

## Original Research Paper

## **Obstetrics & Gynecology**

# A RARE CASE OF RUPTURE OF GRAVID UTERUS IN CONGENITAL DYSGENESIS OF CERVIX

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ABSTRACT
Rupture of gravid uterus is a catastrophic event responsible for high maternal and fetal morbidity and mortality. Rupture of scarred uterus in labor as a result of previous uterine surgeries mostly cesarean section or myomectomy is a known entity. But rupture of uterus in unscarred uterus in primigravida patients is rarel and it occurs when it is associated with Mullerian anomalies. This is a rare case report of rupture of gravid uterus at term in primigravida patient without previous uterine surgery as a result of congenital dysgenesis of cervix.

### KEYWORDS: uterine rupture, congenital dysgenesis of cervix, Mullerian anomalies

#### INTRODUCTION:

The incidence of Mullerian anomalies of the female genital tract is extremely rare i.e. 0.1-3% of all women. They are important because they give rise to many obstetric complications in the form of infertility, second trimester abortions, preterm labor, malpresentations and even rupture uterus in neglected cases. Rupture of uterus in late gestation or at labor because of previous uterine surgeries in the form of previous cesarean section or sections in multigravida are well documented. In primigravida, the common causes being prolonged and obstructed labor in neglected malpresentations, injudicious use of oxytotics, etc. and rarely Mullerian anomalies. Of the various classes of Mullerian anomalies as described by American Fertility Society, isolated anomalies of genital tracts are rare<sup>2</sup>. They always occur in combination with each other or anomalies of different systems, mostly urinary and skeletal systems. Dysgenesis of cervix comes under class 2 defects of vertical fusion of Mullerian ducts<sup>3</sup>i.e. down- growing of Mullerian tubercle and up-growing derivative of the urogenital sinus. When this does occur, it is in association with absence of a portion or whole of the vagina. Two types of cervical anomalies have been seen. The first is cervical aplasia which lacks a uterine cervix. The lower uterine segment narrows and inserted in a peritoneal sleeve well above the vaginal apex. The second type has four subtypes. Intact cervical body with obstruction of the cervical os. In this case cervix is usually well formed but a portion of endocervical lumen is obliterated by either fibrous or membranous tissue. This was the finding in our case. Others being cervical body with fibrous bands, stricture of midportion of cervix and fragmentation of cervix. When vagina is involved, cyclic lower abdominal pain without menstrual flow is the presenting complaint to seek gynecological evaluation. MRI is the diagnostic tool of importance.

CASE REPORT:

A 23 year old female patient with primary infertility of 4 years was being referred to Emergency Department of Obstetrics as intrauterine fetal demise 36 weeks with unexplained tachycardia on 9/2/2013 at around 4.00 pm from District hospital. On examination pulse was 120/min, BP- 140/90 with marked pallor and urine albumin 1+. Abdominal examination revealed distension and tenderness over abdomen and guarding and rigidity, no palpable uterine contractions and loss of uterine contour. Ultrasonographic examination confirmed the findings of fetal demise with

collection of intra placental and retroplacental bleed. Rupture of uterus was not diagnosed on ultrasound. An initial diagnosis of abruption of placenta was kept but on per speculum examination cervical os could not be identified. There was rudimentary thin post lip was seen but external os was not felt. Considering the anomalies of cervix and possibly uterus and with the clinical suspicion of rupture of uterus, immediate laparotomy was planned. After a quick preliminary preparation, general anesthesia was administered and abdomen opened by midline vertical incision. A stillborn Baby with placenta was lying inside peritoneal cavity. There was e/o complete uterine rupture from fundus to the left posterolateral border, extending behind left adnexa upto lower uterine segment from mid fundic region superiorly to the posterior aspect upto isthmus with irregular edges, bleeding from rupture site with hemoperitoneum of around one litre. Decision of repair of uterus was taken considering her obstetric history. Internal os opening was not palpable from the uterine cavity with assistant palpating external os through vagina and surgeon internal os, we tried to figure out the defect. The two fingers were approximated but separated from each other by ? fibrous? Membranous tissue, which was dissected and opening made through it by artery forceps. Intraoperative total blood loss was around 1.5 litre. The postoperative period was uneventful and she was reexamined on 7<sup>th</sup> postoperative day to see the patency of os. We could admit one finger easily directly into uterine cavity. The patient was explained and counselled about the nature of surgery performed and need for extra vigilance, early admission and need for repeat elective cesarean section in future pregnancy was reemphasized. The patient is still under followup.

#### **DISCUSSION:**

Uterine rupture in unscarred gravid uterus with the mullerian anomalies of uterus have been described by few authors. As such these cases are rare and needs special mention because unless without a high index of suspicion, these cases are difficult to diagnose<sup>2</sup>. Elsavegh, A. and Nwosu, E.C. have described a case of rupture of pregnancy in the communicating rudimentary uterine horn at 34 weeks. Lot of cases of uterus giving way during labor due to injudicious use of oxytotics have been described in literature<sup>4</sup>. None of the cases of rupture uterus in congenital dysgenesis of cervix has been reported. Congenital dysgenesis of cervix. In our case the possibility of penetration of sperms through a microscopic

defect in the membranous or fibrous band of cervix can be thought of. MRI and Antenatal scan can be of some help in diagnosing such conditions<sup>5</sup>. Early diagnosis would have been possible if she would have reported to medical facility for the investigations of infertility and the cervical anomaly would have been diagnosed earlier. This catastrophic event would have been prevented and she would not have lost the baby<sup>6</sup>.

#### CONCLUSION:

We should, however, bear in mind that prompt response to every woman during labour is of paramount importance to avoid repeating this type of incident.



Fig 1 showing the extent of uterine rupture



Fig 2 showing the repair of uterus done in order to retain the obstetric function

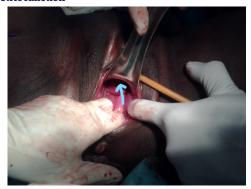


Fig 3 showing the inability to visualize the external os intraoperatively



Fig 4 showing external os after repair surgery

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