



SUCCESSFUL OUTCOME IN A CASE OF PREVIOUS LAPAROTOMY FOR TRANSUTERINE APPROACH IN IRREPARABLE VAGINAL TEARS NOT ACCESSIBLE THROUGH CONVENTIONAL ROUTE: A CASE REPORT

Obstetrics & Gynaecology

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ABSTRACT

Background : Obstetric haemorrhages are the most common cause of maternal morbidity and mortality in developing countries. Traumatic postpartum haemorrhage (PPH) secondary to high vaginal wall tear is a rare but life-threatening complication of vaginal delivery. **Case report :** We discuss a 26-year-old G2P1L1 female who had history of traumatic PPH in her previous pregnancy with a high posterior vaginal wall laceration that was bleeding profusely, and the apex was not traceable vaginally, who was referred to our hospital and managed successfully with abdominal exploration for transuterine approach with bilateral internal iliac artery ligation to arrest bleeding. Patient presented this time at term for safe confinement, was evaluated and was managed by an elective LSCS due to massive vaginal tear repaired by transuterine approach in previous pregnancy. **Conclusion :** Cervicovaginal tears are seldom sutured through a transuterine approach. This case described a successful correction that avoided the use of obstetric hysterectomy and preserved fertility of this patient thus providing evidence that this approach, although rare, can be used as a final approach, is safe and does not hamper the further fertility of the patient.

KEYWORDS

Traumatic PPH, Internal iliac artery ligation

INTRODUCTION :

Postpartum haemorrhage (PPH) is a life threatening event, which involves severe bleeding during and after the third stage of labour. PPH is one of the most common obstetrical complications, affecting up to 18% of deliveries. It accounts for 35-55% of peripartum maternal deaths worldwide.¹

A vaginal tear is a spontaneous laceration to perineum that occurs during the second stage of labour and it can be life threatening too in some cases. There are some conventional routes for repair of these inaccessible tears e.g. under anaesthesia cervicovaginal exploration with Sim's speculum pushing uterus from above for cervical exploration and pushing it above for vaginal exploration. In some cases, stepladder approach is used for tracing apex of the vaginal tear. Even one can use local suction with cannula for suctioning of bleeding. Most of the times, these procedures achieve hemostasis; however, in some cases especially with multiple vaginal tears with repeated attempts to suture, create raw area and make vaginal mucosa more fragile. Here, we are discussing an approach seldom used for repair of extensive vaginal tears not accessible through conventional route i.e. transuterine approach.

Case Report :

A 26 years old G2P1L1 with h/o previous exploratory for transuterine approach in view of traumatic PPH, was referred from a PHC for safe confinement on 14/03/2023. She had h/o amenorrhoea since 9 months, was a booked pregnancy at PHC with no presenting complaints. She had regular visits, Inj TT was taken during ANC visits, haematinics were being taken. She had 3 USGs done. No significant past or family history. According to LMP, her EDD fell on 19/03/2023. She had regular 28 day menstrual cycles, with moderate flow. She was married since 8 yrs, was a 2nd gravida. She was 39.2 weeks by LMP and 39.4 weeks by early scan.

Patient had an uneventful ANC period in her last pregnancy, with regular visits at a nearby PHC, she had a full term spontaneous vaginal delivery and was referred from a peripheral hospital in view of continuous vaginal bleeding. She underwent vaginal exploration twice

