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UTERINE SCAR SILENT RUPTURE FOLLOWING INDUCTION OF SECOND TRIMESTER ABORTION – A RARE CASE REPORT

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ABSTRACT Usage of misoprostol for second trimester abortion can have catastrophic consequences especially in scarred uterus. Here we present a case of Multigravida with five months of amenorrhoea with intrauterine fetal demise came for termination of pregnancy. She was given both medical and mechanical methods of induction of abortion which failed. Hence, she was taken up for hysterotomy. Intraoperatively, the fetus and placenta were found between layers of right broad ligament mimicking a broad ligament pregnancy with a rent in previous uterine scar. Patient had no intraoperative and postoperative complications and recovered well.

KEYWORDS : Rupture uterus, Scarred uterus, Second trimester induction of Abortion

INTRODUCTION

Uterine rupture is a serious uncommon and life-threatening complication which can endanger mother's life. Though rupture can be seen in both scarred and unscarred uterus, there is a higher incidence of rupture in scarred uterus almost accounting upto 1% to 1.3%[1,2]. Here, we present an interesting case of uterine scar rupture during a second trimester induction of abortion for intrauterine fetal demise following medical and mechanical methods. The patient was finally taken up for hysterotomy as she did not respond to various methods of induction of abortion. The fetus and placenta were found in between the leaves of broad ligament which mimicked a Broad ligament pregnancy on the right side with a rent in the uterus in bucket handle fashion at the right angle of previous CS scar.

Case Presentation

A 28-years G3P2L2 with 5months pregnancy reported with leak per vagina for the past 3 days and a USG report of Intra-uterine fetal demise. She had one vaginal delivery 5yrs ago, followed by a lower segment transverse caesarean section 2yr back.

On examination the vitals were stable with a pulse rate 80/min, blood pressure- 110/70 mmHg,. On abdominal examination, uterus was around 24week size. Fetal heart was absent on fetal doppler. On examination, there was no demonstrable leak and on vaginal examination, the cervical os was closed and cervix uneffaced and bilateral fornices were free and non-tender.

A review scan was done to confirm the same which revealed intra- uterine fetal death with fetus in breech presentation corresponding to 20 weeks 5 days. The placenta was on the anterior aspect with absent amniotic fluid. Basic laboratory investigations including complete blood count, blood grouping and Rh typing, blood glucose, renal function tests and coagulation profile were within normal limits. Patient and the attenders were counselled and given the option of both medical and surgical methods for termination of second trimester abortion explaining the benefits, side effects and risks of the two methods. The patient chose medical method of abortion with tablet Mifepristone and tablet Misoprostol. The informed written high-risk consent was obtained.

On Day 1, Patient received Tab. Mifepristone 200mg orally. On Day 2, Foleys bulb induction was done wherein the bulb was inflated with 40ml of distilled water. On Day 3, (48hrs after giving the mifepristone tablet), patient was reassessed. Her vitals were stable, uterine contour was well maintained and there were no uterine contractions. Cervical os was closed and Foleys bulb was in situ. Tab Misoprostol 200 mcg was given sublingually. A second dose of Tab. Misoprostol 200mcg orally was given 4hrs later. Patient had good uterine contractions each lasting for 30- 40sec. Foleys bulb was expelled into the vagina, OS was 2cm dilated with 3cm long cervix[3]. However, the contractions decreased after four hours, Inj.Oxytocin 2.5 IU in 500ml Ringer Lactate solution was started at the rate of 8 drops/min. Contractions increased, which were very frequent with good intensity (3-4/40-60sec/10mins). It was continued for 12hrs.

At the end of 4th day, the patient was asymptomatic, stable and afebrile. Despite trying both medical and mechanical methods for induction, there was no improvement in BISHOP score. Hence, a decision for hysterotomy was taken. On laparotomy, intra operative findings were surprising: uterus was around 12 weeks size and a similar bulge was noted in right broad ligament (Fig 1). Though initially it was thought to be a broad ligament haematoma, later it mimicked a broad ligament pregnancy as the uterine cavity was empty.

