

ABM Protocols

ABM Clinical Protocol #5: Peripartum Breastfeeding Management for the Healthy Mother and Infant at Term Revision, June 2008

The Academy of Breastfeeding Medicine Protocol Committee

A central goal of The Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient.

Background

HOSPITAL POLICIES AND ROUTINES greatly influence breastfeeding success.¹⁻⁶ The Baby Friendly Hospital Initiative has defined the Ten Steps to Successful Breastfeeding, and recent research has again verified that “This Baby-Friendly designation has proven to be an effective strategy to increase breastfeeding initiation rates in US hospital settings.”¹

The peripartum hospital experience should include adequate support, instruction, and care to ensure the successful initiation of breastfeeding. Such management is part of a continuum of care and education that begins during the prenatal period, promotes breastfeeding as the optimal method of infant feeding, and includes information about maternal and infant benefits. The following principles and practices are recommended for care in the peripartum hospital setting.

Prenatal

1. All pregnant women must receive education about the benefits and management of breastfeeding to allow an informed decision about infant feeding.⁴⁻⁶ An evidence-based review of practices that improve the duration or initiation of breastfeeding found that “there is good evidence to recommend provision of structured antepartum educational programs”⁷ Information and advice from a health professional early in pregnancy are also supported by the American College of Obstetricians and Gynecologists in their policy statement, which states “Advice and encouragement of the obstetrician-gynecologist are critical in making the decision to breastfeed.”⁵
2. Prenatal education should include information about the stages of labor, drug-free ways to address labor pain, potential side effects of labor medications, and the benefits to mother and baby of exclusive breastfeeding initiated in the first hour after birth.⁴ Educational materials produced

by formula manufacturers are inappropriate sources of information about infant feeding.⁸

3. Maternity care includes an assessment of any medical or physical conditions that could affect a mother’s ability to breastfeed her infant. In some cases it may be helpful to obtain a prenatal consultation with the infant’s physician or a lactation consultant or specialist and to develop a plan of follow-up to be instituted at the time of delivery.⁵ Women will benefit from moderated group discussions or referral to a lay support organization (e.g., La Leche League) prior to delivery.⁶ There is also good evidence that peer counseling promotes the initiation and maintenance of breastfeeding.⁷

Labor and Delivery

1. Women will benefit from the continuous presence of a close companion (e.g., doula) throughout labor and delivery. The presence of a doula is known to enhance breastfeeding initiation and duration. Many risk factors associated with early breastfeeding termination, including the mean length of labor, the need for surgical intervention, and the use of pain-reducing interventions such as epidurals and other medications, are reduced by the presence of a doula.⁹⁻¹²
2. Intrapartum analgesia may also have an impact on breastfeeding, and consideration needs to be given to the type and dose of analgesia.^{5,13,14} Higher doses of intrapartum fentanyl may “impede the establishment of breastfeeding.”¹⁴

Immediate Postpartum

1. The healthy newborn can be given directly to the mother for skin-to-skin contact until the first feeding is accomplished. The infant may be dried and assigned Apgar scores, and the initial physical assessment performed as

the infant is placed with the mother. Such contact provides the infant optimal physiologic stability, warmth, and opportunities for the first feeding.^{6,15–17} Extensive early skin-to-skin contact may increase the duration of breastfeeding.¹⁷ Delaying procedures such as weighing, measuring, and administering vitamin K and eye prophylaxis (up to an hour) enhances early parent–infant interaction. Infants are to be put to the breast as soon after birth as feasible for both mother and infant (within an hour of birth).¹⁸ This is to be initiated in either the delivery room or recovery room, and every mother should be instructed in proper breastfeeding technique.^{4,6,19,20}

