
THE ACADEMY OF BREASTFEEDING MEDICINE CLINICAL PROTOCOL COMMITTEE

ABM Protocols

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

The ultimate success of breastfeeding is measured in part by both the duration of breastfeeding and the exclusivity of breastfeeding. Anticipatory attention to the needs of the mother and baby at the time of discharge from the hospital is crucial to ensure successful, long-term breastfeeding. The following principles and practices are recommended for consideration prior to sending a mother and her full-term infant home.

GUIDELINES

1. Formal documented assessment of breastfeeding effectiveness should be performed at least once during the last 8 hours preceding discharge of the mother and baby, by a medical professional trained in formal assessment of breastfeeding. Similar assessments should have been performed during the hospitalization, preferably at least once every 8 to 12 hours. These should include evaluation of positioning, latch, milk transfer, baby’s weight and percent weight loss, clinical jaundice, and stool and urine output. All problems raised by the mother such as nipple pain, ability to hand express, perception of inadequate supply, and any perceived need to supplement must also be addressed.1–10

2. Prior to discharge, anticipation of breastfeeding problems should be assessed based on the maternal and/or infant risk factors (Tables 1 and 2): All problems with breastfeeding, whether observed by hospital staff or raised by the mother should be attended to and documented in the medical record prior to discharge of mother and baby. A plan of action that includes follow-up of the problem after discharge must be in place.1–17

3. Physicians, midwives, nurses, and all other staff should encourage the mother to practice exclusive breastfeeding for the first 6 months of the infant’s life and to continue breastfeeding through at least the first year of life, preferably to 2 years of life and beyond. The addition of appropriate comple-
mentary food should occur after 6 months of life. Mothers will benefit from education about the rationale for exclusive breastfeeding. The medical, psychosocial, and societal benefits for both mother and baby and why artificial milk supplementation is discouraged should be emphasized. Special counsel-

4. Families will benefit from appropriate, non-commercial educational materials on breastfeeding (as well as on other aspects of child health care). Discharge packs containing infant formula, pacifiers, commercial advertising materials, and any materials not appropriate for a breastfeeding mother and baby should not be distributed. These may encourage poor breastfeeding practices, which may lead to premature weaning.

5. Breastfeeding mothers and appropriate others will benefit from simplified anticipatory guidance prior to discharge regarding key issues in the immediate future. Specific information should be provided in written form to all parents regarding:
   a) management of engorgement;
   b) indicators of adequate intake (yellow bowel movements by day 5, at least six urinations per day and three to four stools per day by the fourth day of life, and regain birth weight by days 10–14);
   c) signs of excessive jaundice;


### Table 1. Maternal Risk Factors for Lactation Problems

<table>
<thead>
<tr>
<th>History/social factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primiparity</td>
</tr>
<tr>
<td>Early intention to both breastfeed and bottle or formula feed</td>
</tr>
<tr>
<td>Early intention to use pacifiers and/or artificial nipples</td>
</tr>
<tr>
<td>Early intention/necessity to return to work or school</td>
</tr>
<tr>
<td>History of previous breastfeeding problems or breastfed infant with slow weight gain</td>
</tr>
<tr>
<td>History of infertility</td>
</tr>
<tr>
<td>Significant medical problems (e.g., untreated hypothyroidism, diabetes, cystic fibrosis)</td>
</tr>
<tr>
<td>Maternal age (e.g., adolescent mother or advanced age)</td>
</tr>
<tr>
<td>Psychosocial problems (e.g., depression, poor, or negative support of breastfeeding)</td>
</tr>
<tr>
<td>Perinatal complications (e.g., hemorrhage, hypertension, infection)</td>
</tr>
<tr>
<td>Intended use of any hormonal contraceptives before breastfeeding is well established</td>
</tr>
<tr>
<td>Perceived inadequate milk supply</td>
</tr>
<tr>
<td>Maternal medication use (inappropriate advice about compatibility with breastfeeding is common)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anatomic/physiologic factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of noticeable breast enlargement during pregnancy</td>
</tr>
<tr>
<td>Flat or inverted nipples</td>
</tr>
<tr>
<td>Variation in breast appearance (marked asymmetry, hypoplastic, tubular)</td>
</tr>
<tr>
<td>Any previous breast surgery, including plastics procedures</td>
</tr>
<tr>
<td>Previous breast abscess</td>
</tr>
<tr>
<td>Maternal obesity (BMI &gt; 29)</td>
</tr>
<tr>
<td>Extremely or persistently sore nipples</td>
</tr>
<tr>
<td>Failure of lactogenesis stage 2 (milk did not noticeably “come in.” This may be difficult to evaluate prior to discharge that occurs in first 24–48 hours.)</td>
</tr>
<tr>
<td>Mother unable to hand express colostrum</td>
</tr>
<tr>
<td>Discharge from hospital using a nipple shield or any other “appliance”</td>
</tr>
</tbody>
</table>


