



Breech Presentation Fact Sheet

Breech Presentation Fact Sheet

by:

Published: July 24, 2013

What is Breech Presentation?

- Breech presentation is the most common human malpresentation and occurs in 3-4% of all term pregnancies.¹
- Three types of breech presentation occur: Frank (baby's hips are flexed and knees extended bilaterally), Complete (baby's hips and knees are flexed bilaterally), and Incomplete (baby may present with one or two feet – 'footling' - or one knee extended and the other flexed with hips flexed).^{2,3}
- Early in pregnancy about half of all babies are breech presentation.⁴ Babies continue to turn to cephalic presentation throughout all weeks of pregnancy.¹

What Causes Breech Presentation?

- Only about 15% of breech presentations have an identifiable etiology.⁵
- Established risks for breech presentation are: Previous breech presentation pregnancy,^{5,6,7,8} Late or lack of antenatal care,^{8,9} Prematurity (<37 weeks gestation),^{6,7,8} Comparatively lower birth weight,^{8,9} and Congenital anomalies.^{8,9,10}

Recent Rates of Vaginal Delivery for Breech Presentation By Country

- Japan 56%.¹¹ Findings: Poor outcome 1.2% vaginal delivery : 0.0% cesarean
- Sweden 52%.¹² Findings: No statistically significant difference between vaginal birth and cesarean section babies for perinatal/neonatal outcomes.

- Norway 40%.¹³
- Finland 39%.¹⁴ Findings: Less birth trauma for vaginal breech deliveries than vaginal vertex deliveries. More trauma for breech vaginal delivery than breech CS, but lower long-term morbidity for breech vaginal than breech cesarean deliveries. Breech vaginal death 0.07%, vertex vaginal delivery death 0.02%.
- Sweden 37%.¹⁵ Findings: Infant mortality, birth injury and convulsions higher for breech vaginal birth than breech CS
- Ireland 23%.¹⁶ Findings: No nonanomalous perinatal deaths, significant trauma, or neurological dysfunctions for vaginally or CS delivered breech babies.
- Denmark 15.3%.¹⁷ Findings: Higher rates of puerperal fever and pelvic infections for CS breech delivery.
- California 4.9%.¹⁸ Findings: Neonatal mortality, asphyxia, brachial plexus injury, and birth trauma higher for vaginally delivered breech than CS. If woman had a previous vaginal delivery no difference in neonatal mortality by delivery mode.
- Canada <5%.¹⁹

Other Research on Breech Presentation Outcomes by Delivery Method

- Meta analysis 1: 24 studies published between 1966-1992²⁰
Findings: Higher perinatal mortality, traumatic morbidity, short-term morbidity, and long-term morbidity in vaginal delivery than in CS for breech presentation. Lower maternal morbidity and mortality for vaginal delivery of breech.
- Meta analysis 2: nine randomized trials or cohort studies published between January 1981 to June 1993²¹
Findings: No statistically significant difference between infant mortality and morbidity between vaginal and CS delivery of breech presentation.
- Term Breech Trial: randomized controlled clinical trial in 121 centers in 26 countries and included 2088 women with term singleton breech pregnancies who were randomly assigned to give birth vaginally or by cesarean section²²
Findings: Perinatal mortality, neonatal mortality, and serious neonatal morbidity higher for vaginal breech delivery than for CS in countries with low levels of infant mortality. No difference in infant outcomes by delivery method in countries with high infant mortality. No difference in maternal morbidity and mortality by delivery mode.

Turning Options

- External Cephalic Version (ECV) after 37 weeks has a success rate of 35% - 86% while spontaneous version occurs in 22%.^{23,24} Women who have successful ECV are at higher risk of having cesarean deliveries than are women with vertex presentation babies who did not have ECV.²⁵
- Moxibustion or ginger paste applied close to the acupuncture point Bl 67. Small studies show a success rate of 66.6%-92%.²⁶⁻³²
- Other less studied options: Homeopathic formulas *pulsatilla* and *natrum muriaticum*,³³⁻³⁶ Gentle chiropractic treatments: Webster's technique or Bagnell system,^{37,38} Hypnosis,³⁹ Playing music over the maternal abdomen.^{40,41}

Overview

- Morbidity and mortality for breech infants and mothers is most related to inclusion and exclusion criteria adhered to by the hospital for determining mode of delivery, the competence of the attending physician, and the expectation of the mother rather than the mode of delivery.
- In general countries that perform more vaginal breech births have birth outcomes that are as good as or better than cesarean section outcomes. Countries that perform few vaginal breech births have birth outcomes that are worse than those for cesarean section births.
- In many countries breech vaginal birth has higher morbidity and mortality risks for babies, but the risk is still relatively low.
- Some of what has been typed as risk (e.g. low Apgar scores) is clearly not a long-term risk.
- Much of what has been typed as risk can be ameliorated by proper screening for vaginal birth.
- If you want to have a successful vaginal birth look for an old-time doctor or someone with a lot of experience with breech presentation.
- If you have a macrosomic baby or a footling breech cesarean may be better for you.
- To have a successful vaginal birth avoid induced or augmented labor and epidurals.
- If you are going to have a cesarean, consider having a scheduled cesarean without trial of labor.

