

A Different Technique for Head Stuck in Breech Delivery

Gürhan GÜNEY¹, Nihat İNAN¹, Aytekin TOKMAK², Muammer DOĞAN²

Van, Turkey

ABSTRACT

Breech presentation and breech delivery increase fetal-maternal morbidity and mortality. In cases of fetal head stuck following delivery of the fetal body, abdominal flexion and vaginal extraction may be a choice of surgical intervention. In the current study, we report a 38-year-old, gravida 4 para 3 woman who presented in our emergency department with the fetal head remained stuck inside the uterus whereas other parts of the body were outside the vagina. Ultrasound at admission showed absent cardiac activity due to prolonged cord compression and a solid lesion 7 cm in diameter near the fetal head which was thought to be an intramural myoma was detected at the same time.

Traditional maneuvers for delivery of the head under general anesthesia failed. We performed a different technique in breech delivery when all maneuvers have failed. Upper flexion and lower extraction technique is a novel approach and can be performed safely by two obstetricians.

Keywords: Breech delivery, Head stuck, Uterine fibroid, Abdominal flexion, Vaginal extraction

Gynecol Obstet Reprod Med 2015;21:109-111

Introduction

Breech presentation and delivery may have catastrophic complications for labor and delivery. This condition may result in major morbidity and mortality for both the woman and her fetus if techniques are not performed correctly.¹ Breech delivery can be one of the obstetric emergencies especially during the last stage of labor. The incidence of breech presentation is about 3-4% at term. Preterm labor is the most common cause of this condition and its management is controversial.² Operator's experience and medico-legal reservations determine the mode of delivery and caesarean section is generally preferred in such cases. Uterine fibroids are benign tumors, which originate from the uterus and cause several complications like dysfunctional labor, malpresentation, postpartum haemorrhage etc.³

In this case report, we present a multigravida with neglected breech presentation resulted in head stuck. We detected an uterine fibroid that obstructed the birth canal and prevented extension of fetal head. Although all maneuvers for delivery of the fetal head were performed, they failed. We decided to perform a phannensteil and lower segment uterine incisions to

reach the fetal head. Flexion from abdominal incision and extraction of the body vaginally could be tried as a last chance in cases of fetal head remained stuck in uterus in difficult breech presentations.

Case Report

A 38-year-old woman, gravida 4 para 3, applied to our emergency department with labor pain at term. On her genital inspection, the fetus was completely outside the vagina except his head which was remained stuck in pelvis (Figure 1). Fetal cardiac activity was absent at M-mode ultrasound imagination. At the same time, we detected a 7 cm diameter lesion that seemed like myoma at uterine corpus near the fetal head (Figure 2). She reported that she had caesarean section twice before and the last one was done one year ago. In her current pregnancy, she had once received antenatal care at the beginning of her pregnancy. Afterwards she was never admitted to a hospital. The patient was taken to the operating room and under general anesthesia all traditional maneuvers such as Mauriceau, McRoberts and modified Prague were tried,⁴ but all of them were unsuccessful. The right hand and forearm of first operator were placed into the vagina and fetal head was tried to be caught but it failed, too. The fetal head that remained stuck resisted to traction and traction was discontinued. Otherwise, this could have decapitated the head or caused to uterine rupture. So we decided to make an abdominal incision. We accessed to the fetus with phannensteil and lower segment uterine incisions respectively. In our observation, fetal head was in extension habitus above the myoma that was intramural- subserous beginning from fundus and extending to the corpus. During the operation, one of the obstetricians flexed the fetal head through the incision with pushing the myoma laterally and the other obstetrician delivered the fetus vaginally (Figure 3).