2. Mother–baby rooming-in on a 24-hour basis enhances opportunities for bonding and for optimal breastfeeding initiation. Whenever possible, mothers and infants are to remain together during the hospital stay.^{6,20} To avoid unnecessary separation, infant assessments in the immediate postpartum time period and thereafter are ideally performed in the mother's room. Evidence suggests that mothers get the same amount and quality of sleep whether infants room-in or are sent back to the nursery at night.^{21,22}
3. Education about the benefits of 24-hour rooming-in encourages parents to use it as the standard mode of hospital care for themselves and their baby. Adequate nursing personnel must be available to assess and document the status of the infant and infant feeding while the baby is in the family's room.^{4,6,23–25}
4. Women need help to ensure that they are able to position and attach their babies at the breast. Those delivered by cesarean section may need additional help from nursing staff to attain comfortable positioning. A trained observer should assess and document the effectiveness of breastfeeding at least once every 8–12 hours after delivery until mother and infant are discharged.⁶ Peripartum care of the couplet should address and document infant positioning, latch, milk transfer, baby's daily weight, clinical jaundice, and all problems raised by the mother, such as nipple pain or the perception of an inadequate breastmilk supply. Formal inpatient lactation instruction programs need to be assessed carefully for effectiveness and best practices.²⁶ Infants who are breastfeeding well will feed eight to 12 times or more in 24 hours, for a minimum of eight feedings every 24 hours. Limiting the time at the breast is not necessary and may be harmful to the establishment of a good milk supply. Infants usually fall asleep or release the breast spontaneously when satiated.
5. Supplemental feeding should not be given to breastfed infants unless there is a medical indication for such feedings.^{6,27,28} Supplementation can prevent the establishment of maternal milk supply and have adverse effects on breastfeeding (e.g., delayed lactogenesis, maternal engorgement). Supplements may alter infant bowel flora, sensitize the infant to allergens (depending on the content of the feeding and method used), and interfere with maternal–infant bonding and may interfere with infant weight gain.^{27,29} There is no role for the routine supplementation of non-dehydrated infants with water or dextrose water, and these could contribute to hyperbilirubinemia.²⁸ Before any supplementary feedings are begun, it is important that a formal evaluation of each mother–baby dyad, including a direct observation of breastfeeding, is completed.³⁰
6. Pacifier use in the neonatal period should be avoided. Research shows that “pacifier use in the neonatal period was detrimental to exclusive and overall breastfeeding. These findings support recommendations to avoid exposing breastfed infants to artificial nipples in the neonatal period.”³¹
7. In general, acute infectious diseases, undiagnosed fever, and common postpartum infections in the mother are not a contraindication to breastfeeding, if such diseases can be readily controlled and treated. Infants should not be breastfed in the case of maternal human immunodeficiency virus infection (in a developed country), untreated active tuberculosis, or herpes simplex when there are breast lesions.^{32,33} Infectious peripartum varicella may require separation of the mother and newborn, limiting direct breastfeeding. The listing of all contraindications is beyond the scope of this document, but reliable sources of information are readily available and include information about medications and radioactive compounds.^{33–35}

Problems and Complications

1. Mother–baby couplets at risk for breastfeeding problems benefit from early identification and assistance. Consultation with an expert in lactation management may be helpful in situations including but not limited to the following:
 - a) Maternal request/anxiety
 - b) Previous negative breastfeeding experience
 - c) Mother has flat/inverted nipples
 - d) Mother has history of breast surgery
 - e) Multiple births (twins, triplets, higher-order pregnancies)
 - f) Infant is premature (<37 weeks of gestation)
 - g) Infant has congenital anomaly, neurological impairment, or another medical condition that affects the infant's ability to breastfeed
 - h) Maternal or infant medical condition for which breastfeeding must be temporarily postponed or for which milk expression is required
 - i) Documentation, after the first few feedings, that there is difficulty in establishing breastfeeding (e.g., poor latch-on, sleepy baby, etc.)
 - j) Hyperbilirubinemia
2. Early discharge from the hospital (<48 hours) of mothers and babies mandates that risks to successful breastfeeding be identified quickly so that the time spent in the hospital is used to maximal benefit.³⁶ All breastfed infants should be seen by a health care provider within 48–72 hours of discharge to evaluate the infant's well-being and the successful establishment of breastfeeding.^{6,36,37}
3. If a neonate needs to be transferred to an intermediate or intensive care area, steps must be taken to maintain lactation in the mother. When possible, transport of the mother to the intermediate or intensive care nursery to continue breastfeeding is optimal. If breastfeeding is not possible, arrangements should be made to continue human milk feeding for the neonate. Mothers must be shown how to maintain lactation through breast pumping or manual expression when they are separated from their in-

