Case Report

Journal of College of Medical Sciences-Nepal, Vol-19, No 2, Apr-Jun 2023
ISSN: 2091-0657 (Print); 2091-0673 (Online) Open Access
DOI: 10.3126/jcmsn.v19i1.48990

An Intrauterine Complete Perineal Tear in a Female Neonate, A Rare Birth Injury Related to Breech Presentation: A Case Report

Sarika Gautam,[1] Shivangi,[1] Savita Rani Singhal,[1] Yogender Singh Kadian,[2] Anjali Gupta[1]

[1]Department of Obstetrics and Gynaecology, PGIMS, Rohtak, Haryana, India, [2]Department of Obstetrics and Gynaecology, PGIMS, Rohtak, Haryana, India.

ABSTRACT

Birth injuries are wounds that a newborn receives when being delivered, whether vaginally or via lower segment caesarean section. It is a case of a 39-week pregnant female with foetal distress and breech presentation in labour who was received in the emergency labour room as a referral case after multiple per vaginal examinations done by a staff nurse at a peripheral hospital, with a complaint of leaking and bleeding per vaginum since then. Her emergency LSCS was done in view of foetal distress with breech presentation. A female baby was extracted and found to have a complete perineal tear in an otherwise healthy neonate. Her paediatric surgeon's opinion was sought, and a complete perineal tear was done in layers with Vicryl 3-0 sutures. On follow-up, the female neonate was continent and thriving well. Unintended vaginal examinations during breech presentation could result in an intrauterine complete perineal tear if the examiner is untrained. If these injuries are identified immediately and prompt management is done, it may lead to lesser morbidity and a better quality of life.

Keywords: breech presentation; neonate; complete perineal tear; genital injury; community health centre.

INTRODUCTION

Birth wounds are wounds that a newborn sustains during delivery, either through a r-segment caesarean section (LSCS) or vaginal delivery. More complications are linked to breech presentation than cephalic presentation. [1] It has been observed that breech presentation is associated with more neonatal traumatic morbidity, and the rate is 12 times higher than in single-term vertex presentation. [2] Female genital area trauma in breech presentation is scarcely described in literature here. Here is an instance of a female neonate who had an intrauterine complete perineal tear while being treated by a staff nurse at a peripheral hospital during a labour trial, assuming the vertex presentation.

Correspondence: Dr. Sarika Gautam, Department of Obstetrics and Gynaecology, PGIMS, Rohtak, Haryana, India. E-mail: sarika.gautam07@gmail.com. Phone: +91-9953430099.

Case Presentation:

A 39-week pregnant woman with foetal distress in labour was referred to the emergency labour room by a nearby community health centre (CHC). She underwent a systemic examination. Her abdominal examination revealed a breech presentation with a mild to moderate contraction and evidence of foetal distress. On her per vaginal examination, membranes were ruptured, showing mild blood mixed liquor, and the cervix was 3 to 4 cm dilated. Delayed delivery was anticipated, so she was prepared for emergency LSCS after informed written consent was taken for a 39-week pregnancy in labour with foetal distress and breech presentation. Her emergency LSCS was performed under regional anaesthesia, and a female baby was delivered by breech extraction. The baby was smeared in meconium, along with a few tinges of blood. The baby cried immediately after birth and was handed over to the attending paediatrician. The rest of the LSCS was uneventful, with an average amount of blood loss and a well-contracted uterus. On her neonatal examination by APGAR score, it was 7/10 and 9/10 at 1 and 5 minutes, respectively. On her general physical examination, a complete perineal tear was observed, which extended up to the anal mucosa. On examination, the edges were ragged, bluish, and oedematous, and it looks like it was done 3 to 4 hours ago.

