Case Report

A rare case of ruptured bicornuate uterus at Karnali Academy of Health Sciences

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Introduction

Rupture of gravid uterus is a rare but serious obstetric complication. It is more common in multigravida or with previous uterine scar, mostly in labour. The rupture at early gestation i.e. first and second trimester is mostly associated with uterine anomalies or cornual pregnancy. The early gestation itself may pose a problem in early diagnosis. Incidence of pregnancy in rudimentary horn is 1/40,000 pregnancies[1]. Rupture in such cases occurs because of inability of malformed uterus to expand as a normal uterus. The rupture in rudimentary horn is likely to occur in late first trimester or even in second trimester. Rarely pregnancy can go on till late second trimester before rupturing. Chang et al reported rupture of rudimentary horn as late as 25 weeks of gestation[2]. A midtrimester rupture generally occurs at fundus as against lower segment rupture during labour. The haemorrhage occurring because of rupture is massive and can be life threatening, unless diagnosed and treated promptly more than other types of ruptured ectopics[3,4].

Case Report

A 25-year-old G_2P_{0+1} at 21weeks was admitted with pain abdomen and abdominal distention on 2073/02/18 at 10 am. She was a referred case from Mugu district hospital. There, she was diagnosed as a case of early fetal demise by absent fetal cardiac activity in USG. They had given her 4 doses of misoprostol 200 mcg 6 hours apart. Despite misoprostol the fetus was not expelled and neither there was any per vaginal bleeding. But patient had severe abdominal pain and abdominal distention so she was referred to our center. There was no history of bleeding per vaginum.

On general examination, patient was conscious, pulse was 110/min, blood pressure was 100/70 mm of Hg and pallor was present. Abdomen was distended with tympanic note in epigastric region. There was marked guarding and rigidity. The size of uterus could not be appreciated correctly. On per vaginal examination, the cervix was tightly closed and tubular. Her hemoglobin was 6 gms%. Ultrasound showed intrauterine fetal death with fetus in abnormal position. An ultrasound guided tap revealed frank blood. Thus, laparotomy done with the diagnosis of rupture uterus.

On exploration, there was haemoperitoneum of about 2.5 liters and fetus was in the abdominal cavity. On removing blood clot, a bicornuate uterus was seen with left horn of normal size and intact and the right horn showing rupture at fundus with placenta posteriorly attached. The ruptured right horn was excised at its junction with the left horn and then sutured in layers. Patient was transfused with five units of blood. Patient recovered well and was discharged on day ten. She was started on oral contraceptive and was advised to continue for one year.

Discussion

Rupture uterus is a life threatening obstetric problem. Rupture in primigravida in first or second trimester

generally occurs in congenitally malformed uteri like unicornuate or bicornuate uterus with or without rudimentary communicating - noncommunicating horn. In our case it was bicornuate uterus, with rupture of right horn. Most likely it was secondary to use of misoprostol.

Ultrasonography (USG) may be helpful in diagnosing such anomalies before rupture, which will help in decreasing the morbidity and mortality associated with rapid and massive haemoperitoneum occurring because of rupture. Achiron et al reported two cases of pre-rupture USG diagnosis of such cases[5] reducing morbidity and mortality. Treatment usually involved is removal of ruptured horn. As it leaves a scar on upper part of the uterus, it is important to avoid pregnancy for at least one year by barrier or hormonal contraceptives. In addition, future pregnancy requires proper monitoring, early hospitalization, and elective caesarean section at term6. Also misoprostol should be judiciously used if uterine anomalies is suspected.

Conclusion

Diagnosis is always difficult in case of cornual pregnancy. An expert ultrasonologist is needed to have for proper diagnosis. Diagnosis made before cornual rupture will reduce the morbidity and mortality.

References

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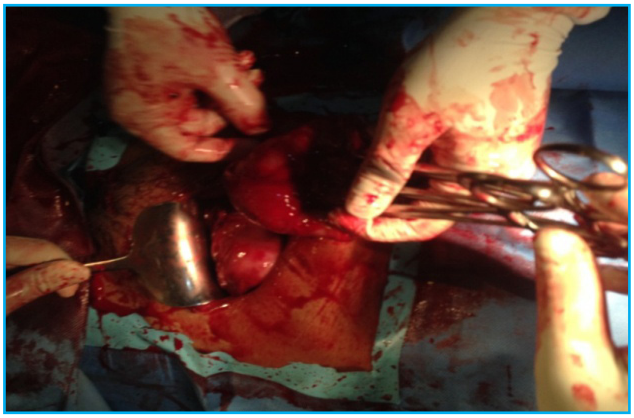

Fig 1. *Showing bicornuate uterus with normal size lt. horn and ruptured rt. Horn*

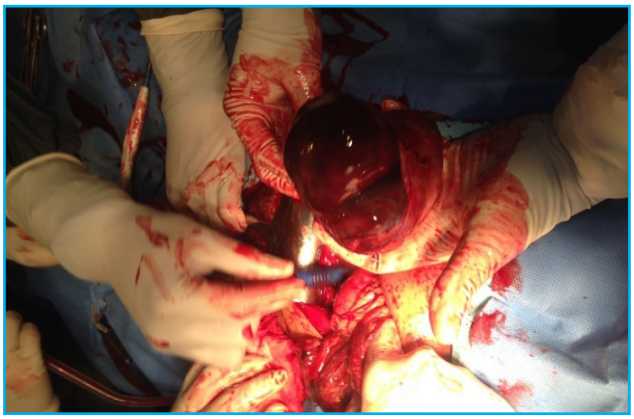

Fig 2. *Ruptured rt. horn with placenta in situ*