### Table 2. Infant Risk Factors for Lactation Problems

<table>
<thead>
<tr>
<th>Medical/anatomic/physiologic factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birthweight or premature (&lt;37 weeks)</td>
</tr>
<tr>
<td>Multiples</td>
</tr>
<tr>
<td>Difficulty latching on to one or both breasts</td>
</tr>
<tr>
<td>Ineffective or unsustained suckling</td>
</tr>
<tr>
<td>Oral anatomic abnormalities (e.g., cleft lip/palate, micrognathia, macroglossia, tight frenulum)</td>
</tr>
<tr>
<td>Medical problems (e.g., jaundice, hypoglycemia, respiratory distress, infection)</td>
</tr>
<tr>
<td>Neurologic problems (e.g., genetic syndromes, hypertonia)</td>
</tr>
<tr>
<td>Persistently sleepy infant</td>
</tr>
<tr>
<td>Excessive infant weight loss</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother–baby separation or breast pump dependency</td>
</tr>
<tr>
<td>Formula supplementation</td>
</tr>
<tr>
<td>Effective breastfeeding not established by hospital discharge</td>
</tr>
<tr>
<td>Early discharge from the hospital (&lt;48 hours of age)</td>
</tr>
<tr>
<td>Early pacifier use</td>
</tr>
</tbody>
</table>

d) sleep patterns of newborns, including safe cosleeping practices; (see ABM Protocol #6: Guideline on cosleeping and breastfeeding);
e) maternal medication use;
f) individual feeding patterns, including normality of evening cluster feedings; and
g) follow-up and contact information.3,9,64–67

6. Every breastfeeding mother should receive instruction on the technique of expressing milk by hand (whether she uses a pump or not), so she is able to alleviate engorgement, increase her milk supply, or prepare to use a pump. In addition, she may need to be taught to use a breast pump so that she can maintain her supply and obtain milk for feeding to the infant should she and the infant be separated or if the infant is unable to feed directly from the breast.3,9,68–73

7. If a mother is planning on returning to outside employment or school soon after delivery, she would benefit from additional written information. This should include social support, possible milk supply issues, expressing and storing milk away from home, the possibility of direct nursing breaks with the baby, and her local and/or state laws regarding accommodations for breastfeeding and milk expression in the workplace.3,9,73–98 It is prudent to provide her with this information in written form, so that she has resources when the time comes for her to prepare for return to work or school.

8. Every breastfeeding mother should be provided with names and phone numbers of individuals and medical services that can provide advice, counseling, and health assessments related to breastfeeding on a 24 hour-a-day basis if available, as well as on a less intensive basis.3,9,10,99–134

9. Mothers should be provided with lists of various local peer support groups and services (e.g., La Leche League, hospital/clinic based support groups, governmental supported groups, e.g., WIC [Women, Infants, and Children] in the U.S.) with phone numbers, contact names, and addresses. They should be encouraged to contact and consider joining one of them.3,9–10,99–134

10. In countries where discharge is common before or by 3 days of age, prior to discharge, appointments should be made for (a) an office or home visit, within 3–5 days of age, by a physician, midwife, or a physician-supervised breastfeeding trained licensed health care provider and (b) the mother’s 6-week follow-up visit to the obstetrician or family physician who participated in the delivery of the baby. Infants discharged before 48 hours of age should be seen by 96 hours of age.3,9,135 Additional visits for the mother and the infant are recommended even if discharge occurs at greater than 5 days of age, until all clinical issues such as adequate stool and urine output, jaundice, and the baby attaining birth weight by 10 days of age are resolved. (Note: a baby who is not back to birth weight at day of life 10, but who has demonstrated a steady, appropriate weight gain for a number of days, is likely fine. This baby may not need intervention, but continued close follow-up.) Any baby exhibiting a weight loss approaching 7% of his birth weight by 5–6 days of life needs to be closely monitored until weight gain is well established. Should 7% or more weight loss be noted after 5–6 days of life, even more concern and careful follow-up must be pursued. These babies require careful assessment, as by 4–6 days the infant should be gaining weight daily, so their “% weight loss” is actually more when that is taken into account. In addition to attention to these issues, babies with any of these concerns must be specifically evaluated for problems with breastfeeding and milk transfer.3,9,66,102,103,106,109,110,118,126,131,136–142

11. If the mother is medically ready for discharge but the infant is not, every effort should be made to allow the mother to remain in the hospital either as a continuing patient or as a “mother-in-residence” with access to the infant for exclusive breastfeeding promotion. Maintenance of a 24-hour rooming-in relationship with the infant is optimal during the infant’s extended stay.143–149

12. If the mother is discharged from the hospital before the infant is discharged (as in the case of a sick infant), the mother should
be encouraged to spend as much time as possible with the infant, practice skin-to-skin technique and Kangaroo care with her infant whenever possible, and to continue regular breastfeeding.\textsuperscript{150–156} During periods when the mother is not in the hospital, she should be encouraged to express and store her milk, bringing it to the hospital for the infant.

**ACKNOWLEDGMENTS**

Supported in part by a grant from the Maternal Child Health Bureau, Department of Health and Human Services.

**REFERENCES**


74. Killien MG. The role of social support in facilitating postpartum women’s return to employment. JOGNN 2005;34:639–646.


Contributor
*Amy Evans, M.D.*

Protocol Committee
*Caroline J. Chantry, M.D., FABM, Co-Chairperson*
*Cynthia R. Howard M.D., MPH, FABM, Co-Chairperson*
*Ruth A. Lawrence, M.D., FABM*
*Kathleen A. Marinelli, M.D., FABM, Co-Chairperson*
*Nancy G. Powers, M.D., FABM*

*Lead author.*

For reprint requests: abm@bfmed.org