn is one of the rarest congenital uterine anomalies. The prevalence of unicornuate uterus with rudimentary horn is even rarer i.e. 1:100,000.[1] The rudimentary horn may consist of a functional cavity, or it may be a small solid lump of the uterine muscle with no functional endometrium. In a series of 366 cases with rudimentary horn, non-communicating horn accounted for 92% of cases, and renal anomaly was found in 36% cases. Unilateral renal agenesis was found in 38% cases in another series.[2]

Provided there is no obstruction to menstrual flow, these uterine anomalies present few problems in the absence of pregnancy. Pregnancy in a rudimentary horn is rare. The incidence of rudimentary horn pregnancy is difficult to calculate. Frequently quoted figures are between 1 per 76,000 and 1 per 140,000 pregnancies.[3]

A case of pregnancy occurring in a rudimentary horn with consequent rupture is reported.

2. Case report

An unusual case of a 25-year-old woman, G1P0, with a pregnancy of 18 weeks, presented to the emergency unit of our

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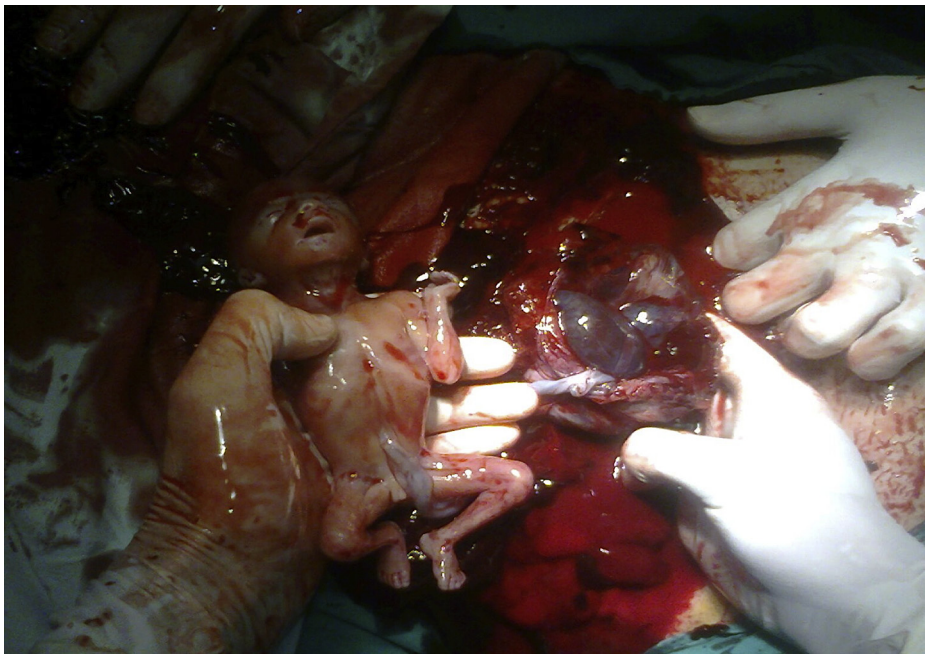

Fig. 1 – A nonviable fetus with placenta attached to ruptured right rudimentary horn.

department with acute abdominal pain and hypovolemic shock. The patient did not seek antenatal care before admission. Pregnancy was diagnosed by urine pregnancy test after a missed period for one week. Ultrasound was not done till admission .The patient was illiterate and living in a rural area far away from any health facility. She was not complaining so she did not seek medical advice. No other significant history was noted.

On examination, the patient was drowsy, in agony and in a nearly shock state with pale, cold, clammy extremities, a thready pulse of 120 beats/minute and arterial blood pressure of 70/40 mmHg.

Abdominal examination revealed distention and tenderness all over. On vaginal examination, mild vaginal bleeding was noted. A speculum examination did not reveal any cervical or vaginal pathology. The cervical os was tightly closed. The patient was resuscitated with intravenous fluids and blood transfusion.

Further assessment with transabdominal ultrasound showed a free floating nonviable fetus of 18 weeks gestation in abdominal cavity with anhydramnios and moderate abdominal collection surrounding. Absent visual continuity of myometrial tissue surrounding the fetus was noted. The placenta was intrauterine, lying posterior with no retroplacental clots seen. Abdominal tapping with spinal needle revealed non clotted dark bloody collection.

In view of the previous data, a provisional diagnosis of a ruptured uterus with a differential diagnosis of an abdominal pregnancy was made.

An emergency laparotomy was performed immediately after resuscitation. Intraoperative findings revealed a unicornuate uterus with a ruptured pregnancy in a right rudimentary horn. Also, a dead fetus floating in the peritoneal cavity with blood clots surrounding was noted. The placenta was still attached to the cavity of the rudimentary horn (Figs. 1 and 2).

It was, however, difficult to visualize the uterine septum. No communication from the horn to the contralateral uterine cavity was seen. The uterus, lying separate in the pelvis, was soft in consistency, globular and enlarged to a size consistent with ten weeks. The right fallopian tube and ovary were found healthy and were attached normally to the unicornuate uterus.

Excision of the rudimentary horn and the right fallopian tube with conservation of the right ovary was done together with the nonviable fetus and the placenta. All the pedicles were secured with good hemostasis. A total volume of nearly 2 L of hemoperitoneum blood was also removed. Both the ureters and kidneys were normal. Due to the significant blood loss throughout the operation, the patient was given a massive blood transfusion of four units and two units of plasma transfusion.

The excised specimen was sent for histopathological examination, which was reported as (sections from the uterine horn show areas of hemorrhage and necrosis. Section from the fallopian tube was morphologically normal. Sections of the placenta show fibrosed chorionic villi with syncytial knots. No villitis was seen). Histopathology confirmed the diagnoses (ruptured pregnant uterine rudimentary horn).

Post-operatively, hemoglobin level was 9.8 g/dl. Patient had a smooth postoperative recovery. The patient was counseled for contraception with oral pills for one year. The patient was discharged healthy two days after admission.

Follow-up appointment was planned for intravenous urogram to rule out any associated renal anomalies. No associated renal anomaly was diagnosed. The patient was

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