



<p>1: Professor; Department of Gynae & Obs. Muhammad Medical College, Mirpurkhas Sindh.</p> <p>2: Student</p> <p>*=corresponding author</p>	<p>Ruptured ectopic pregnancy in the rudimentary horn of a unicornuate uterus. A case report.</p> <p>Qamar ur nisa [*]1, Erum Samreen Siddiqui ².</p> <hr/> <p>Abstract</p> <p>Ectopic pregnancy in rudimentary horn of a Unicornuate uterus is a very rare phenomenon, and usually presents in second trimester with rupture and hemoperitoneum. Diagnosis before its rupture is very challenging.</p> <p>We are presenting a case report of ruptured ectopic pregnancy in rudimentary horn of a Unicornuate uterus. A 26 years old gravida 4 para 2 with one early miscarriage, having first vaginal delivery and second delivery by Caesarean section due to fetal distress, presented in emergency with 4 months amenorrhea, severe lower abdominal pain for 2 days and signs and symptoms of shock. There was severe anemia and abdominal tenderness. Ultrasound showed, left ruptured ectopic pregnancy with 16 weeks size dead fetus present in the pelvic cavity and massive hemoperitoneum. After resuscitation laparotomy was performed. There was ruptured left rudimentary horn pregnancy. The horn was reserved and uterus was repaired. Multiple blood transfusions were done. Post-operative period remained uneventful.</p> <p>Keywords: rudimentary horn, Hemoperitoneum, ectopic pregnancy.</p>
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Introduction:

Uterine anomalies are most common of the congenital anomalies of female genital Tract but the true incidence is not yet known because many women remain asymptomatic ^{1,2}.

These have been seen in 3 – 4% of fertile women, 5 – 10% of women with recurrent early pregnancy loss and 25% with late pregnancy complications especially preterm delivery^{3,4}. Unicornuate uterus is one of the types of malfusion of the Mullerian ducts⁵. In almost 75% of Unicornuate uterus, the rudimentary horn is present resulting from partial development of one Mullerian duct. If rudimentary horn fuses with the Unicornuate uterus it results in communicating rudimentary horn but if the fusion does not occur, it results in non-communicating rudimentary horn which accounts for 70 to 90% of the cases⁶. Pregnancy in rudimentary horn of Unicornuate uterus is very rare occurring in 1 in 75000 to 150,000 of cases and is usually diagnosed late with rupture of horn and hemoperitonium^{7,8}.

Case Report:

A 26 years old un booked gravida 4 presented in emergency with gestational amenorrhea of 4 months, Hypovolemic shock for 4 hours preceded by sudden severe lower pain 1 day before. She

was referred from some remote area for management. On arrival in the hospital, her blood pressure was 90/50mmHg, there was tachycardia and tachypnea. Her skin was cold and clammy and eyes were sunken and pale looking. On per abdominal examination, there was slight bulging and severe tenderness in the hypo gastric region. On per speculum examination, cervix was normal looking and there was no bleeding. There was moderate cervical motion tenderness on bimanual examination with bulging and tenderness in adnexa. Uterus was difficult to palpate.

Baseline investigations and ultrasound was done. She was severely anemic with hemoglobin of 5.3g%, HCT was 15.2%, MCV and MCH were reduced and MCHC was normal. TLC was 16,000/uL and platelets were 205,000/uL.

Ultrasound showed, normal looking uterus and cervix, moderate hemoperitoneum and single, non-viable extra uterine fetus corresponding to 16 weeks gestational age present in the pelvic cavity. There was a complex adnexal mass on left side of the uterus. The findings were suggestive of ruptured ectopic pregnancy. After resuscitation with iv fluids and arranging 5 units

of blood, patient was shifted to operation theatre for laparotomy with the diagnosis of ruptured ectopic pregnancy.