References Cited

1. Hickok, D. E., Gordon, D. C., Milber, J. A., Williams, M. A., & Daling, J. R. (1992). The Frequency of Breech Presentation by Gestational Age at Birth: A large Population-Based Study. *American Journal of Obstetrics and Gynecology*, 166, 851-852.
2. Bennett, V. R., & Brown, L. K. (1999). *Myles Textbook for Midwives*.
3. Cruikshank, D. P. (1999). Malpresentation and Umbilical Cord Complications. In J. R. Scott, P. J. Di Saia, C. B. Hammond & W. N. Spellacy (Eds.), *Danforth's Obstetrics and Gynecology*. (8th ed., pp. 419-436). Philadelphia: Lippincott, Williams & Wilkins.
4. Zhang, J., Park, M., & Reddy, U. (2004). Natural history of Fetal Position During Pregnancy and Risk of Breech Delivery. *American Journal of Obstetrics & Gynecology*, 191(6, Supplement 1), S169.
5. Luterkort, M., Persson, P.-H., & Weldner, B.-M. (1984). Maternal and Fetal Factors in Breech Presentation. *Obstetrics & Gynecology*, 64(1), 55-59.
6. Albrechtsen, S., Rasmussen, S., Dalaker, K., & Irgens, L. M. (1998a). The Occurrence of Breech Presentation in Norway 1967-1994. *Acta Obstetricia et Gynecologica Scandinavica*, 77, 410-415.
7. Albrechtsen, S., Rasmussen, S., Dalaker, K., & Irgens, L. M. (1998b). Reproductive Career After Breech Presentation: Subsequent Pregnancy Rates, Interpregnancy Interval, and Recurrence. *Obstet Gynecol*, 92, 345-350.
8. Amoa, A. B., Sapuri, M., & Klufio, C. A. (2001). Perinatal Outcome and Associated Factors of Persistent Breech Presentation at the Port Moresby General Hospital, Papua New Guinea. *Papua and New Guinea Medical Journal*, 44(1-2), 48-56.
9. Roberts, C. L., Algert, C. S., Peat, B., & Henderson-Smart, D. (1999). Small Fetal Size: A Risk Factor for Breech Birth at Term. *International Journal of Gynecology & Obstetrics*, 67, 1-8.
10. Rayl, J., Gibson, J., & Kickok, D. E. (1996). A population-Based Case-Control Study of Risk Factors for Breech Presentation. *American Journal of Obstetrics and Gynecology*, 174, 28-32.
11. Koike, T., Minakami, H., Sasaki, M., Tamada, T., & Sato, I. (1995). The Problem of Relating Fetal Outcome with Breech Presentation to Mode of Delivery. *Archives of Gynecology and Obstetrics*, 258, 119-123.
12. Hellsten, C., Lindqvist, P. G., & Olofsson, P. (2003). Vaginal Breech Delivery: Is It Still an Option? *Obstetrics and Gynecology*, 111, 122-128.
13. Haheim, L. L., Albrechtsen, S., Berge, L. N., Bordahl, P. E., Egeland, T., Henriksen, T., et al. (2004). Breech Birth at Term: Vaginal Delivery or Elective Cesarean Section? A Systematic Review of the Literature by a Norwegian Review Team. *Acta Obstetricia et Gynecologica Scandinavica*, 83, 126-130.
14. Ulander, V.-M., Gissler, M., Nuutila, M., & Ylikorkala, O. (2004). Are Health Expectations of Term Breech Infants Unrealistically High? *Acta Obstetricia et Gynecologica Scandinavica*, 83, 180-186.
15. Roman, J., Bakos, O., & Cnattingius, S. (1998). Pregnancy Outcomes by Mode of Delivery Among Term Breech Births: Swedish Experience 1987-1993. *Obstetrics and Gynecology*, 92, 945-950.
16. Alarab, M., Regan, C., O'Connell, M. P., Keane, D. P., O'Herlihy, C., & Foley, M. E. (2004).