¹ Department of Obstetrics and Gynecology, Van Research and Education Hospital, Van

² Department of Obstetrics and Gynecology, Dr. Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara

Address of Correspondence: Aytekin Tokmak
Department of Obstetrics and Gynecology, Dr. Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara, Turkey
aytekintokmak@yahoo.com

Submitted for Publication: 23. 01. 2014

Accepted for Publication: 18. 02. 2014



Figure 1: The head remained stuck in uterus



Figure 2: The fibroid expanded uterus



Figure 3: Fetus extracted without destructive intervention

Discussion

Breech presentation is the most common type of malpresentation. Preterm labor is the leading cause of breech presentation. Uterine fibroids are another cause of this condition. Prevalance of fibroids above 5 cm in pregnant women was found 0.74% and breech presentation was found 12.5% in

these women.⁵ In a study the incidence of breech presentation was found 2,1% after 28 weeks of gestation.² Breech delivery increases fetal-maternal morbidity and mortality. Caesarean section has become the mode of delivery due to medico-legal problems and operator's experience.

In this case report, we presented a multigravida with breech presentation resulted in head remained stuck in uterus. At the same time, we detected an uterine fibroid that obstructs the birth canal and prevents extension of fetal head. Despite all maneuvers for delivery of the fetal head were performed, we could not succeed. We performed an abdominal surgical intervention and pushed the fibroid laterally and flexed fetal head and extracted fetus vaginally.

Stillbirths are common in developing countries. In an analysis from Nepal, it was reported that the cause of stillbirth in women without preeclampsia home breech delivery with head stuck was 16.0%.⁶ In another report perinatal mortality due to asphyxia were usually caused by prolonged obstructed labor, prolapsed cord, stuck head in breech delivery and retained second twin.⁷

Advances in modern obstetric care nearly eradicated obstructed labor in developed countries. But it is still going on to plague many women in developing countries. Destructive operations like decapitation, evisceration and craniotomy have very high morbidity and mortality. In a retrospective study from India caesarean has less complications than destructive operations in obstructed labor.⁸

Although destructive operations performed in cases of intrauterin exitus when fetal head is stuck are considered to have no place in modern obstetrics, some early studies indicate that destructive operations result in less complications (less maternal deaths, shorter length of stay at hospital, less need for transfusion) when compared to caesarean deliveries.⁹ However, such complications as genital lacerations, vesicovaginal fistula, rectovaginal fistula, postpartum haemorrhage and uterine rupture might be observed in destructive operations even if they are less.¹⁰

The management of obstructed labor generally include destructive and abdominal surgical interventions. However, it is reported in a case that series of four fetal head entrapment after vaginal breech delivery was managed successfully in a brief duration of action by using intravenous nitroglycerin which is an effective smooth muscle relaxant.¹¹

However, we were liberal in this situation as fetus had been exitus. We believe that our tecnique may be applied to difficult breech deliveries safely as a last chance. If required conditions for breech delivery are absent in patients such as hyperextension of the fetal head, myoma which may cause distosia, edema in fetal tissues, and all maneuvers attempted are unsuccessful, it is better not to be persistent on breech delivery as fetal head may get stuck. In our case, as the patient

had two caesarean sections before and had myoma in her uterine corpus, there was a high risk of uterine rupture, which led us to prefer abdominal surgical intervention.

Even though caesarean is the most preferred delivery in breech deliveries, the question of which delivery is the safest in breech deliveries has not been answered yet in many researches. According to the results of term breech trial (TBT) conducted in October 2000, caesarean delivery was found to have resulted in less perinatal death and serious early neonatal morbidity.¹² As a result of this study, breech deliveries decreased and the number of attendants experienced in breech delivery decreased accordingly. Although the TBT study did not cover multiparas, caesarean delivery started to be accepted as the precise delivery type in breech deliveries.

A different result was obtained in another study carried out in Belgium and the Netherlands. It was found out that a planned term breech vaginal delivery performed by keeping all risk factors under control (normal pelvimetry, absence of hyperextension in fetal head, frank breech presentation, estimated fetal weight to be between 2500-3800 gr, continuous fetal monitoring) by providing patients with adequate, objective and clear information was not significantly different from a planned caesarean delivery in terms of fetal or neonatal mortality or serious fetal morbidity.¹³ Caesarean section is not a necessary in every breech presentation. Patients who fall under the above mentioned criteria may be subjected to perform vaginal delivery together with appropriate continuous electronic monitoring by qualified staff, after they have been informed in detail.

