

## CASE REPORT

### POST INSTRUMENTAL INCOMPLETE UTERINE RUPTURE WITH LEFT OVARIAN CYST A RARE CASE

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**ABSTRACT:** Uterine rupture stands as a single obstetric accident during pregnancy and child birth, and one of the leading causes for maternal and fetal morbidity and mortality. Although there is decline in different studies, it is a potentially catastrophic event in which the integrity of myometrial wall is breeched.<sup>(1)</sup> Survivors are often encumbered with morbidities such as impaired reproductive function as a result of surgical management leading to marital disharmony and psychological trauma.<sup>(2)</sup> The incidence of uterine rupture can be dropped with good antenatal care, access to skilled delivery and emergency obstetric care, emergency transport system, equitable distribution of health staff and availability of blood banks with sustainable blood supply. Uterine rupture usually occurs during delivery due to misuse of oxytocics, obstetrical procedure like forceps/vacuum which are applied without fulfillment of criteria for application and inadequate skills. We here by present a case report of post instrumental incomplete uterine rupture.

**KEYWORDS:** Uterine rupture, Post-partum hemorrhage, Instrumental delivery, Scarred and unscarred uterus.

**CASE REPORT:** P3L3 delivered a male baby of weighing 3.5kg at 11AM by forceps application for prolonged second stage of labor in a government hospital and she was referred to our hospital at 5:30PM with history of post-partum hemorrhage (PPH) with 1 pint of packed cells on flow there was delay of about 5½ hours to reach our hospital after delivery. On general examination patient was in shock with pulse rate 120/min, BP-90/60mmHg, P/A-uterus was contracted and retracted. P/S examination a sutured episiotomy wound seen with vaginal lacerations along with active bleeding from posterior fornix, cervical os was intact. Patient was diagnosed as P3L3 with immediate post natal day with traumatic PPH due to forceps application.

Her investigations revealed Hb-6gm%, blood group O positive, platelet count-2.61 lakhs/cmm, coagulation profile within normal limits. Patient was immediately posted for exploration & suturing in OT after arranging adequate blood & packed cells, & FFPs. Under general anesthesia vaginal suturing done but bleeding continued.

After thorough Re-examining a tear in the posterior fornix noted which was communicating into the pouch of Douglas. Then immediate decision for laparotomy was taken. Intraoperative findings revealed uterus to be well contracted and retracted, along with a huge solid left ovarian cyst of about 10\*10cms (Fig. no. 1) along with incomplete uterine rupture at the level of lower uterine segment on left side along with the broad ligament hematoma. The peritoneum was intact with the myometrial rupture. The peritoneum picked up, separated and pushed down along with the bladder. Then total peripartum hysterectomy along with cystectomy on left side done. Intraoperatively 2 pints of whole blood & 2 pints of FFP were transfused. Postoperative period was uneventful. After removal of sutures on 8<sup>th</sup> post-operative day patient was discharged.

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**Fig. 1: Incomplete Ruptre of Uterus**



**Fig. 2: Left Ovarian Mass – Leading to prolonged second stage**

**DISCUSSIONS:** The status of forceps delivery is constantly under discussion within the specialty and with pediatrics colleague. Even though there are lots of controversies, efforts are made for improvement in application of this instrument in the interest of mother and the baby which is life saving and rewarding experience when applied properly.<sup>(3)</sup> So we can say that forceps application after fulfillment of criteria's in an expert hand is an art but not a dangerous instrument in a skilled obstetrician. There are varieties of forceps available but high forceps, mid cavity and rotational forceps has no role in modern obstetrics.<sup>(4)</sup> Now a day an outlet forceps only should only be applied after maternal verbal consent.

**Uterine Rupture is one of the most common Obstetrics Emergencies threatening the lives of both Mother and Fetus. There are two types of Uterine Rupture:**

1. Complete – were the whole thickness of uterine wall is involved, usually occurring in an Unscarred uterus.
2. Incomplete, where the visceral peritoneum remains intact as seen in scar dehiscence.

In our case it was an incomplete rupture in a un scarred uterus at the level of lower uterine segment with intact peritoneum. Ovarian cyst may be the region for prolonged second stage and forceps application.

The risk factors for uterine rupture include obstructed labor, grand multiparty, previous scarred uterus, uterine anomalies, inappropriate prostaglandin and oxytocin usage, previous instrumental abortions, vacuum extraction and forceps delivery.

The necessary requirements for forceps application are that the fulfillment of criteria and after confirming proper application, traction should be applied during contraction with prior episiotomy.

The amount of traction should be least necessary to accomplish safe fetal head descent. In biomechanical studies, safe limit of 45 pounds in primi Para & 30 pounds in multi Para have been suggested. Though there is no consensus on the amount of traction force,<sup>(5)</sup> the angle of traction is important so to ensuring that everything has been done accordingly to proper protocols, if no progress is observed in three traction, an attempt to abdominal delivery should be considered. After all forceps deliveries a thorough examination of both mother and the new born is mandatory.

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The maternal complications like perineal tear vaginal tear cervical tear, extension of episiotomy, traumatic PPH, urinary and fecal incontinence, and the fetal complications like impression mark, abrasions on the face, cephalohematoma, skull fracture, and cerebral palsy can occur.

In our case it was an incomplete rupture in a unscarred uterus at the level of lower uterine segment with intact peritoneum. Ovarian cyst may be the reason for prolonged second stage and forceps application.

**CONCLUSION:** We can conclude that obstetrics' forceps has a significant place in obstetrics'. As it is a lifesaving procedure for mother and fetus in many situations. In a skilled hand it is very safe and important to cut short of second stage of labor or even prophylactic use also. Successful result can be achieved more only by skill and not by force.

Sound clinical evaluation and adherence to the ground rule and skill of operator will minimize the risk of failure and complication. Using outlet forceps the overall rates of maternal and perinatal morbidity and mortality are negligible and even comparable to spontaneous vaginal delivery.

Over the years cesarean delivery rate has increased while instrumental delivery rate has fallen dramatically over the past decade. ACOG 2011 recommends forceps delivery as an acceptable and safe option for delivery. Outlet forceps plays a very important role in obstetrics practice and remains appropriate tools in the armamentarium of the modern obstetrician, so in modern obstetrics outlet forceps is having a definite role.

All the young obstetrician must have knowledge and confidence in applying the instrumental vaginal deliveries. Even nowadays government of India in Emoc training for medical officer in service (MBBS) included the forceps and vacuum delivery in the syllabus to teach them, so they can help the nation in decreasing the maternal mortality rate.

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