

Rupture of Non-Communicating Rudimentary Horn of Uterus

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Abstract: Pregnancy in non-communicating rudimentary horn is extremely rare and terminates by rupture in 2nd trimester of pregnancy. Thus excision of the rudimentary horn advised when diagnosed. Here is a case of ruptured rudimentary horn pregnancy where the diagnosis was missed by sonogram at 14weeks and reported to us in hemorrhagic shock.

Keyword: non-communicating rudimentary horn, pregnancy, unicornuate uterus.

Introduction

Mullerian duct anomalies in female results from defective fusion or defective absorption during embryonic life [1-3]. Prevalence of congenital uterine anomalies is 1:200 to 1:600 in fertile women [3]. Rudimentary horn is a rarest uterine anomaly and a prevalence of unicornuate uterus with a rudimentary horn is even rarer i.e., 1:100000 [1]. Pregnancy in rudimentary horn is also rare between 1 per 76000 and 1 per 140000 pregnancies [1]. A case of ectopic pregnancy in non-communicating rudimentary horn of uterus with consequent rupture is reported here.

Case History

A 25 yr old woman, G₃P₂L₂, h/o amenorrhoea of 4 months, presented with hypovolaemic shock to AMWCH, h/o pain abdomen 8 days back, consulted private practitioner, confirmed intrauterine gestation of 14wks. Past history of normal vaginal delivery, no h/o dysmenorrhoea, O/E extremely pale, cold and clammy skin, pulse 130/min thready, systole 70mmHg, lower abdomen distension, tenderness and guarding present. Bimanual examination showed uterus not palpable, fornix full, cervix movement tender, culdocentesis positive for unclotted blood. A clinical diagnosis of ruptured interstitial pregnancy made. She was resuscitated and taken for laprotomy with 3 pints of blood.

Laprotomy finding: Hemoperitoneum of 2 liters of blood with clots. Fetus with intact amniotic sac found in the abdominal cavity. Left non-communicating horn ruptured with still placenta partially attached. Excision of the ruptured left rudimentary horn with left sided salphingo-oophorectomy done. Post operative period uneventful. She was discharged on 10th day.



Excised Rudimentary Horn with the Fetus and Placenta

Discussion

90% of rudimentary uterine horn is non-communicating to main uterine cavity [2]. Pregnancy results from transmigration of ovum or zygote, although corpus luteum observed on the contra-lateral side only in 10% cases, 70-80% rupture usually in 2nd trimester before 20wks [2]. Intraperitoneal hemorrhage is torrential and life threatening. Diagnosis is only by suspicion. Because of functioning endometrium and hematometra, teenagers may give h/o spasmodic dysmenorrhoea [2]. Married women may give h/o infertility, recurrent 2nd trimester abortion, preterm labor, malpresentation [3]. Bimanual palpation of a mass extending outside the uterine angle i.e., Baart de la faille's sign or displacement of fundus to contra-lateral side with rotation of uterus and elevation of the affected horn (Ruge Simon Syndrome) and deviation of uterus to one side with adnexal mass in pregnancy may indicate rudimentary horn [1]. In HSG uterus deviated to one side with unilateral tubal block [2], in USG gestational sac surrounded by myometrium seen separate from the uterus, a pseudo pattern of an asymmetrical bicornuate uterus, absent visual continuity in tissue surrounding the gestational sac, uterus and cervix all indicate rudimentary horn pregnancy [4-6]. Sensitivity of USG is 26% and decreases with advancing pregnancy age. Mostly diagnosis is missed by inexperienced hand as in our case. 3 dimensional USG may be used for diagnosis of uterine abnormalities. Laparoscopy is most accurate diagnosis[5]. MRI proved to be useful, noninvasive tool to detect uterine anomalies [5-6]. Once diagnosis is strongly suspected, laparoscopy or laprotomy is must, excision of the rudimentary horn advised [2-3,7]. Literatures show low preclinical 8% and preoperative detection rate 29% only. Pregnancy in the unicornuate uterus show high incidence of abortion, preterm labor, cervical incompetence, malpresentation and increased cesarean rate [3]. Evaluation of renal system advised because of high incidence of urological anomalies [1,2,8]. Thus this condition should be diagnosed before conception itself or at least before rupture occurs and excision of rudimentary horn advised to prevent life threatening massive intraperitoneal hemorrhage to prevent maternal mortality [7].

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