If the patient has a history of a previous caesarean delivery despite being multipara, as in our case, uterine fibroid which may lead to dystocia and ex-fetus, but who waited for some period of time, she should not be forced to vaginal delivery; otherwise, this may lead to decapitation and uterine rupture. If fetal head could not be delivered out despite all maneuvers being attempted and it takes time, we can assure a safe delivery of the fetus by applying our technique in a caesarean delivery.

Başın Takıldığı Makat: Doğumda Uygulanan Farklı Bir Teknik

ÖZET

Makat prezantasyon ve doğum maternal-fetal morbidite ve mortaliteyi artırmaktadır. Fetal gövdenin doğumunu takiben başın takıldığı olgularda abdominal fleksiyon ve vajinal ekstraksiyon bir cerrahi müdahale seçeneği olabilir. Bu çalışmada acil servise fetal vücudun vajenden doğumunu takiben başın takıldığı 38 yaşında, gravida 4 para 3, bir kadını sunduk. Kabul ultasonu uzamış kord basısına bağlı fetal kalp atımının olmadığını gösterdi ve fetal başın yanında 7 cm çaplı miyom olması

muhtemel solid bir lezyon saptandı. Genel anestezi altında genel leneksel makat doğum manevraları başarısız oldu. Biz makat doğumda tüm manevraların başarısız olduğunda uygulanabilecek farklı bir teknik uyguladık. Üstten fleksiyon ve alttan ekstraksiyon tekniği farklı bir yaklaşımdır ve iki doğum uzmanı tarafından güvenle uygulanabilir.

Anahtar Kelimeler: Makat doğum, Baş takılması, Uterin fibroid, Abdominal fleksiyon, Vajinal ekstraksiyon

References

- Hart DE, Dolan B, Reardon RF. A novel technique for a difficult breech delivery. *J Emerg Med* 2012; 43(5):e325-6.
- Singh A, Mishra N, Dewangan R. Delivery in breech presentation: the decision making. *J Obstet Gynaecol India* 2012;62(4):401-5.
- Noor S, Fawwad A, Sultana R, Bashir R, Qurat-ul-ain, Jalil H, Suleman N, Khan A. Pregnancy with fibroids and its and its obstetric complication. *J Ayub Med Coll Abbottabad* 2009;21(4):37-40.
- Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Rouse DJ, Spong CY: *Williams obstetrics* 23rd edition, p:577-579
- Navid S, Arshad S, Qurat-ul-Ain, Meo RA. Impact of leiomyoma in pregnancy. *J Ayub Med Coll Abbottabad* 2012;24(1):90-2.
- Pradhan P, Poudel S, Maharjan A. Still-birth a tragic journey: a critical analysis. *Nepal Med Coll J* 2010;12(4):239-43
- Aiken CG. The causes of perinatal mortality in Bulawayo, Zimbabwe. *Cent Afr J Med* 1992;38(7):263-81.
- S Adhikari, M Dasgupta M Sanghamita Management of obstructed labor: a retrospective study. *J Obstet Gynecol India* 2005;55(1):48-51
- Gaym A. Obstructed labor at a district hospital. *Ethiop Med J* 2002;40(1):11-8.
- Sikka P, Chopra S, Kalpdev A, Jain V: Destructive operations- a vanishing art in modern obstetrics: 25 year experience at a tertiary care center in india. *Arc Gynecol Obstet* 2011;283:929-33
- Bayhan G. Turhanoğlu S. Yalınkaya A. Özer G. Erden AC. İntravenöz Nitrogliserinin Obstetrikte Kullanımı. *Perinatoloji Dergisi* 2001;9:2
- Hehir MP, O' Connor HD, Kent EM, et al. Changes in vaginal breech delivery rates in a single large metropolitan area. *Am J Obstet Gynecol* 2012;206:498.e1-4
- Goffinet F, Carayol M, Foidart JM, Alexander S: Is planned vaginal delivery for breech presentation at term still an option? Results of an observational prospective survey in France and Belgium. *Am J Obstet Gynecol* 2006;194:1002-11