CASE REPORT

Role of Decapitation in Management of a Case of Complete Shoulder Dystocia with Rupture Uterus - A Case Report

NADIA ZAHID¹, MUNTIHA SAROSH², RAKHSHSANDA TOHEED³, MOHAMMAD SAA⁴, .KOKAB ZIA⁵

¹Professor, Department of OB/GYN, Avicenna Medical and dental college, Lahore

²Associate professor, Department of OB/GYN, Avicenna Medical and dental college, Lahore

³Professor, Department of OB/GYN, Avicenna Medical and dental college, Lahore

⁴Medical student Ameeruddin Medical College, Lahore.

⁵Professor, Department of OB/GYN, Avicenna Medical and dental college, Lahore

Correspondence to Dr. Nadia Zahid, Email: drnadiazahid@gmail.com, Phone: 042-5743486, 0322 – 4391618

SUMMARY

Complete Shoulder dystocia in the presence of scarred uterus is an acute obstetrical emergency and if not properly handled can lead to serious fetal and maternal complications. A $G_5P_4A_0$ previous II cesarean sections, presented in emergency after delivery of fetal head and impacted shoulders, at a small private clinic in a village, four hours back. On laparotomy, there was uterine rupture from the previous uterine scar along with posterior bladder wall rupture. The shoulder dystocia was relieved by decapitation and breech extraction abdominally. Subtotal hysterectomy and repair of the bladder wall was done. This case highlight the dilemma of lack of regular antenatal care and maternal education, malpractices by untrained health professionals and time lapse in referral system that is still a very serious and major issue in developing countries like Pakistan .

Keywords: Shoulder dystocia, obstructed labor, and uterine rupture

INTRODUCTION

Shoulder dystocia is a specific case of obstructed labour whereby after the delivery of the head , the anterior shoulder of the infant requires significant manipulation to pass below the pubic symphysis. Shoulder dystocia is an acute obstetrical emergency with an incidence of 0.15–2%¹. Although most of the complications occur in the fetus but in neglected cases, serious maternal complications like obstructed labour and rupture of uterus may result². We are presenting a rare case of neglected shoulder dystocia which resulted in combine uterine and bladder rupture due to mismanaged labour at a small private clinic.

CASE REPORT

A 30 yrs. old $G_6P_4A_0$ with previous II cesarean sections, presented to the emergency department in semi-conscious state. On examination abdomen was distended but uterine contour was not felt, no palpable uterine contractions, previous operation scar marks seen and FHS were absent. On local examination baby head was stuck against perineum (Turtle sign). She had term pregnancy with two caesarean sections and two vaginal deliveries. Labour was induced by tablet misoprostol by attending LHV or nurse. After prolonged 2^{nd} stage of labour the head of the baby was delivered but body failed to deliver. According to patient; birth attendants tried hard to deliver the trunk by applying continuous uterine fundal pressure. After a lapse of three hours, patient was referred to our hospital without proper protocol for referral of a serious patient in unequipped van.

Initial resuscitation was done and airway, breathing and circulation maintained. Patient was catheterized however only 100 cc frank blood came in urine bag. Provisional diagnosis was complete shoulder dystocia with ruptured uterus. On laparotomy, extensive uterine rupture of about 10 -12cm from previous uterine scar with haemoperitoneum of about 2 liters was found. Baby was tried to deliver by Zavenelli maneuver but it failed as head could not be pushed back vaginally. So decapitation was done and body of the baby was delivered abdominally. After birth of the baby about 5-6cm tear was identified at base of bladder, Foleys catheter was lying in abdominal cavity. On account of irrepairable, extensive uterine rupture subtotal hysterectomy was done. The posterior wall bladder tear, was repaired in two layers by urologist after identifying the ureteric orifices. Estimated blood loss during surgery was one liter. Two units of blood were transfused during surgery and two units were given post operatively.

Received on 13-05-2021 Accepted on 23-10-2021 On 10th post operative day she developed urinary incontinence vaginally despite catheterization. She was discharged on 14th post operative day after removal of stitches with in situ Foleys catheter. The plan was to keep the indwelling catheter for one month with regular follow ups. If the fistula didn't heal spontaneously she will be referred to urology department for second repair after 3 months.

DISCUSSION

Our patient had multiple risk factors for shoulder dystocia and rupture uterus. They include maternal obesity, multiparty, fetal macrosomia, induced labour and prolonged second stage and mismanagement of labor in the context of previous two cesarean sections. Uterine fundal pressure by nurse superadded to compound her complications. A similar case was reported from Taiwan in which uterine rupture occurred due to traumatic assisted fundal pressure in a case of hydrops fetalis and shoulder dystocia³. Due to the suspected uterine rupture, emergency laparotomy was decided. Due to complete shoulder dystocia, extensive uterine rupture, and inability to deliver the baby abdominally, destructive procedure that is decapitation of fetal head was opted to facilitate delivery of the baby. Destructive procedures like decapitation can still be adapted in this modern era of obstetrics especially in developing countries to deal with a specific case. In literature review decapitation is mostly performed for the dead fetus in neglected shoulder presentation. D. E. Marsden reported four cases of decapitation and vaginal delivery for impacted transverse lie in late labour from Korea4.

In our patient fetal macrosomia (weight: 4 kg) and resultant shoulder dystocia caused obstructed labor leading to combine uterine and bladder rupture due to previously scarred uterus and misuse of misoprostol, mismanaged labor and uterine fundal pressure. Sujata Singh and coworkers reported a case of uterine and bladder rupture in a woman having previous C. section who presented to tertiary care hospital after a prolonged second stage of labour⁵. Another case was reported from India of anterior cervical- vaginal tear along with posterior bladder wall rupture in an unscarred uterus after obstructed labour⁶.

The clinical signs of obstructed labour and ruptured uterus include signs of shock, change in uterine contour, stoppage of uterine contraction, fresh vaginal bleeding and non applied high presenting part. Bladder rupture is usually diagnosed peroperatively but heamaturia on catheterization raises high suspicion as was in our case. The cause of bladder injury during second stage of labour is sustained pressure from the fetal presenting part against the bladder wall during uterine contraction

leading to ischemic necrosis of the bladder subsequently⁷. The patient remained under the combined care of gynaecologist and urologist. As expected, she developed incontinence of urine on 10th post operative day in the presence of indwelling catheter. Obstructed labor is the main cause of obstetrical fistula in the developing countries. A report from Ghana showed that 91.5% of fistulas are due to obstructed labour and 8.5% are due to different gynaecological surgeries8. Adequate training of the health professionals, control of malpractices, irrational use of labour inducing drugs, identification of high risk factors, timely and appropriate way of referral are the basic measures needed to avoid serious maternal and perinatal morbidity and mortality in high risk cases.

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