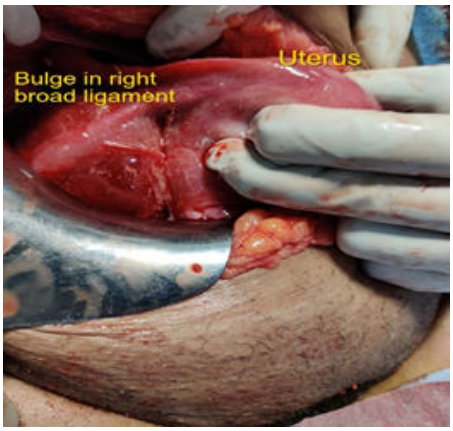

Figure 1: Empty bulky uterus with bulge in right broad ligament

Right broad ligament was opened by incision at the round ligament and dead macerated fetus of 380 grams extracted by breech followed by placental removal as shown in Fig 2, there was no active bleeding. On further exploration, a bucket handle rent was noted at the right angle of the uterine scar. The rent in wall of uterus (Fig 3) was sutured and bilateral tubectomy was done. There was no hemoperitoneum nor any

pelvic organ injuries. The abdomen was closed after ensuring hemostasis. Postoperatively, the patient recovered without any complication. Follow-up visits at 1 and 3 months postoperatively were uneventful.

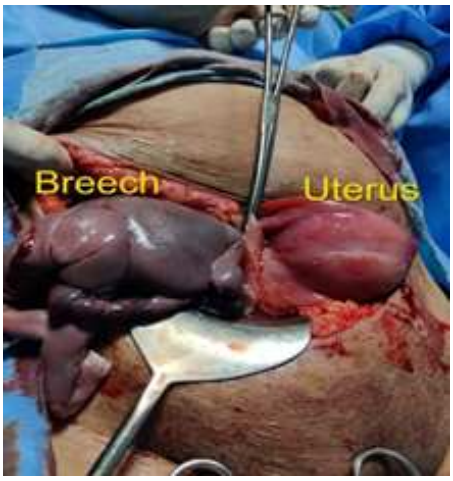

Figure 2: Fetus extracted by Breech from layers of broad ligament

Figure 3: Bucket handle rent in uterus

DISCUSSION:

All around the world, reports of an increase in caesarean delivery rates during the past few decades has been noted. Because of this, many women carry uterine scars into their subsequent pregnancies, which may increase the likelihood of complications like scar dehiscence or scar rupture[4]. Selecting an effective approach to prevent uterine rupture in all high-risk patients is crucial. Surgical techniques are now only an option in some circumstances due to growing trends toward the medical method of termination[5].

Our patient was stable throughout the induction process and there was no fresh per vaginal bleeding anytime during the process. Even though the scar rupture was noted in the lower uterine segment on the right lateral wall, she did not have features of shock or intraperitoneal bleed because a) the rupture happened in the previous scar which was fibrosed, b) the foetus with placenta were expelled in between the two leaves of the right broad ligament and c) there was no peritoneal irritation neither due to the foetus nor the amniotic fluid. The decision for hysterotomy was taken as there was no improvement in BISHOP score despite induction for four days by both medical and mechanical methods and with good contractions.

On USG before induction, the dead fetus was in breech presentation with placenta in anterior aspect, but after the scar rupture, the breech of fetus got squeezed through the rent first to occupy the upper part of broad ligament, followed by the trunk and the head and lastly the placenta. Therefore, during the extraction from the layers of broad ligament, fetus was delivered by breech and the placenta was in the lower part of the broad ligament. There was no bleeding after removal of the fetus and placenta.

CONCLUSION:

Misoprostol is an acceptable choice for induction of abortion in the second trimester both in scarred and unscarred uterus. Though the complications are uncommon but it could be life threatening. Hence, to lower the mortality rate in such cases, we should constantly have a high index of suspicion, require close monitoring, and be well-prepared to manage life-threatening complications.

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