When asked about her visit to the CHC after experiencing abdominal pain, the mother said she stayed there for one to two hours. There was no attending doctor present, and the staff nurse repeatedly examined her per vaginally (PV), which caused her membranes to rupture and cause bleeding per vaginum. After one hour, the staff nurse informed the attendants that she needed a caesarean section and made a referral to a tertiary care facility. After 1.5 hours, the patient and her attendants arrived at the hospital. The patient underwent an emergency LSCS, where it was discovered the female neonate had a full perineal tear. After consulting with a paediatric surgeon and receiving informed written consent, the case was scheduled for perineal tear repair. Her perineal tear was treated by a paediatric surgeon using Vicryl 3-0 delayed absorbable sutures to treat it in layers as normal. For post-operative recovery and maintenance, the baby was sent to neonatal intensive care. Daily antiseptic dressings were applied to the wound with betadine solution. After the first 48 hours, the infant was taken back to the mother's side and breastfed. When she passed stools, the neonate was discovered to be continent. The neonate and mother were successfully discharged from the hospital after seven days of admission. A female neonate was called for vaccination and follow-up and found to be thriving well.

In our case, the intrauterine-inflicted complete perineal tear was discovered shortly after birth and rapidly repaired by a paediatric surgeon, leading to a favourable neonatal prognosis and limiting additional morbidity.

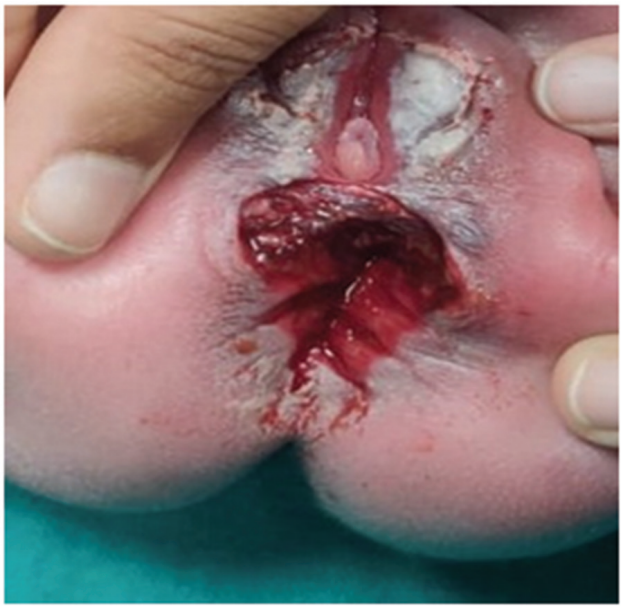

Figure 1. complete perineal tear in neonate.

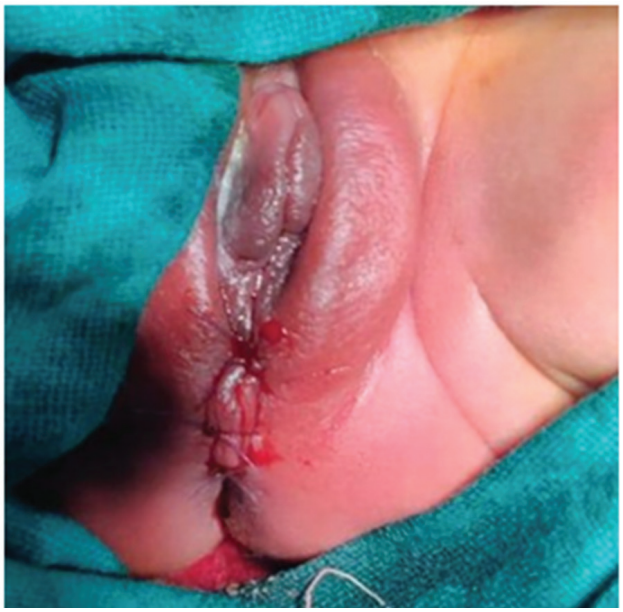

Figure 2. post complete perineal tear repair.