- fants.^{4,6} There is evidence that there may be greater maternal milk production with the use of electric breast pumps. This method should be considered, if available.
4. If an infant is not consistently feeding at the breast effectively at the time of hospital discharge, the mother must be shown how to maintain lactation through breast pumping or manual expression, and demonstrate proficiency in emptying her breasts before she is released home. The possible need for supplemental feedings for the infant must be addressed, with consideration given to the choice of supplement to be used and the method of feeding. Any and all breastmilk the mother can express should be used, and only supplemented further if maternal supply is inadequate. Cup feeding may help preserve breastfeeding duration among those that require multiple supplemental feedings.³¹ The mother–infant dyad will need referral to a professional competent in lactation management for continued assistance and support.

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References

1. Philipp BL, Merewood A. The Baby-Friendly way: The best breastfeeding start. *Pediatr Clin North Am* 2004;51:761–783.
2. World Health Organization. *Evidence for the Ten Steps to Successful Breastfeeding*, revised ed. WHO/CHD/98.9. World Health Organization, Geneva, 1998.
3. Kramer MS, Chalmers B, Hodnett ED, et al. Promotion of Breastfeeding Intervention Trial (PROBIT): A cluster-randomized trial in the republic of Belarus. *JAMA* 2001;285:4–15.
4. World Health Organization, United Nations Children's Fund. Protecting, promoting and supporting breastfeeding: The special role of maternity services (a joint WHO/UNICEF statement). *Int J Gynecol Obstet* 1990;31(Suppl 1):171–183.
5. American College of Gynecologists, Committee on Obstetric Practice. Special Report from ACOG. Breastfeeding: Maternal and infant aspects. *ACOG Clin Rev* 2007;12(Suppl):1S–16S.
6. American Academy of Pediatrics, Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 2005; 115:496–506.
7. Palda VA. Interventions to promote breast-feeding: applying the evidence in clinical practice. *CMAJ* 2004;170:976–978.
8. Howard CR, Howard FM, Lawrence RA, et al. The effect on breastfeeding of physicians' office-based prenatal formula advertising. *Obstet Gynecol* 2000;95:296–303.
9. Sosa R, Kennell J, Klaus M, et al. The effect of a supportive companion on perinatal problems, length of labor, and mother–infant interaction. *N Engl J Med* 1980;303:597–600.
10. Klaus MH, Kennell JH. The doula: An essential ingredient of childbirth rediscovered. *Acta Paediatr* 1997;86:1034–1036.
11. Zhang J, Bernasko JW, Leybovich E, et al. Continuous labor support from labor attendant for primiparous women: A meta-analysis. *Obstet Gynecol* 1996;88:739–744.
12. Kennell J, Klaus M, McGrath S, et al. Continuous emotional support during labor in a US hospital. A randomized controlled trial. *JAMA* 1991;265:2197–2201.
13. Beilin Y, Bodian CA, Weiser J, et al. Effect of labor epidural analgesia with and without fentanyl on infant breast-feeding: A prospective, randomized, double-blind study. *Anesthesiology* 2005;103:1211–1217.
14. Jordan S, Emery S, Bradshaw C, et al. The impact of intrapartum analgesia on infant feeding. *BJOG* 2005;112:927–934.
15. Christensson K, Siles C, Moreno L, et al. Temperature, metabolic adaptation and crying in healthy full term newborns cared for skin-to-skin or in a cot. *Acta Paediatr* 1992;81:488–493.
16. Varendi H, Christensson K, Porter RH, et al. Soothing effect of amniotic fluid smell in newborn infants. *Early Hum Dev* 1998;51:47–55.
17. Mikiel-Kostyra K, J Mazur, I Bo, truszko, et al. Effect of early skin-to-skin contact after delivery on duration of breast-feeding: a prospective cohort study. *Acta Paediatr* 2002;91:1301–1306.
