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Case Report

Rupture of Left Horn of Bicornuate Uterus at 19 Weeks

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Abstract

Congenital malformations of uterus are a well discussed entity. We report a case of bicornuate uterus with pregnancy in the left horn with an unusual presentation. It was diagnosed at 19 weeks of gestation at our hospital, exploratory laparotomy with excision of the left ruptured horn of the uterus was done. Haemorrhage occurring because of rupture of cornuate uterus is massive and can be life threatening. Hence it should be diagnosed early and treated promptly.

Key words: Congenital Malformation, Cornuate Uterus.

Introduction

Congenital malformations of female genital tract result from embryologic maldevelopment of the mullerian ducts either in their formation, fusion or absorption stage. They are the deviations from normal anatomy, representing a benign condition with a prevalence of 5.5% in general population.[1] Bicornuate uterus results from incomplete fusion of the two mullerian ducts leading to varying degrees of separation between two symmetrical uterine cavities ranging from partial separation to complete septation with no communication between the two cavities.[2]

Bicornuate uterus is known to be associated with several obstetric complications; some of them include recurrent pregnancy loss, fetal malpresentation, intrauterine growth restriction, preterm labour, increased need for operational intervention including caesarean section.[3] Among these, the most common ones affecting the outcome of pregnancy are recurrent pregnancy loss (25%), preterm birth (15-25%) and cervical insufficiency (38%).[4] We are reporting one such case of bicornuate (bicornis unicollis) uterus with pregnancy in one horn.

Rupture uterus in nulliparous patients is generally associated with mullerian anomalies. A case of 25 years old primigravida with 19 weeks 1 day gestation presenting with features of rupture is reported here. After exploration, left ruptured horn was excised. The incidence, diagnosis and management of such cases is discussed

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.

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Case Report

A 25-year-old Primigravida with five months amenorrhoea was admitted with severe pain in abdomen since 4 days. There was a history of syncope attack on the day of admission. There was no history of fever, episodes of vomiting and constipation for last three days. There was no history of bleeding per vaginum. Her previous menstrual cycles were regular.

On general examination, patient was afebrile and pulse was 115 beats/ min. Blood pressure was 80/60 mm of Hg. There was severe pallor. Abdomen was distended. The size of uterus could not be appreciated correctly. On per vaginal examination, the cervix was tightly closed and tubular. Haemoglobin was 5gms%. Complete blood count (CBC) showed lymphocytosis. Ultrasonography revealed collection in the abdominal cavity, along with thickened uterine musculature and immediately ultrasound guided tap revealed frank blood. The clinical and sonography diagnosis was rupture ectopic.

On exploration, there was haemoperitoneum of around 1000ml and clots of around 400 gms was present and foetus was in the abdominal cavity (Fig 1, Fig 2). On removing blood clot, a bicornuate uterus was seen with intact right horn and left horn showing rupture at fundus at about 5x4 cm present at fundus with placenta posteriorly attached (Fig 3).

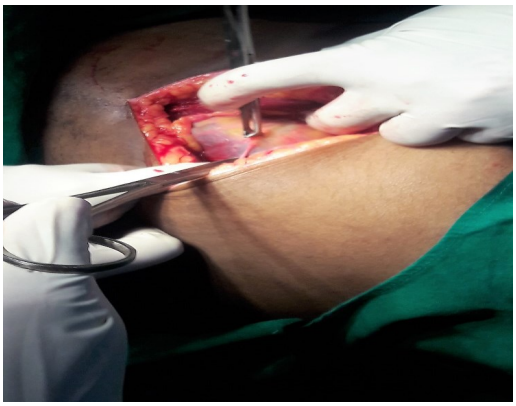

Fig 1: Picture Showing Hemoperitoneum

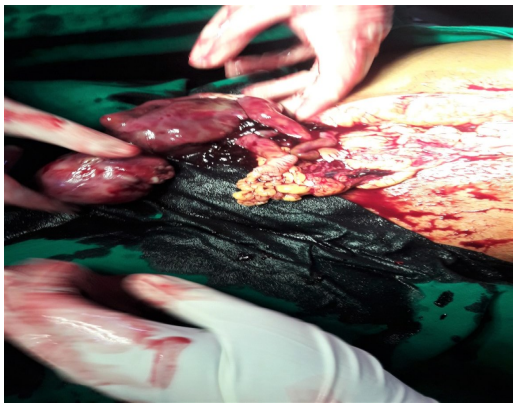

Fig 2: Picture Showing Fetus in Abdominal Cavity

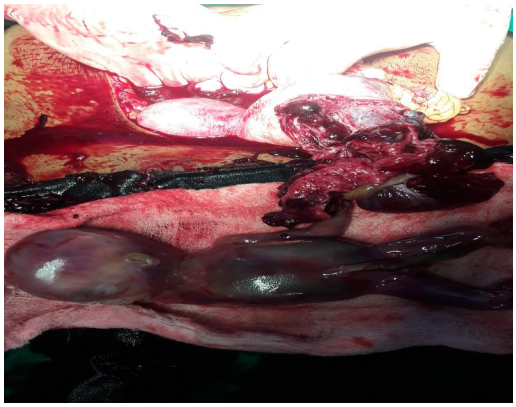

Fig 3: Picture Showing Rupture of Left Horn

Excision of the ruptured left horn was done, haemostasis achieved and then suturing was done in layers. Patient was transfused with 3 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. She was advised for Hysterosalphingogram after 6 weeks

Discussion

Incidence of pregnancy in rudimentary horn is 1/40,000 pregnancies. [5] 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.[6] A mid trimester 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.

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.[4]

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 hospitalisation, and elective caesarean section is advised at term.
In Conclusion rupture uterus in nulliparous patients is generally associated with mullerian anomalies. A differential diagnosis of the same should be kept in mind when primigravida patient presents with acute pain abdomen.

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