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Case report

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Performing double episiotomy for shoulder dystocia management. Case report

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Abstract

Shoulder dystocia is an obstetric emergency that occurs in approximately 1% of vaginal deliveries. This situation is related with neonatal morbidity and mortality as long as maternal complications. The management of shoulder dystocia should be quick in order to avoid serious consequences. This case report is about the immediate diagnosis and successful management of shoulder dystocia through performing a second episiotomy after the HELPERR mnemonic failed.

Key words: Childbirth, shoulder dystocia, obstetric emergency, episiotomy, case report

Introduction

Shoulder dystocia is an obstetric emergency in which normal traction on the fetal head does not lead to delivery of the shoulders[1] It occurs in approximately 1% of vaginal deliveries[2] because the anterior shoulder of the fetus impacted above the maternal pubic symphisis.[3] Less commonly it is caused by impaction of the posterior shoulder against the sacral promontory.[1] Maternal obesity and excessive maternal weight gain during the pregnancy are associated with shoulder dystocia. Other conditions that can lead to this obstetric emergency are prior shoulder dystocia, gestational diabetes, fetal marosomia and post-term pregnancy. Prolonged first or second stage of labour, instrumental delivery and augmentation of the labour can cause shoulder dystocia too.[3] It is important to mention that in the most cases shoulder dystocia happens without warning.[4] This condition can cause a great number of fetal and maternal complications[5] such as neonatal brachial plexus injuries,[2] hypoxia, maternal trauma including damage to the bladder, anal sphincter and rectum and postpartum hemorrhage.[1,3]

In case of shoulder dystocia additional personnel should be called immediately. This includes obstetrician, neonatologist, anaesthesiologist and midwives.[6] The management of shoulder dystocia can be achieved though HELPEER mnemonic.[7] McRoberts maneuver, suprapubic pressure, internal rotation maneuver will almost always result in successful delivery.[1]

HELPERR mnemonic is a very helpful tool that provides healthcare workers with knowledge and abilities to deal with this emergent and difficult situation (Figure 1). None of the techniques is better from the others. The combination of all the steps will contribute to shoulder dystocia successful management.[6] It is of great importance to do the maneuvers properly, not necessarily with a specific sequence. Each maneuver should be performed for 30 to 60 seconds. Their aim is to increase the functional size of the uterus, decrease the diameter between the shoulders and change their position in the uterus.[8]

Case presentation

A 17-year-old woman from Democratic Republic of Congo came in the labor ward during the night-shift with uterine contractions every five minutes and fully dilated cervix. She was a healthy person without medication, allergies or operations in her medical history. She had a vaginal birth some years ago. According to her last menstruation she was in the 40th week of pregnancy and she had never visited a doctor or midwife before. It is important to mention that she was stressed enough so the information given were not very clear.

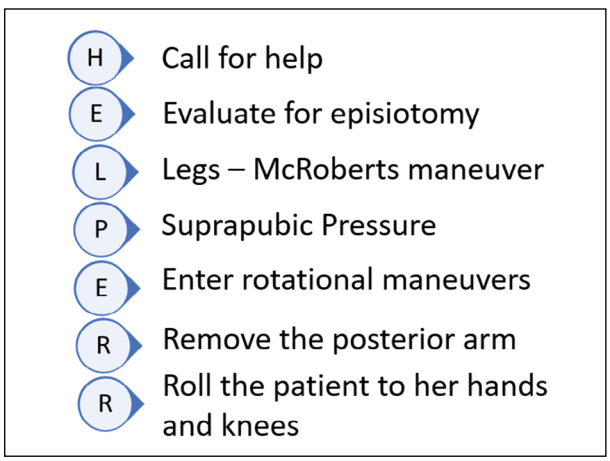

Figure 1. HELLPER acronym for emergent cases.

We checked her temperature, pulse and blood pressure, we took sample for Covid-19 test and blood tests and we also did a cardiogram. Furthermore we placed an intravenous canulla, according to the clinical practice.

Some minutes later the amniotic sac ruptured and the amniotic fluid was mixed with thick meconium. The woman was ready to push. The fetal head was born, but the shoulders failed. As long as shoulder dystocia was encountered we asked for additional personnel to come and help. Specifically we called an obstetrician and a pediatrician.