18. Righard L, Alade MO. Effect of delivery room routines on success of first breast-feed. *Lancet* 1990;336:1105–1107.
19. Righard L, Alade MO. Sucking technique and its effect on success of breastfeeding. *Birth* 1992;19:185–189.
20. University of California at San Diego, Wellstart International. Model hospital breastfeeding policies for full-term normal newborn infants. In: *Lactation Management Curriculum: A Faculty Guide for Schools of Medicine, Nursing, and Nutrition* (Woodward-Lopez G, Creer AE, eds.). Wellstart International, San Diego, CA, 1-1 to 11-51, 1994.
21. Keefe MR. The impact of infant rooming-in on maternal sleep at night. *J Obstet Gynecol Neonat Nurs* 1988;17:122–126.
22. Waldenstrom U, Swenson A: Rooming-in at night in the postpartum ward. *Midwifery* 1991;7:82–89.
23. Perez-Escamilla R, Pollitt E, Lonnerdal B, et al. Infant feeding policies in maternity wards and their effect on breastfeeding success: An analytical overview. *Am J Public Health* 1994;84:89–97.
24. Powers NG, Naylor AJ, Wester RA. Hospital policies: Crucial to breastfeeding success. *Semin Perinatol* 1994;18:517–524.
25. Saadeh R, Akre J. Ten steps to successful breastfeeding: A summary of the rationale and scientific evidence. *Birth* 1996;23:154–160.
26. Henderson A, Stamp G, Pincombe J. Postpartum positioning and attachment education for increasing breastfeeding: A randomized trial. *Birth* 2001;28:236–242.
27. Bystrova K, Matthiesen AS, Widström AM, et al. The effect of Russian Maternity Home routines on breastfeeding and neonatal weight loss with special reference to swaddling. *Early Hum Dev* 2007;83:29–39.
28. American Academy of Pediatrics Subcommittee on Hyperbilirubinemia. Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. *Pediatrics* 2004;114:297–316.
29. Blomquist HK, Jonsbo F, Serenius F, et al. Supplementary feeding in the maternity ward shortens the duration of breast feeding. *Acta Paediatr* 1994;83:1122–1126.
30. Protocol Committee Academy of Breastfeeding Medicine. Clinical protocol #3: Hospital guidelines for the use of supplementary feedings in the healthy term breastfed newborn. Academy of Breastfeeding Medicine, 2002. www.bfmed.org (accessed May 9, 2008).
31. Howard CR, Howard FM, Lanphear B, et al. Randomized clinical trial of pacifier use and bottle-feeding or cup feeding and their effect on breastfeeding. *Pediatrics* 2003;111:511–518.
32. Lawrence RA. *Maternal and Child Health Technical Information Bulletin: A Review of the Medical Benefits and Contraindications to Breastfeeding in the United States*. National Center for Education in Maternal and Child Health, Arlington, VA, 1997.

33. Lawrence RA, Lawrence RM: *Breastfeeding: A Guide for the Medical Profession*, 6th ed. Elsevier Mosby, Philadelphia, 2005.
34. American Academy of Pediatrics Committee on Drugs. The transfer of drugs and other chemicals into human milk. *Pediatrics* 2001;108:776–789.
35. Naylor A, Wester R: Providing professional lactation management consultation. *Clin Perinatol* 1987;14:33–38.
36. Protocol Committee Academy of Breastfeeding Medicine. Clinical protocol #2: Guidelines for the hospital discharge of the newborn infant and mother, “The Going Home Protocol.” *Breastfeeding Med* 2007;2:158–165. www.bfmed.org (accessed May 9, 2008).
37. Labarere J, Gelbert-Baudino N, Ayril AS. Efficacy of breastfeeding support provided by trained clinicians during an early routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs. *Pediatrics* 2005;115:e139–e146.
38. Slusher T, Slusher IL, Biomdo M, et al. Electric breast pump use increases maternal milk volume in African nurseries. *J Trop Pediatr* 2007;53:125–130.

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