in a private hospital for vaginal tear. She received 6 units packed red cell concentrate, 6 fresh frozen plasma and 4 units of platelet at the same hospital. Despite all of this, the patient's condition deteriorated due to bleeding and she was referred to Government Medical College and Hospital, Aurangabad for further management. On admission, the patient's general condition was poor, pallor (+++), afebrile, pulse 120/min, BP 80/60 mmHg, shock index 1.5, respiratory rate 30/minute, CVS tachycardia, RS bilateral chest clear, air entry bilateral equal, per abdomen examination uterus 28-week size, and firm. Blood investigations showed Hb 5.5gm%, TLC 5000, platelet count 1 lac/mm³. Liver and kidney function tests were normal. Emergency cervicovaginal exploration with SOS exploratory laparotomy was decided. Local genital examination under anaesthesia showed vaginal packs in situ, soaked with blood; there was passage of 500 gm blood clots after removal of the pack, vaginal tear present, profuse vaginal bleeding present, vaginal mucosa was fragile. Vaginal tears were tried to visualize by pushing the uterus cephalad; however, due to bleeding and multiple lacerations, visualization was not possible, and the patient already underwent vaginal exploration twice, hence, the decision for exploratory laparotomy was finalized. Intraoperative finding included uterus of 28-week size, well retracted upper segment, and bulged out lower uterine segment. After removing packs and clots vaginally, lower uterine bulge disappeared. Bilateral internal iliac ligation was done to reduce the blood loss. After separating uterovesicle fold, a transverse incision was made in the lower uterine segment. Uterine cavity showed no active bleeding.

The anterior and posterior lips of cervix were identified through transuterine approach. Posterior vaginal wall traced; there was high vaginal tear extending up to posterior fornix and bleeding profusely. Vaginal tear was sutured with Vicryl no 1-0 Intermittent suture through trans uterine approach. After inserting 5 intermittent sutures, bleeding was stopped, haemostasis was confirmed and intraperitoneal drain kept. B/L uterine and ovarian arteries were ligated and abdomen was then closed. The abdominal wall was closed in layers. Vaginal exploration was done again, and no active bleeding was seen vaginally. Tear in labia majora and labia minora were sutured. The patient received 2 units of packed red cell concentrate and 3 units of FFP. Post

operatively, the patient was shifted to ICU for monitoring. Post operative finding showed fair general condition, pallor (+), afebrile, pulse 90/min, BP 110/70 mmHg. Per abdomen examination showed well retracted 16-week size uterus. No active bleeding was seen on local genital examination. The patient recovered well and discharged on day 7 of surgery.



This time, she presented to our hospital at term for safe confinement. She was vitally stable, with per abdomen examination revealing Uterus corresponding to 36 weeks of gestation with previous scar of exploratory laparotomy, longitudinal lie, Cephalic presentation with head floating, FHS +/144 per minute, Uterus well relaxed and no scar tenderness present. PV examination revealed os as closed and uneffaced. Blood investigations came back as normal. USG showed a Single Live Intrauterine Pregnancy of 36.5 weeks GA with vertex presentation, Placenta – posterior fundal with no praevia or retroplacental clot, Amniotic fluid volume adequate (AFI -13cms) and Estimated foetal weight - 3147 gms

Patient was posted for elective LSCS considering her previous history of exploratory laparotomy with transuterine approach for suturing of extensive vaginal tear. Despite all apprehensions, LSCS of this patient went very smoothly.

Baby was healthy, 3.4 kg, cried well with no gross congenital anomalies

Patient was stable post operatively and was discharged in a stable condition on the 7th post operative day after removal of all stitches.

DISCUSSION :

Obstetric haemorrhage is the most common cause of maternal morbidity and mortality in both developed and developing countries. PPH occurring within 24 hours of delivery is the leading type of major obstetric hemorrhage² Genital tract trauma is the second leading cause of the same. Treatment for vaginal tears is variable according to size, location, and severity of patient. As it was impossible to approach the tear vaginally, cervicovaginal exploration through transuterine approach was done here, thereby helping arrest bleeding, avoiding obstetric hysterectomy and preserving fertility of this patient. In this pregnancy, as uterus was already scarred, careful evaluation and meticulous surgery was required to prevent complications and ensure a favourable outcome.

This method was an urgent and incidental decision as a last approach to save the mothers life alongside preserving fertility, thus being a novel

uterine conservative procedure. Although questions were raised at the time regarding safety and further fertility of the patient, this follow up case provides positive evidence regarding the same, thereby putting forward this novel approach as safe to be resorted to in clinical practice.

CONCLUSION :

Extensive vaginal tears are difficult to access and tackle vaginally.

Although cervicovaginal tears are seldom sutured through a transuterine approach, this case described a successful correction that avoided the use of obstetric hysterectomy and preserved fertility of this patient thus providing evidence that this approach, although rare, can be used as a final approach, is safe and does not hamper the further fertility of the patient.

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