We followed all the steps of HELPEER mnemonic, but none of the maneuvers worked. The woman was in the lithotomy position with abducted legs bending the knees at the height of abdomen in order to increase the pelvic diameters to the maximum. We performed episiotomy and applied suprapubic pressure. As the delivery failed we continued with internal rotation maneuvers.

The woman was not able to turn to all fours position (Gaskin maneuver) because her legs were weak. We could not use surgical measures to manage the case either, so we decided to perform a second episiotomy to give more space to the fetus. After the second episiotomy was done we applied suprapubic pressure again and the baby was delivered. The delivery was completed 9 minutes after the shoulder dystocia was diagnosed. A baby boy weighed 4380gr was born. The Apgar Score in the first minute of life was 3 and he needed resuscitation. We followed the "European Resuscitation Council" algorithm for Neonatal Life Support and soon the baby recovered. The baby boy was transferred in the Neonatal Intensive Care Unit for further monitoring and oxygen supplementation according to the pediatrician's guidance. The perineal trauma was sutured and when the woman calmed down we answered to her questions about this emergent situation. All the steps followed for shoulder dysto-

cia management were written down thoroughly in woman's medical records.

Two hours later the woman was transferred to the Gynecology Clinic.

Discussion

An experienced team is necessary in this situation, but on the other hand it is more important to perform the maneuvers correctly, without losing time because every minute is crucial.[9] HELPERR mnemonic is very helpful in shoulder dystocia management, but it is does not always work. There are references in the literature that confirm it.[10] There are additional ways for successful management of the situation, such as Zavanelli maneuver and symphysiotomy [9], but it is not always feasible to be performed. In the case we describe we could not use any of the other ways so we decided to perform the second episiotomy, which increased the available space so the trapped shoulder released.

Conclusion

Health care professionals attending deliveries should always be prepared to recognize and deal with this emergent situation. [1] Training programs can improve the perinatal result and increase the staff confidence on managing shoulder dystocia.

Informed consent

Informed consent was obtained.

References

1. Hill A, Lense J, Roepcke F, Shoulder Dystocia: Managing an Obstetric Emergency. Am Fam Physician. 2020 Jul 15;102(2):84-90.
2. Sentihles L, Senat MV, Boulogne Al et al. Shoulder Dystocia : guidelines for clinical practice from the French College of Obstetricians and Gynecologists (CNGOF) Eur J Obstet Gynecol Reprod Biol 2016 ; 203 : 156-161. Doi:10.16/j.ejogrd.2016.05.47.
3. Padumadasa S, Goonewardene M, 2021, Shoulder Dystocia In: Obstetric Emergencies: A practical manual. CRC Press Taylor & Francis Group.
4. Ansell L, Ansell DA, McAra- CouperJ et al. Axillary traction: An effective method of resolving shoulder dystocia. Aust N Z J Obstet Gynecol. 2019; 59(5):627-633. Doi: 10.1111/ajo.13029.
5. Menticoglou S. Shoulder dystocia: incidence, mechanisms and management strategies. Int J Women's Health. 2018; 10:723-732. Doi: 10.2147 /IJWH.S175088.
6. American Academy of Family Physicians. Advanced Life Support in Obstetrics (ALSO). Accessed August 11, 2020. https://www.aafp.org/cme/programs/also.html
7. American College of Obstetricians and Gynecologists. Shoulder Dystocia. ACOG Practice Patterns October, 1997; (7):1-7. (Level III).
8. Ελληνική Εταιρεία Μαιευτικού & Γυναικολογικού Επείγοντος. Δυστοκία ώμου, Εγχειρίδιο ALSO: 399-409.
9. Bothou A, Apostolidi D,Tsikouras P, Iatrakis G et al. Overview of techniques to manage shoulder dystocia during vaginal birth. Eur J Midwifery. 2021; 5(October):48 https://doi.org/10.18332/ejm/142097
10. Walt L, Symphysiotomy for shoulder dystocia. American Family Physician . 2020 https://www.aafp.org/afp/2020/0715/p84.html

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