

Floating Fetus In Abdomen-Case Report On Ruptured Uterine Rudimentary Horn Pregnancy.

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I. Introduction

Mullerian anomalies are rare developmental anomalies of the female reproductive tract, were first described by Buttram and Gibbons in 1979. This classification was revised by the American society of Reproductive Medicine in 1988. Unicornuate uterus is a type 2 classification with normally structured, functional uterus with cervix and vagina with hypoplasia or agenesis on the contralateral side either communicating or non- communicating horn accounts for 2.4%-13% of all Mullerian anomalies. Pregnancy in rudimentary horn is rare form of ectopic pregnancy with incidence of 1/76,000 to 1/140,000. Pregnancy in rudimentary horn can reach different gestational age in patients depending on the muscular structures of the rudimentary horn. We report a case of G2P1L1 at 12 weeks of gestation with previous normal delivery, misdiagnosed as missed miscarriage, referred for further management, presented to the hospital in shock with acute abdomen with distension

II. Case Description

A 21year old, G2P1L1 with 12 weeks of pregnancy, presented with complaints of pain abdomen and abdominal distension. She had a previous uneventful vaginal delivery of a girl baby 2 years back. This was her second spontaneous conception confirmed by urine pregnancy test by herself in home. She did not register this pregnancy and had no prior antenatal checkups. She went for an ultrasound examination at 12 weeks of gestation due to pain abdomen. The ultrasound revealed with a missed miscarriage, hence here for further management.

On examination, patient was in hypovolemic shock with severe pallor and rapid thready pulse. Her blood pressure was not recordable. The abdomen was tense and distended with guarding and rebound tenderness. The uterine size could not be made out. Pelvic examination revealed fullness in the fornices with cervical motion tenderness. There was no vaginal bleeding. As the patient was in shock, with Hemoglobin of 3 grams/dl, hence was decided to be taken up for emergency laparotomy.

INVESTIGATION- ultrasound revealed a non-viable fetus seen in the right adnexa with organised hematoma adjacent to it. Hemoperitoneum seen in the pouch of douglas, hepatorenal pouch and intra-abdominal cavity with raised possibilities of ruptured right ectopic pregnancy or secondary intra-abdominal pregnancy due to ruptured uterus.

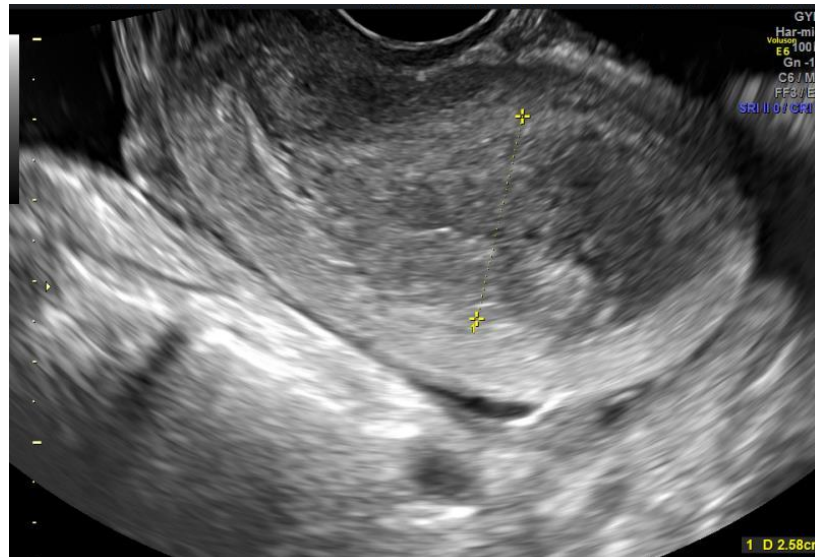


Figure -1 ultrasound showing empty uterus with thickened endometrium.



Figure -2 showing fetus under the liver.

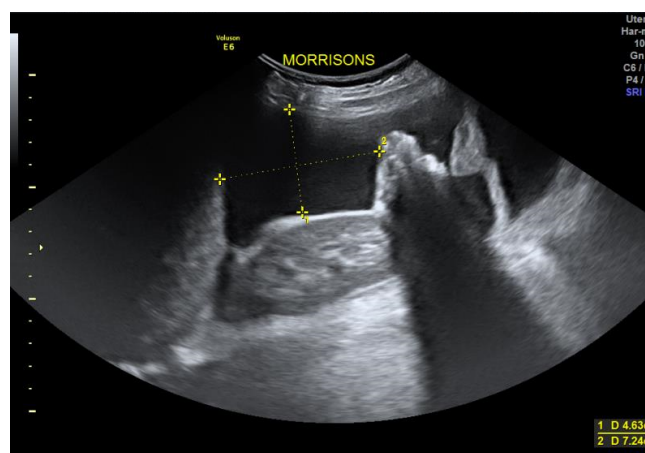


Figure -3 showing collection in Morrison pouch.

