CASE REPORT

Salvage from cervical dystocia in third degree uterovaginal prolapse: Duhrssen's incision

Manju Lata Verma, Vartika Tripathi, Uma Singh, Zakia Rahman

Department of Obstetrics and Gynaecology, King Georges Medical University Lucknow, Lucknow, India

Correspondence to
Dr Manju Lata Verma,
gaganmlv@gmail.com

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SUMMARY

We present a case of a 28-year-old woman second gravida with a full-term pregnancy who presented to us in active phase of labour with third degree uterovaginal prolapse complicated by entrapment of fetal head by dystocia of cervix and fetal distress. Patient was immediately shifted to the operation theatre and prompt delivery was conducted by giving Duhrssen's incision on the highly vascular, oedematous prolapsed cervix. The outcome was an alive and healthy male baby. Duhrssen's incision was stitched with minimal blood loss. Postnatal management included antibiotics and daily intravaginal packing. Patient was discharged along with the baby in satisfactory condition.

BACKGROUND

Incidence of uterine prolapse during pregnancy, due to poor cardinal and uterosacral ligament apical support, is a rare condition manifesting in an estimated 10 000 to 15 000 pregnancies.¹ Presentation of uterine prolapse is a rare event in a pregnant woman, which can be pre-existent or else manifest in the course of pregnancy.² Complications of pregnancy with prolapse mentioned in the literature are abortion, retention of urine, premature rupture of membrane, chorioamnionitis, cervical dystocia, prolonged labour, obstructed labour, operative interference, subinvolution and uterine sepsis.³⁻⁵ Majority of patients having complications due to

prolapse have inadequate cervical dilatation leading to cervical lacerations. This resistance of cervix to dilatation is more marked if dilatation is initiated in a cervix which is already prolapsed. Some even end up in obstructed labour. Obstructed labour if left untreated can lead to rupture uterus. Thus, maternal and fetal morbidity and mortality are rarely encountered due to prolapse complicating labour.

Prolapse can complicate the antenatal period, as well as labour and delivery. One of the most dreaded complications of prolapsed uterus during labour is cervical dystopia with a high rate of maternal and fetal morbidity and mortality. Recommendations regarding the management of this infrequent but potentially harmful condition are scarce and outdated.¹ There is still a need for obstetricians to be aware about the management of uterine prolapse which allows for an uneventful pregnancy, labour and delivery.

Global health problem list

- Delay in seeking medical help during the antenatal period specially in low socioeconomic regions.
- Management of pregnancy complicated by uterovaginal prolapse in the antenatal period to prevent intrapartum complications.
- Intrapartum complications of cervical dystocia supervened by fetal distress and complete encasing of fetal head, lying outside the introitus.

CASE PRESENTATION

Our patient was a 28-year-old married woman who presented to our emergency department on 11 September 2017 at 22:00. She was a second gravida with a previous term vaginal birth of a healthy baby 10 years back. This pregnancy of the patient was unbooked and uninvestigated. On admission, she had a full-term pregnancy and was in active phase of labour with third degree uterovaginal prolapse. According to the patient, she had complaints of something coming out of vagina since the past 5 years. It was gradually progressive over the years, to the point where mass had attained a size of 8–10 cm (figures 1 and 2). However, she did not have any other complaints including altered bowel or bladder habits. She had not sought any medical help for the same either before or during pregnancy. She also did not report to have any other significant history or history suggestive of any chronic illness.

Figure 1 Third degree uterovaginal prolapse with cervical dystocia.

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Figure 2 Duhrssen's incision for delivery of baby in third degree uterovaginal prolapse with cervical dystocia.

On examination, her vitals were stable. Abdominal examination revealed fundal height corresponding to term size with good uterine contractions and irregular fetal heart dipping till 60 beats per minutes on auscultation. On local examination, the baby's head was out of the introitus encased by the partially dilated cervix. Further examination confirmed cervical dilatation of 6 cm and effacement of 80%. The walls of cervix on the right side proximal to the introitus showed early signs of ischaemia.

TREATMENT

Foley catheterisation was done with difficulty following which patient was immediately shifted to the operation theatre in view of third degree uterovaginal prolapse with cervical dystocia with acute fetal distress. At 22:32 on 30 September 2017, after giving

Figure 3 Duhrssen's incision being repaired.