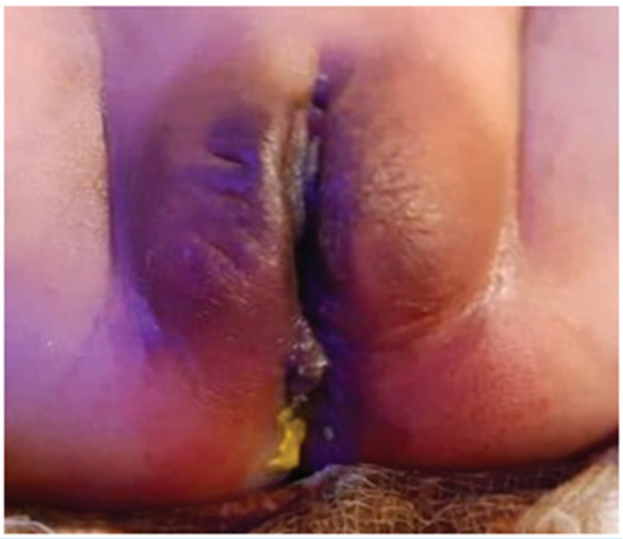

Figure 3. continent neonate post repair day 5.

DISCUSSION

An intrauterine female foetal perineal tear is one of the rare complications of breech presentation. In this case, the foetus presented with this injury because of multiple vaginal examinations by an untrained professional at the peripheral hospital, where she missed the presentation and inadvertently conducted multiple examinations that led to this iatrogenic birth injury. According to a review of the literature, there are very few cases in which foetuses suffer perineal birth injuries prior to delivery. Singh and Chaudhary observed a case like this in 2019 at a tertiary medical college as a referral case, in which the untrained daai (traditional birth attendant) handled the patient's case incorrectly by performing multiple per vaginum examinations. Like in the present case, their patient was a primigravida who was referred from a peripheral hospital, and they also took the patient for a caesarean section due to an inadequate pelvis. They discovered a second-degree perineal tear along with another tear close to the medial aspect of the labia majora, which was not bleeding in their case. They repaired the same thing for a better outcome and less morbidity.[3]

A case series of two cases has been published by Carceller et. al., where they presented cases of female neonates, both in primigravida. The first case was delivered uneventfully after a 14-hour vaginal delivery trial where they found diffuse hematomas of the labia majora and an oedematous tag originating from the posterior part of the hymeneal ring that had a bluish discoloration. In the second case delivered by caesarean section after a 12-hour trial of labour in this neonate, they found bilateral hip dislocations and a diffuse hematoma of the labia majora. The authors concluded that neonatal genital trauma during trial of labour is an uncommon complication of breech presentation, occurring more often in primiparous cases than multiparous females who require conservative treatment by pressure saline-soaked dressing.[4]

In case of Singh R and Chaudhary R, who had severe injury that was induced in character, necessitated repair of tears. In addition, M. Saroha et. al., injury was immediately repaired. Experts recommended that if a vaginal delivery is not anticipated within adequate time, a safe caesarean section should be offered in order to minimise the morbid complications of infant genital injuries.[3,5]

A similar unbooked case has been reported by Matthew Akapa et al., where they received a term multigravida female with labour pain from a peripheral hospital who underwent multiple PV examinations and a long trial of labour. The patient has undergone a repeat LSCS in view of a previous LSCS with breech presentation where female offspring delivered. The baby was found to be pale with multiple vulval perineal tears, active bleeding, and a right labial hematoma. Baby was attended to immediately and received a blood transfusion with repair of a vulval hematoma, after which he recovered well and was discharged from the hospital.[6]

In Singh IK's letter to the editor, she received a female neonate after a traditional birth attendant hooked his or her thumb in the female foetus' anus to deliver the baby. Upon examination, the tissue was devitalized and smeared with stools, and a sigmoid colostomy was performed in this case, which suggested that the management of cases seen later may require extensive surgery and further increase operative interference in order to repair the tear. [7]

In contrast, BV Bhat et al. experienced a more severe case of intrauterine full perineal tear in which a defunctioning sigmoid colostomy was performed but somehow the newborn succumbed to septicaemia. [8]

On reviewing all this literature, it has been observed that the spectrum of female genital trauma due to breech presentation varies from milder symptoms to grave symptoms like ecchymosis, vulval oedema, hematoma, varying degrees of perineal tear, and complete perineal tear.