INTRAOPERATIVE FINDINGS- the abdomen was opened by a Pfannenstiel incision and there was ruptured right sided rudimentary non communicating horn of a unicornuate uterus with fetus lying free in peritoneal cavity with a hemoperitoneum of about two litres. Both ovaries and left side fallopian tube appeared normal. The Fetus weighed about 20 grams with clots of about 500grams removed. The rudimentary horn was excised. The uterus wall was repaired After achieving hemostasis, abdomen was closed in layers after keeping a drain. Patient was transfused with three units of blood intraoperatively. Her postoperative recovery was uneventful.

Histopathological examination of the specimen confirmed the diagnosis of a Unicornuate uterus with a non-communicating rudimentary horn. She was discharged from hospital on tenth postoperative period.

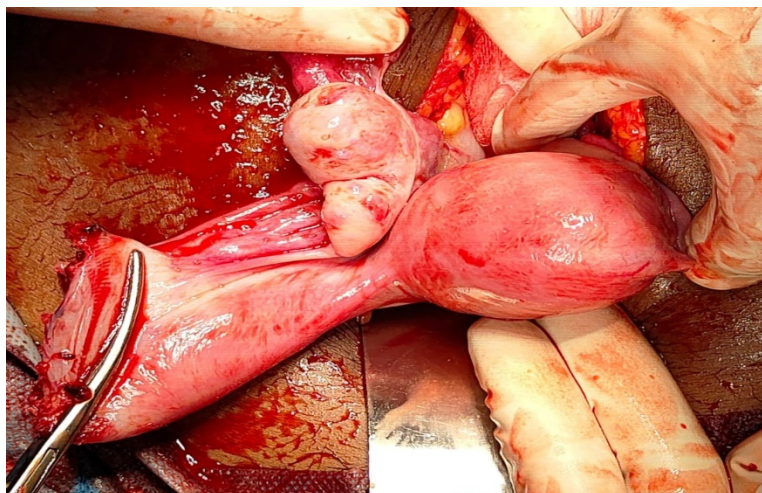


Figure -4: Non communicating ruptured rudimentary uterine horn.



Figure-5 Ruptured rudimentary horn and fetus

III. Discussion

A Unicornuate uterus results from the normal differentiation of only one mullerian duct and is observed in 0.4% of women. The unicornuate uterus is class 2 according to the American Fertility society's classification and represents the most common malformation.

It is associated with approximately 90% non-communicating rudimentary horn. Partial development of the other duct results in a rudimentary horn that is either with cavity, communicating with the uterus (type A1a) or with cavity, not communicating (type A1b), or is without a cavity (type A2). Rudimentary horn in uterus is usually presents on the right side due to left mullerian canal moves caudally than right part. Unicornuate uterus with rudimentary horn associated with infertility, endometriosis, hematometra, recurrent pregnancy loss, urinary tract anomalies, prematurity, although in many patients they remain asymptomatic. Renal anomalies are found in 36% of cases; hence it is mandatory to further assess those women. Pregnancy in non-communicating rudimentary horn occurs through the transperitoneal migration of the spermatozoa or fertilized ovum. It is a rare form of ectopic gestation, its rupture during pregnancy is the most dreaded complication. The most common symptom is abdominal pain and it may occur at any time during the pregnancy. The timing of rupture varies from 5 to 35 weeks depending on the horn musculature and its ability to hypertrophy and dilate. The first case of uterine rupture with rudimentary horn was reported in 1669. 70-80% rupture before 20 weeks of gestation. Early diagnosis before rupture is essential to prevent maternal morbidity and mortality. Diagnosing can be challenging. It is diagnosed by Ultrasound, hysterosalpingogram, hysteroscopy, laparoscopy and MRI. Sensitivity of ultrasound decreases as pregnancy advances. It can be missed in inexperienced hands. Tubal pregnancy, cornual pregnancy, abdominal pregnancy were the common sonographic misdiagnosis. Some reported cases have been diagnosed by MRI. Criteria for diagnosing pregnancy in the rudimentary horn they are 1. pseudo pattern of asymmetrical bicornuate uterus; 2. Absent visual continuity tissue surrounding the gestation sac and the uterine cervix; 3. presence of myometrial tissue surrounding the gestational sac. Most of them remain undiagnosed until it ruptures. Although clinical examination or ultrasound may suspect uterine malformations, the literature reports a very few cases where the diagnosis is made before the onset of symptom

(8%) and the rate of cases detected preoperatively does not exceed 29%. Confirmation of the diagnosis is often surgical at laparoscopy or laparotomy. Immediate surgery is recommended by most even in unruptured cases. Excision of the rudimentary horn and its fallopian tube is recommended. Medical management with Methotrexate and its resection by laparoscopy is also reported. A case of pregnancy progressing to third trimester and resulting in live birth after cesarean also been reported.

IV. Conclusion

Rudimentary horn pregnancy is rare ectopic pregnancy. Diagnosis is difficult clinically, even with imaging modalities. Confirmatory being laparotomy. Early diagnosis, timely resuscitation and surgery and blood transfusion has saved the patient in our case. Identifying both cornuas systematically in all patients increases the detection rate. The absence of continuity between the gestational sac and lumen and the cervical canal on imaging is an important finding.

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