

**A RARE CASE OF CORNUAL UTERINE RUPTURE IN SCARRED UTERUS- A CASE REPORT****Dr Shashwatee Ghosh**

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ABSTRACT

Uterine rupture during the course of labour is a well documented complication and the majority of cases occur in women with scarred uteri. It is a life threatening emergency. It is associated with maternal mortality, especially in developing countries, and with major maternal morbidity, particularly peripartum hysterectomy. Most reports demonstrated that underlying pathological changes could be anticipated in the presence of certain conditions like multiparity, uterine anomalies like uterine diverticula and bicornuate uteri, placenta percreta, arteriovenous malformation, endometriosis, precipitous labour and obstructed labour. However our patient was free from any of the above risk factors which might have contributed to spontaneous uterine rupture. A rupture that occurs in areas of presumably normal tissue instead of scar tissue is extremely rare. We present a case of cornual rupture in a post-caesarean pregnancy. The rent in the left cornual region close to the insertion of left tube. It was sutured in 2 layers with delayed absorbable suture by intermittent sutures. Expedient diagnosis and quick surgical intervention can reduce the maternal morbidity and mortality in such cases.

KEYWORDS : uterine rupture, previous LSCS, cornual rupture , complicated pregnancy**INTRODUCTION**

Rupture of uterus is an obstetric life threatening emergency associated with a high perinatal and maternal morbidity and mortality. The risk factors include intrauterine surgeries including previous lower segment caesarean section, previous intra uterine instrumentation, trauma, grand multipara, medical induction or augmentation of labour , abnormal placentation, macrosomia and obstructed labour.¹The incidence of rupture in scarred uterus is 1% while that in unscarred uterus is 0.006% as investigated by WHO.² Uterine rupture generally occurs in the third trimester or during labour, the commonest site being the previous scar . It is uncommon in the first , second trimester. A rupture that occurs in cornual region is extremely rare.³In this report we present a case of G3P1L1A1 who was diagnosed having rupture uterus at cornual site at 19 weeks of gestation , leading to hemorrhagic shock.

CASE REPORT

A 28 year old G3P1L1A1 was referred to our hospital at 19 weeks of gestation with chief complaints of severe abdominal pain since 14 -16 hours . Her antenatal period was uneventful prior to admission. She previously had a 5 year old female child by lower segment caesarean section, for breech presentation. She also underwent MTP at 2 months for which suction evacuation was done. Her past medical and surgical histories were not significant. On examination, there was severe pallor present (clinically 4-5 gm%), pulse rate was 140 bpm, blood pressure was 80/40 mmHg, respiratory rate was 20 breaths/minute. On per abdominal examination, abdomen was distended with guarding, rigidity present, rebound tenderness was present and there was evidence of free fluid in abdomen (bloody tap present). Height of uterus and uterine tenderness could not be ascertained. Fetal heart sounds were not audible. On per speculum examination, cervical os was closed, cervical length 3 cms, without any leakage or bleeding.

**Fig. 1 : Left Sided Cornual Rupture**

Baseline investigations and sample for blood grouping and cross matching were sent and meanwhile patient was resuscitated. Ultrasonography was done which showed gross ascites with free fluid in Morissons pouch and pouch of Douglas. There was discontinuity in left cornual site of uterus and underlying placenta suggestive of uterine rupture and intra uterine fetal death. She was shifted to OT for emergency exploratory laparotomy which was proceeded under general anesthesia.

**Fig. 2: Cornual Rupture Sutured In 2 Layers**

On exploration there was 2 litres of hemoperitoneum with discontinuity of uterine wall in the left cornual region ,through which amniotic sac and non viable fetus were seen bulging out. A female abortus weighing 440 grams was delivered out . Placenta was expelled out completely. A rent of 7*1 cms was present in the left cornual region close to the insertion of left tube. It was sutured in 2 layers with delayed absorbable suture (vicryl 2-0) by intermittent sutures. Her blood loss was 2.5 litres. She received total 6 PRC and 6 FFP. Post operative period was uneventful. She was discharged on day 10 after suture removal.

DISCUSSION

Although rupture of non laboring uterus is rare , it can be potentially catastrophic to both mother and fetus. The most common site of rupture in scarred uterus is the previous lower segment caesarean section scar. This was not so in our case as we found rupture in the left cornual site. This could have indicated a cornual pregnancy, but the normal location of pregnancy was shown by first trimester scan. Also there was no asymmetrical enlargement of uterus on physical examination, ruling out cornual pregnancy.

Singh et al reported cornual rupture in a case of previous lower segment caesarean section at term but could not find any possible explanation.³ abbas et al reported cornual

rupture at term in a patient who underwent laparoscopic corneal resection.^{4,5}

In our case, suction evacuation could be a risk factor for rupture of uterus at the cornual site. This can be attributed to the attenuation of musculature at the cornual site caused by instrumentation which resulted in rupture uterus in the subsequent pregnancy. These patients should have ante natal visits at high risk care unit in the management of subsequent pregnancies. During these visits a thorough and careful history should be elicited regarding instrumentation.

Physiological and anatomical changes may affect the presentation of abdominal pain during pregnancy.⁶ Fever may not always be present and symptoms of normal pregnancy (nausea, vomiting, abdominal pain) could mimic severe abdominal pathology.⁷ So acute abdomen presents atypically during pregnancy and it is difficult to distinguish a normal pregnancy from a tense abdomen. Hence a high index of suspicion is necessary.

CONCLUSIONS

Rupture uterus can also occur at unusual site in a previously scarred uterus. Early diagnosis and prompt surgical intervention can reduce the maternal morbidity and mortality. Best outcome can be achieved by multidisciplinary team approach consisting of gynecologist, anesthetists, intensivist and blood bank services. Similarly a high index of suspicion is mandatory in pregnant women presenting with unusual symptoms with or without risk factors.

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