- Singleton Vaginal Breech Delivery at Term: Still a Safe Option. *Obstetrics and Gynecology*, 103(3), 407-412.
17. Krebs, L., & Langhoff-Roos, J. (2003). Elective Cesarean Delivery for Term Breech. *Obstetrics and Gynecology*, 101(4), 690-696.
18. Gilbert, W. M., Hicks, S. M., Boe, N. M., & Danielson, B. (2003). Vaginal Versus Cesarean Delivery for Breech Presentation in California: A Population-Based Study. *Obstetrics and Gynecology*, 102, 911-917.
19. Nevo, O., Berger, H., Walsh, S., & Farine, D. (2004). Effect of Large Trials on Clinical Practice - The Term Breech Trial. *American Journal of Obstetrics and Gynecology*, 191(6, Supplement 1), S80.
20. Cheng, M., & Hannah, M. E. (1993). Breech Delivery at Term: A Critical Review of the Literature. *Obstetrics & Gynecology*, 82, 605-618.
21. Gifford, D. S., Morton, S. C., & Kahn, K. L. (1995). A Meta-Analysis of Infant Outcomes After Breech Delivery. *Obstetrics & Gynecology*, 85, 1047-1054.
22. Hannah, M. E., Hannah, W. J., Hewson, S. A., Hodnett, E. D., Saigal, S., & Willan, A. R. (2000). Planned Caesarean Section Versus Planned Vaginal Birth for Breech Presentation at Term: A Randomised Multicentre Trial. *The Lancet*, 356, 1375-1383.
23. Hofmeyr, G. J., & Kulier, R. (2002). External Cephalic Version for Breech Presentation at Term (Cochran Review). Unpublished manuscript, Oxford.
24. Lau, T. K., Lo, K. W. K., Wan, D., & Rogers, M. S. (1997). Predictors of Successful External Cephalic Version at Term: A Prospective Study. *British Journal of Obstetrics and Gynaecology*, 104, 798-802.
25. Vezina, Y., Bujold, E., Varin, J., Marquette, G. P., & Boucher, M. (2004). Cesarean Delivery After Successful External Cephalic Version of Breech Presentation at Term: A Comparative Study. *American Journal of Obstetrics and Gynecology*, 190, 763-768.
26. Cardini, F., Basevi, V., Valentini, a., & Martellato, A. (1991). Moxibustion and Breech Presentation: Preliminary Results. *American Journal of Chinese Medicine*, XIX(2), 105.
27. Cardini, F., & Hauang, W. (1998). Moxibustion for Correction of Breech Presentation: A Randomised Controlled Trial. *Journal of the American Medical Association*, 280(18), 1580-1584.
28. Cardini, F., & Weixin, H. (1998). Moxibustion for Correction of Breech Presentation. *Journal of the American Medical Association*, 11, 1580-1584.
29. Cooperative Research Group of Moxibustion Version of Jangxi Province. (1980). Studies of Version by Moxibustion on Zhiyin Points. In Z. Xiangtong (Ed.), *Research on Acupuncture, Moxibustion and Acupuncture Anesthesia* (pp. 810-819). Beijing, China: Science Press.
30. Cooperative Research Group of Moxibustion Version of Jangxi Province. (1984). Further Studies on the Clinical Effect and the Mechanism of Version by Moxibustion. Unpublished manuscript, Beijing, China.
31. Cai, R., Zhou, A., & Gao, H. (1990). Study on Correction of Abnormal Fetal Position by Applying Ginger Paste at Zhihying Acupoint. A Report of 133 Cases. *Zhen Ci Yan Jiu*, 15(2), 89-91.
32. Qin, G. F., & Tang, H. J. (1989). 413 Cases of Abnormal Fetal Position Corrected by Auricular Plaster Therapy. *Journal of Traditional Chinese Medicine*, 9(4), 235-237.

33. Baylies, B. L. (1890). Pulsatilla in Malposition of the Fetus. In IHA Transactions (pp. 133-146).
34. Farrington, E. A. (1988). *Clinical Materia Medica*. New Delhi: B. Jain Publishers.
35. Simkin, P. (1983). *Turning a Breech Baby to Vertex*. Minneapolis (MN): ICEA/Pennypress Publications.
36. Weed, S. (1986). *Wise Woman Herbal for the Childbearing Year*. Woodstock, NY: Ash Tree Publishing.
37. Bagnell, K. (2004). The Bagnell System for Breech Presentation. *Today's Chiropractic*, 36-44.
38. Pistolese, R. A. (2002). The Webster Technique: A Chiropractic Technique with Obstetric Implications. *Journal of Manipulative and Physiological Therapeutics*, 25(6), E1-9.
39. Mehl, L. E. (1994). Hypnosis and Conversion of the Breech to the Vertex Presentation. *Archives of Family Medicine*, 3(10), 881-887.
40. Johnson, R. L., & Elliott, J. P. (1995). Fetal Acoustic Stimulation, an Adjunct to External Cephalic Version: A Blinded Randomised, Cross-Over Trial. *American Journal of Obstetrics and Gynecology*, 173(50), 1369-1372.
41. Johnson, R. L., Strong, T. H. J., Radin, T. G., & Elliott, J. P. (1995). Fetal Acoustic Stimulation as an Adjunct to External Cephalic Version. *Journal of Reproductive Medicine*, 40(10), 696-698.