Case Report

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Spontaneous mid-trimester rupture of a non-scarred gravid uterus

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ABSTRACT

Gravid uterine rupture is a life threatening condition for both mother and her fetus. Spontaneous rupture usually occurs in scarred uterus in late pregnancy without any myometrial contraction. But, rupture of a non-scarred gravid uterus in early pregnancy is a rare complication. Clinical signs and symptoms of rupture in early pregnancy are non-specific and should be differentiated from other causes of acute abdomen so that proper action should be taken in time to reduce maternal morbidity and mortality. Here we report a case of spontaneous mid-trimester rupture of an unscarred uterus in which prior evacuation caused weakening of myometrium that might have given way in this pregnancy.

Keywords: Spontaneous, Midtrimester, Uterine rupture, Non-scarred gravid uterus

INTRODUCTION

Rupture gravid uterus is an obstetrical emergency with high mortality and morbidity for both fetus and mother. It usually occurs in a previously scarred uterus like previous LSCS, myomectomy, hysterotomy etc - either in late pregnancy or during labour. But, spontaneous midtrimester uterine rupture especially in an unscarred one is a rare condition. Here we report a case of G3A2 at 29wks pregnancy with spontaneous uterine rupture without any history of scarring, placenta percreta or any medication for induction.

CASE REPORT

A 32 year old gravida 3, abortion 2, presented to the casualty at 29wks of gestation with acute pain abdomen for last 10 hrs associated with vomiting 4-5 times and loss of fetal movement. On examination, her vitals were stable. Per abdomen – was distended with diffuse tenderness and uterine border couldn't be delineated. FHS couldn't be localized. Per vaginum, os was closed with slight bleeding present. She denied any history of

interference and on obstetric history, she had two missed abortions followed by suction-evacuation – 1st of 6 wks at 3 yrs & 2^{nd} of 10wks at 1 yr back.

USG showed significant free fluid in abdominal cavity with internal echoes (? hemoperitoneum) with intrauterine demise. Hence, with diagnosis of rupture uterus she was taken for immediate laparotomy. On opening the abdomen,the intact amniotic sac with dead fetus was lying in peritoneal cavity (Figure 1). On further tracing it was found protruding through fundal rupture of approx. 4×5 cm with ragged margins more towards posterior surface (Figure 2). Repair of rupture was done in layers & 1unit PRBC transfused. Her post-op period was uneventful.

DISCUSSION

Incidence of unscarred uterine rupture is 1:17,000-20,000 deliveries. Risk factors are multiparity, placental abnormality, uterine anomaly, obstetric maneuvers, injudicious use of oxytocics, external injuries or any previous history of curettage, MRP, myomectomy, 3

hysterotomy, hysteroscopic resection etc.⁴ In our case no such obvious factor was found except that she had undergone evacuation twice in first trimester of previous pregnancies which might have caused weakening of myometrium. Unscarred uterine rupture usually occurs in lower segment – weakest part. But if there is fundal rupture especially in early pregnancy, the diagnosis is often delayed due to non-specific symptoms and so other causes of acute abdomen should be ruled out.⁵ This case highlights that curettage can also be a risk factor for spontaneous uterine rupture in early pregnancy.⁶



Figure 1: Intact amniotic sac in peritoneal cavity after opening the abdomen.



Figure 2: Fundal rupture of uterus – more on posterior side.

Rupture is called spontaneous because it occurs without any uterine contraction. Hence, maternal and neonatal outcome can be optimized by awareness of risk factors, early recognition of signs and symptoms, establishing timely diagnosis by USG and proper surgical intervention.⁷

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