Figure 4 Closed Duhrssen's incision with haemostasis.

spinal anaesthesia, decision for Duhrssen's incision was taken. Index finger was inserted between the cervical rim and fetal head to prevent injury to fetal scalp. Two incisions about 3 cm long each were given at 2 O' clock and 10 O' clock position at the cervix using tissue cutting scissors. A male baby of 2.5 kg with an APGAR score (appearance, pulse, grimace, activity, respiration score) of 4 and 7 at 1 and 5 min was delivered as cephalic presentation. Placenta delivered with all its membranes and cotyledons intact. Cervical incisions sutured with vicryl 2–0 by taking a knot 1 cm above the apex of the incisions and haemostasis achieved by single layer suturing of the incisions. Prolapsed part of cervix examined for signs of ischaemia. Uterovaginal prolapse repositioned and vaginal packing done with glycerine and acryflavin. Patient was put on injectable antibiotics for 48 hours and intravaginal packing removed after 24 hours. There was no bleeding following removal of the intravaginal pack and early signs of ischaemia over the cervix had subsided. Daily packing was done with glycerine and acryflavin. (figures 3 and 4).

OUTCOME AND FOLLOW-UP

Daily packing was done with glycerine and acryflavin. Site-specific repair of prolapse was planned 6 weeks later and patient along with the baby discharged in satisfactory condition.

DISCUSSION

Prolapse discovered before pregnancy or during early antenatal period warrants conservative management including pessary or in some case even termination of pregnancy. But our patient, who was an unbooked and uninvestigated case presented to us in active labour with cervical dystocia, making it a rare and very challenging scenario. The prolapsed part of cervix had started undergoing ischaemia on the right side. In cases of prolapsed uterus in active labour, caesarean section serves as a feasible option in majority of the cases. In our case, the baby's head had partially crossed the introitus and therefore caesarean section was no more an easy option for quick delivery of the baby. The fetal heart was irregular on admission and to salvage the baby, prompt delivery was required. Fortunately, we were able to evacuate the bladder preventing the dreaded complication

of bladder neck necrosis. Prolapsed uterine vaginal tissue had almost completely encased the fetal head, leaving us with Dührssen's incision as a plausible way to expedite the delivery. Cervical tissue in prolapsed uterus is oedematous and highly vascular. Dührssen's incision can lead to excessive bleeding. Dührssen's incision is mainly reserved for immediate delivery of after-coming head of the fetus in the case of breech delivery. Head entrapment was relieved following Dührssen's incision and the baby was delivered vaginally. In active labour, a prolapsed cervix that is enlarged and oedematous can be managed with a topical concentrated magnesium solution to treat cervical dystocia and lacerations.⁶ In this rare case that we encountered, the patient

presented with fetal distress giving us no time for more conservative approach like topical magnesium solution. To the best of our knowledge, there are no cases in literature describing Dührssen's incision for treatment of cervical dystocia in prolapsed cervix, making it a rare case for purposes of learning and reviewing.

Contributors VT and MLV were responsible for the preparation of manuscript case procedure. US revised the manuscript. ZR was involved in the data collection.

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Learning points

- Recognition of uterovaginal prolapse in pregnancy as a serious entity with dire consequences in the intrapartum period.
- Treatment of the condition early in pregnancy and early stages of labour to prevent intrapartum complications.
- Prompt delivery by Dührssen's incision serves as an option in case of prolapsed cervix with dystocia and fetal head outside the introitus when caesarean section cannot be done.
- Postprocedure haemostasis and control of infection are imperative.

REFERENCES

- 1 Yogeve Y, Horowitz ER, Ben-Haroush A, *et al.* Uterine cervical elongation and prolapse during pregnancy: an old unsolved problem. *Clin Exp Obstet Gynecol* 2003;30:183–5.
- 2 Tsikouras P, Dafopoulos A, Vrachnis N, *et al.* Uterine prolapse in pregnancy: risk factors, complications and management. *J Matern Fetal Neonatal Med* 2014;27:297–302.
- 3 Ghose S, Samal S, Coumary S, *et al.* Utero-vaginal prolapse in primigravida: a case report. *Int J Reprod Contracept Obstet Gynecol* 2012;1:50–1.
- 4 Gupta R, Tickoo G. Persistent uterine prolapse during pregnancy and labour. *J Obstet Gynaecol India* 2012;62:568–70.
- 5 Usharani N, Raghuveer C. Cervical prolapse during third trimester: a rare entity. *J Evidence based Medicine and Healthcare* 2014;1:1646–8.
- 6 Lau S, Rijhsinghani A. Extensive cervical prolapse during labor: a case report. *J Reprod Med* 2008;53:67–9.

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