It has also been observed that most of the cases were the recipients of poor antenatal care and were handled by traditional birth attendants, which were the major concerns in cases of extensive injuries.

Management of these types of cases varies as per the symptoms, from simple pressure dressing to primary perineal tear repair and sigmoid colostomy, which could lead to lethal morbidity. In one case, mortality of the neonate was also seen.

CONCLUSIONS

Our case provided evidence that numerous unintended vaginal examinations during breech presentation could result in an intrauterine complete perineal tear if the examiner is untrained. The authors propose enhancing peripheral area health care services by educating staff nurses to recognise presentations with high accuracy rates, comprehend the value of a minimal vaginal examination, and promptly refer patients in the event of doubt in order to prevent these kinds of complications.

List of Abbreviation:

CHC: community health centre

LSCS: Lower segment caesarean section

PV: per vaginal examination

Conflicts of Interest: None

Financial Support: None

Ethical Approval: Not required

Consent for Publication including maintaining confidentiality: taken

Authors Contribution: all authors 1 to 7 participated in finalizing the manuscript final version. Author 1 and 2 were the operating team. Author 2 contributed significantly to arrange multidisciplinary team and management of new-born.

REFERENCES

1. Mattuizzi A. Breech Presentation: CNGOF Guidelines for Clinical Practice - Epidemiology, Risk Factors and Complications. Gynecol Obstet Fertil Senol [Internet]. 2020 Jan;48(1):70–80. Available from: https://www.sciencedirect.com/science/article/pii/S2468718919303411?via%3Dihub
2. Roginsky JJ, Miller JA, Kaplan S. Management of breech presentation at term. American Journal of Obstetrics and Gynecology. 1973 Feb 15;115(4):497-513.Management of breech presentation at term. American Journal of Obstetrics and Gynecology [Internet]. 1973 Feb 15;115(4):497–513. Available from: http://www.ijcasereportsandimages.com/archive/abstract/101179Z01MA2020.
3. Ragini Singh RC. Neonatal perineal tear: An unusual birth injury with breech presentation. Indian Journal of Obstetrics and Gynecology Research [Internet]. 2019 Sep 12;6(3):408–10. Available from: https://www.ijogr.org/article-details/9690
4. Carceller A, Dansereau C, Blanchard H. Neonatal genital trauma associated with breech presentation. Canadian Medical Association journal [Internet]. 2002 May 14;166(10):1306–7. Available from: https://www.cmaj.ca/content/166/10/1306.short
5. Saroha, Batra P, Dewan P, Faridi M. Genital injuries in neonates following breech presentation. Journal of Neonatal-perinatal Medicine [Internet]. 2015 Jan 1;8(4):421–5. Available from: https://europepmc.org/article/med/26757006
6. Akpa MA, Alabi OJ, Akogu SPO, Odi TO. Fetal vulva laceration during attempted vaginal breech delivery. International Journal of Case Reports and Images [Internet]. 2020;11. Available from: http://www.ijcasereportsandimages.com/archive/abstract/101179Z01MA2020
7. Singh IK. Neonatal Perineal Tear: A Rare Birth Injury. Journal Of Neonatal Surgery [Internet]. 2015 Nov 18;5(1):9. Available from: https://www.jneonatalsurg.com/ojs./index.php/jns/article/view/281/395
8. Bhat BV, Jagdish S, Srinivasan S, Pandey KK, Chatterjee H. Intrauterine perineal tear: A rare birth injury Author links open overlay panel. Journal of Pediatric Surgery [Internet]. 1992 Dec;27(12):1614–5. Available from: https://www.sciencedirect.com/science/article/abs/pii/002234689290528F

Citation: Gautam S, Shivangi, Singhal SR, Kadian YS, Gupta A. An Intrauterine Complete Perineal Tear in a Female Neonate, A Rare Birth Injury Related to Breech Presentation: A Case Report. 2023; 19(2); 232-36.