Intraoperatively, about 2.5 liters of blood with clots was sucked out from the peritoneal cavity, a dead fetus in the sac was present in the peritoneal cavity in front of the bladder and uterus and the placenta was attached to the top of the rudimentary horn of the Unicornuate uterus on the left side. Both the tubes and the ovaries were normal with the left one attached to the horn. There was a communication between the cavities of the horn and the Unicornuate uterus. The ruptured rudimentary horn was clamped and resected at its base, the left fallopian tube, attached to it was also removed but the ovary was saved. The peritoneal cavity was washed with 2 liters of normal saline. Intraperitoneal drain was inserted and the abdomen was closed back in layers. 5 units of blood were transfused intraoperatively and post operatively. There was about 400 ml of bloodstained fluid in the drain in 24 hours. Urine output remained optimal. Post-operative period remained uneventful. She was discharged home in a stable condition on 5th post-operative day.

Discussion:

Various kinds of fusion anomalies of uterus associated with or without pregnancy complications are not uncommon. Minor fusion defects like bicornuate uterus with separate cornual parts are quite common. These minor defects are usually not seen to be associated with complications, but major defects like septate and subseptate uterus may present with different signs and symptoms and manifestations like, spontaneous recurrent miscarriages and malpresentations. The rudimentary horn of Unicornuate uterus may present with dysmenorrhea and pelvic pain. Pregnancy may get implanted in the rudimentary horn which results in rupture of horn with profound bleeding resembling rupture ectopic pregnancy but having longer duration of amenorrhea⁹.

In our case, there was 16-week duration of pregnancy and patient presented with rupture of the horn, massive intraperitoneal hemorrhage and Hypovolemic shock. These events were preceded by severe lower abdominal pain.

Surgical removal of the horn and repair of the defect is the treatment of choice¹⁰. Early diagnosis and timely surgical treatment of rudimentary horn pregnancy is recommended to avoid complications of rupture¹¹. The rupture occurs due to underdeveloped and poorly distensible myometrium of the rudimentary horn and very few of the pregnancies reach to term¹². High suspicion and advanced ultrasound scanning in first trimester may give some clue to the early diagnosis but it's sensitivity remains low^{13, 14}. Therefore, three sonographic criteria were suggested by Tsafir and his associates which may increase the sensitivity of sonographic diagnosis of pregnancy in rudimentary horn before it ruptures. MRI should be considered when ultrasound findings are inconclusive^{15, 16, 17}. Those women who undergo resection are at higher risk of pregnancy complications in future, so they should be informed and counselled properly⁸.

Conclusion: Pregnancy in rudimentary horn, although rare but is associated with severe complications and morbidity. Therefore, a high suspicion, early advanced ultrasound scan in first trimester may help in early recognition and prevent late presentation with rupture of the horn.



Fig No 1: Dead fetus and ruptured uterus

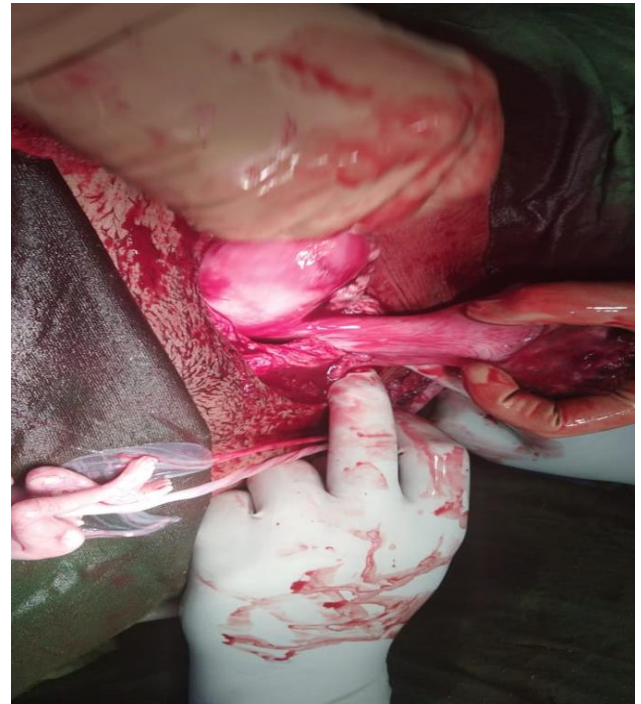


Fig No 2: Rudimentary Horn can be seen

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