Rupture of Rudimentary Horn Pregnancy

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Introduction

Rudimentary horn (uterus bicornis cum cornu rudimento) is a developmental anomaly of the uterus [1]. Pregnancy in rudimentary horn of uterus is also known as cornual pregnancy. Pregnancy in non-communicating rudimentary horn is very difficult to diagnose before it ruptures, leading to life threatening intraperitoneal hemorrhage. The incidence of rupture of rudimentary horn pregnancy is 1:40,000 pregnancies. We report one such case of cornual pregnancy, which ruptured at 16 weeks of gestation with massive intraperitoneal hemorrhage and shock.

Case Report

A 26 year old gravida 3 para 1 abortion 1 (missed abortion with dilatation and evacuation done) reported with history of amenorrhoea of 16 weeks and acute onset of severe abdominal pain. On the way to the hospital she collapsed. There was no history of vaginal bleeding and other complaints. She had visited the antenatal clinic two days earlier, when she was asymptomatic. Clinically, the height of the uterus was 16 weeks, which was corresponding to the period of amenorrhea. She was advised routine obstetric ultrasound after four days. Before the ultrasound could be done, she was brought to the hospital in a state of shock. On examination general condition was poor. Pallor was present +++, pulse rate was 120/minute and systolic blood pressure was 80 mm of Hg. The extremities were cold and pale. Systemic examination revealed tachycardia and hypotension with tachypnoea. Abdominal examination showed distension with generalised tenderness. The uterus was not palpable separately. There was evidence of free fluid in the peritoneal cavity. She was drowsy and responding to painful stimulus. Per vaginal examination revealed an enlarged uterus of about 12 weeks size, and tenderness on rocking of cervix. In view of the decreased uterine size and evidence of free fluid in the peritoneal cavity, a clinical diagnosis of ruptured uterus with intraperitoneal hemorrhage, probably due to a silent perforation during the earlier dilatation and evacuation was made. She was resuscitated and taken up for emergency laparotomy. Preoperative haemoglobin was 3 gm%. Intraoperatively, there

was massive haemoperitoneum with ruptured right rudimentary horn. The foetus and placenta were lying in the peritoneal cavity (Fig. 1).

The rudimentary horn was larger than the main uterus, which was attached to the uterus, by a thin fibrous band. Resection of the right rudimentary horn was done and abdomen closed after ensuring haemostasis and peritoneal lavage. Six units of blood were transfused intraoperatively and postoperatively. The patient recovered and was discharged on seventh postoperative day.

Discussion

Pregnancy in rudimentary horn is possible only by the spermatozoa passing up the normal fallopian tube and fertilizing ovum that enters the fallopian tube of the rudimentary horn subsequently [2]. This patient had two pregnancies, one normal and the other a missed abortion, in the normal uterus. The presence of rudimentary horn was not diagnosed till it ruptured. The usual termination of pregnancy in the rudimentary horn is by rupture because of the poorly developed muscular and mucosal coats at fourth or fifth month of gestation. Rupture may occur at any stage depending upon the anatomy of the rudimentary horn, and sometimes not until midterm [3]. Difficulty may be encountered in distinguishing between a pregnancy in a rudimentary

Fig. 1 : Resected rudimentary horn, with the foetus and placenta

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uterine horn and in the fallopian tube where the position of the round ligament is diagnostic. The ligament runs in to the wall of the gestational sac if the pregnancy occupies the uterine horn, whereas it joins the uterus, and not the gestational sac, if the pregnancy is in the tube. A rare condition that may be confused with rudimentary horn pregnancy is the occurrence of pregnancy in a uterine diverticulum. The accepted treatment is to remove the gravid rudimentary horn and leave the normal one. The patency of the fallopian tube should be obliterated, to prevent the life threatening emergency if the condition is diagnosed before

pregnancy, at the time of laparoscopy or laparotomy.

Conflicts of Interest

None identified

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