

Obstetric and Anesthetic Approaches to External Cephalic Version



Stephanie Lim, MD^a, Jennifer Lucero, MD^{a,b,*}

KEYWORDS

- External cephalic version • Neuraxial anesthesia for version
- Management for breech presentation
- Risks and complications of external cephalic version

KEY POINTS

- Breech position is the most common abnormal presentation and ECV is a relatively safe procedure to ameliorate the term breech position.
- Neuraxial anesthesia has been successfully used to improve the outcomes of ECV (improved maternal pain scores and successful version) and has been shown to be cost-effective by reducing multiple ECV attempts and cost of breech cesarean delivery.
- The American College of Obstetricians and Gynecologists has developed an algorithm for management of breech position both in reducing the rates of cesarean delivery after successful version and an approach to an initial failed ECV attempt.

INTRODUCTION

External cephalic version (ECV) is an elective procedure in which the fetus is rotated from breech to vertex presentation through external manipulation of the maternal abdomen.¹⁻³ This procedure is performed on breech term pregnancies to increase a woman's chance of having a vaginal birth (**Fig. 1**).

Breech Presentation

Breech presentation is the most common abnormal fetal presentation and it complicates approximately 3% to 4% of all pregnancies.¹ It occurs when the fetal extremities or pelvis become engaged in the maternal pelvic inlet. Breech presentation can be suspected

The authors have no financial disclosures.

^a Division of Obstetric Anesthesia, Department of Anesthesia & Perioperative Care, University California San Francisco School of Medicine, San Francisco, CA 94143, USA; ^b Department of Obstetrics, Gynecology & Reproductive Sciences, University California San Francisco School of Medicine, San Francisco, CA 94143, USA

* Corresponding author. 513 Parnassus Avenue, Room S455e, San Francisco, CA 94143-0464513.
E-mail address: Jennifer.Lucero@ucsf.edu

Anesthesiology Clin 35 (2017) 81–94
<http://dx.doi.org/10.1016/j.anclin.2016.09.008>

anesthesiology.theclinics.com

1932-2275/17/© 2016 Elsevier Inc. All rights reserved.

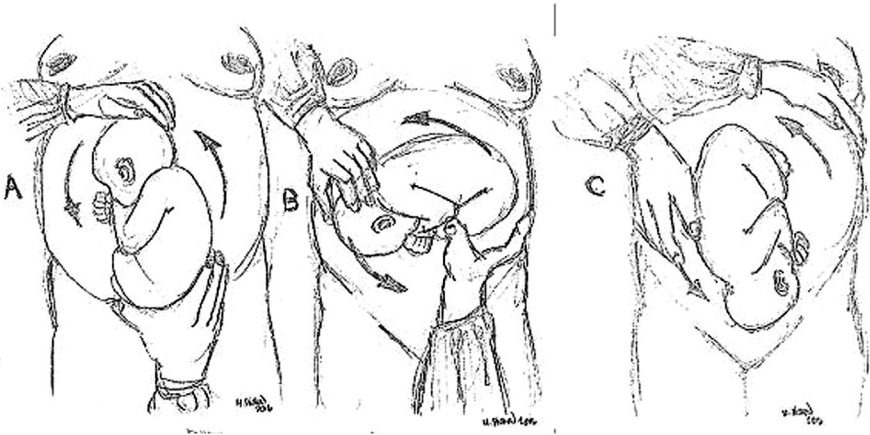


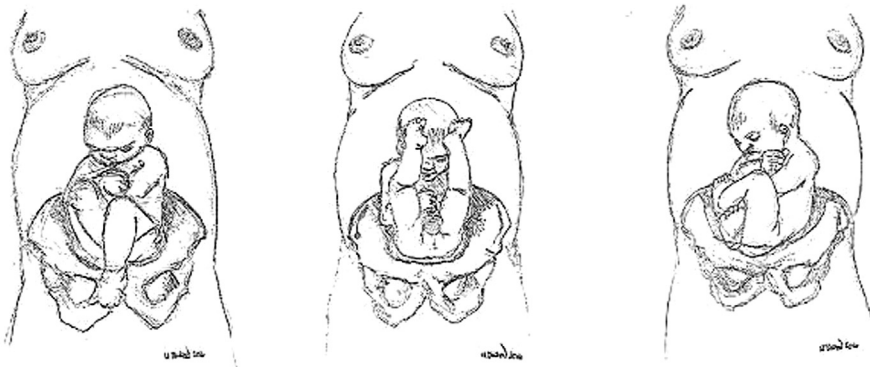
Fig. 1. External cephalic version: fetus is converted from breech to cephalic. (A) Forward roll breech is disengaging and simultaneously pushed upward. (B) Vertex is simultaneously pushed toward the pelvis. (C) Forward roll is completed.

based on clinical examination; however, diagnosis is confirmed with ultrasound. There are 3 types of breech presentations: frank breech, complete breech, and incomplete breech. In frank breech, the fetus's hips are flexed with knees extending bilaterally. In complete breech, both the fetus's hips and knees are flexed. With incomplete breech, either one of fetus's leg or both legs are extended below the buttocks level (**Fig. 2**).

Etiology

Breech presentation likely occurs by chance in most pregnancies. However, in some cases, spontaneous version of the fetus is prevented by maternal anatomic anomalies or fetal anomalies. Normally, the fetus is small in proportion to the amniotic fluid before 28 weeks' gestation and the fetus can rotate to cephalic from breech presentation with ease. As gestational age (GA) and fetal weight increase, the decrease in amniotic fluid volume in relation to the fetus makes the rotation more challenging.

The incidence of singleton breech presentation varies by birth weight and it is inversely related to GA¹ (**Table 1**).



Incomplete breech

Frank breech

Complete Breech

Fig. 2. Types of breech positions.

Download English Version:

<https://daneshyari.com/en/article/5580552>

Download Persian Version:

<https://daneshyari.com/article/5580552>

[Daneshyari.com](https://daneshyari.com)