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# RUPTURE ECTOPIC PREGNANCY AT 14 WEEKS IN NONCOMMUNICATING RUDIMENTARY HORN OF UNICORNUATE UTERUS: A CASE REPORT

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## ABSTRACT

Rudimentary horn pregnancy is rare but, if occurs it gives a grave risk to the health of the pregnant woman. In most cases it presents in the form of ectopic pregnancy. Despite availability of good USG facility, it is very difficult to timely diagnose rudimentary horn pregnancy. Confirmatory diagnosis made only by laparoscopy or during laparotomy. In the rudimentary horn the constitution of the muscle wall thickness is variable so the pregnancy can be accommodated until late pregnancy. Here we present a case of 24 years female Gravida3 Para2 Live2 with 14 weeks pregnancy presented to us in shock with clinical features of ruptured ectopic pregnancy. On laparotomy we found non-communicating rudimentary horn rupture with dead fetus in peritoneal cavity.

**KEYWORDS:** Rudimentary horn, Rupture ectopic, Non-communicating horn, Transperitoneal migration, Laparotomy.

## INTRODUCTION

Unicornuate uterus with rudimentary horn is a type of mullerian duct malformation which is found in every 1 in 1000 women. The incidence of rudimentary horn in unicornuate uterus is nearly 84% (1). The rudimentory horn may have a functional cavity, which may be communicating, noncommunicating or it may be solid muscle with no cavity or functional endometrium. Transperitoneal migration of the sperm or fertilized ovum can lead to pregnancy in the noncommunicating horn with incidence of nearly 1 in every 1 lakh to 1.4 lakh pregnancies (1).The presence of corpus luteum in contra-lateral ovary further re-affirms this mechanism of implantation in rudimentary horn (2). Rudimentary horn pregnancy is associated with high risk of miscarriage, rudimentary horn rupture with massive intraperitoneal hemorrhage or preterm labour.

## CASE REPORT

Unbooked 24 year old lady Gravida3 Para2 Live2 at gestation age 14 weeks by LMP, presented to us in shock with history of pain abdomen and per-vaginal spotting for one day. Patient had previous two uneventful full-term spontaneous vaginal deliveries. On General examination: Patient was Serious, having severe pallor with pulse rate 130/minutes, Her Blood pressure was 78/42 mm Hg, Respiratory rate was 24/minutes. On per abdomen examination: Tenderness was present with abdominal distension, due to abdominal distension uterine fundal height could not be assessed. USG guided paracentesis was done which confirmed hemoperitoneum. On digital vaginal examination cervical motion tenderness was present and fullness was felt in the left fornix. In view of hemoperitoneum with shock, provisional diagnosis of rutured ectopic pregnancy was made and patient was shifted to operation theater for exploratory laparotomy. Laparotomy revealed around 1 litre hemoperitoneum with rudimentary horn rupture. Placenta was inside the ruptured rudimentary horn and fetus lying in abdominal cavity attached to the placenta through the cord. Placenta was removed, the rudimentary horn was found to be non-communicating. Rudimentary horn along with the attached tube was excised and contralateral tubal ligation was done. Per-operatively 1 unit blood transfusion was given and another unit of blood was transfused on post operative day 1.Patient stood the procedure well. Patient was having uneventful postoperative period and discharged on post-operative day-7 in satisfactory condition.

## DISCUSSION

The inappropriate fusion of the two mullerian ducts with arrest in development of one of the duct leads to the formation of unicornuate uterus with rudimentary horn. In 80-85% cases there is no direct connection of the

rudimentary horn with uterine cavity (2). Fibrous or fibromuscular connection may be present between the uterus and rudimentary horn. In case of pregnancy in rudimentary horn, it can last longer than the tubal ectopic pregnancy due to variable musculature of the rudimentary horn. The gestation age till which the pregnancy can last as per the literature available so far is: Mid-trimester-80-90%, Term pregnancy-10% with 2% fetal salvage rate (3). Patients with pregnancy in rudimentary horn, with or without rupture may present with pain abdomen. If there is rupture of rudimentary horn, which usually occurs at 12-20 weeks of gestation age, results in severe intraperitoneal hemorrhage and has a maternal mortatily rate of approximately 5% (4).Management of such cases requires high index of suspicion followed by timely operative intervention and removal of the ruptured or unruptured gravid rudimentary horn (5). In rare circumstances, where rudimentary horn removal is not possible, hysterectomy may be required.

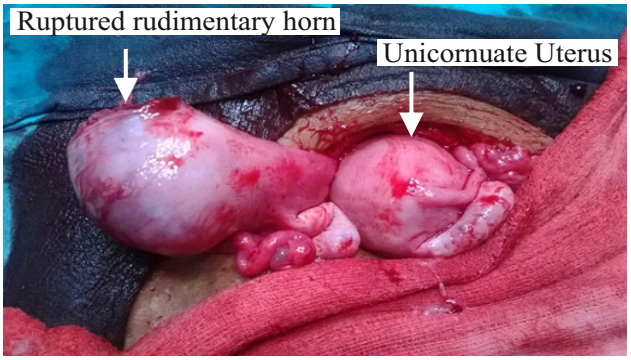


***Fig. 1: Unicornate Uterus With Ruptured Noncommunicating Rudimentary Horn***

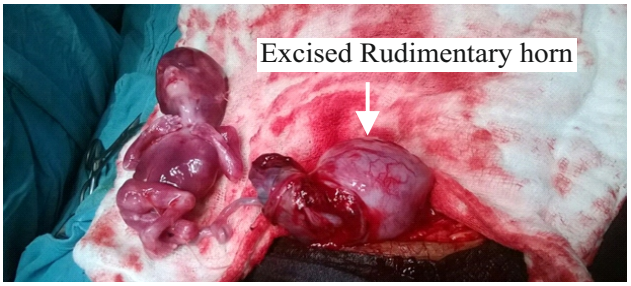


***Fig. 2: Fetus attached to Cord with Placenta, inside excised Rudimentary Horn***

## CONCLUSION

Pregnant woman presenting with acute abdomen can raise the suspicion of rudimentary horn rupture.

Patients with uterine anomaly should be carefully investigated in early pregnancy to localize the gestation sac, 3D USG and MRI has a major contribution in the diagnosis and evaluation of such patients with known uterine anomalies(6).

The removal of rudimentary horn will save the patient from risk of recurrence.

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