Protocol #13 Overabundant Breast Milk Supply/ Forceful Letdown or Breast Milk Ejection Reflex



Protocol #13: Overabundant Breast Milk Supply/Forceful Letdown or Breast Milk Ejection Reflex

Sometimes the supply of breast milk exceeds the baby's needs or ability to breastfeed. It may be combined with a forceful letdown or breast milk ejection reflex. The baby may become distressed trying to cope with too much breast milk flowing too quickly. Signs of difficulty may occur a different phases of breastfeeding or ages of the baby. Optimizing breastfeeding will help the baby to manage the breast milk flow elated to an overabundant breast milk supply or a forceful letdown.

Observation and Assessment

Initial Phase (the first 3 months)

Assess the mother for:

- An overabundant breast milk supply.
- Pain with the initial letdown or breast milk ejection reflex, which is usually the most forceful. The pain is due to stretching of the breast milk ducts.
- Breast milk spraying or squirting from one breast while the baby is feeding on the other breast.
- Breast milk leaking between feedings.
- Recurrent plugged ducts and mastitis.

Assess the baby for:

- Choking, gulping, or sputtering when the mother's breast milk lets down forcefully.
- Fussiness and gassiness due to excessive air being swallowed during and/or after breastfeeding.
- Spitting up excessively after breastfeeding.
- Coming off the mother's breast several times during the breastfeeding with the mother's breast milk spraying.
- A poor latch on the nipple or only on a small portion of the areola.
- A poor suck and swallow pattern when the mother's breast milk lets down forcefully. This may continue throughout part or all of the breastfeeding.
- The inability to "comfort suck" on the mother's breast. The baby may use other methods for comfort such as sucking on the thumb and fingers.
- A strong suck that maintains or increases an abundant breast milk supply.

- Adequate urine/stool output or weight gain.
- Explosive and watery green stools. This may occur because the baby receives too much lower fat breast milk too fast. This may happen when a baby is switched to the second breast too soon, i.e. before the baby is allowed to finish the first breast. The baby is finished with the first breast when she is no longer sucking and swallowing effectively and the mother's breast feels significantly softer. (See General Principles for further discussion of 'explosive' and watery green stools. See also *Protocol #3: Signs of Effective Breastfeeding,* and *Protocol #11: Crying* and *Colic in the Breastfeed Baby*).

Later Phase (3 - 6 months)

Assess the mother for:

- Decreased breast milk supply (*Protocol #12: Insufficient Breast Milk Supply*).
- Diminished letdown reflex.
- Delaying breastfeeding even when the baby is showing feeding cues.

Assess the baby for:

- Ineffective breastfeeding for some or all breastfeedings. Assess the suck-swallow co-ordination.
- Partially or completely refusing the mother's breast.
- Inadequate weight gain.
- Dehydration.

Possible Contributing Factors or Causes Assess the mother for:

• Switching the baby from one breast to the other side

before the baby is finished the first breast. The baby is finished with the first breast when he/she is no longer sucking and swallowing effectively and the mother's breast feels significantly softer (*Protocol* #3: Signs of Effective Breastfeeding).

- ° Switching breasts too soon may:
 - Increase stimulation to the mother's breasts which may increase breast milk production.
 - Cause the baby to receive more lower fat breast milk from two breasts instead of feeding from one breast long enough to receive the fat as more breast milk is removed from the breast.
- Knowledge of infant breastfeeding behaviours.
- Delaying or scheduling breastfeedings.
- Waiting for the baby to cry before offering the mother's breast. Crying is a late sign of hunger (*Protocol #3: Signs of Effective Breastfeeding* for Early Feeding Cues).

Assess the baby for:

- Being overly hungry and frantic, showing signs of late feeding cues, i.e. crying, fussiness, exhaustion, falling asleep (*Protocol # 1: The Initiation of Breastfeeding*).
- Ineffective positioning and latching.

Suggestions

1. Assess for possible cause(s) of an overabundant breast milk supply/overactive letdown reflex (see previous section on *Possible Contributing Factors or Causes*).

2. Provide the mother with suggestions for breastfeeding with an overabundant breast milk supply/forceful letdown reflex.

Initial Phase (the first 3 months

Encourage the mother to:

- Breastfeed early and frequently whenever the baby shows early feeding cues, e.g., rapid eye movements under the eyelids as the baby begins to wake, sucking/licking, hands to mouth, increased body movement, and making small sounds.
- Breastfeed when the baby is calm, before the baby gets too hungry or frantic. A ravenous baby may latch more vigorously and cause a more active

letdown reflex.

- Breastfeed in a calm and relaxed atmosphere.
- Clothe the baby in a diaper only when breastfeeding to promote skin-to-skin contact.
- Support the baby's back so that the baby is in a vertical position, chest-to-chest with the mother, with the baby's nose approaching the mother's nipple.
- Use effective positioning and latching techniques, i.e., the baby is supported in a vertical chest-tochest position so that the baby's head is able to tilt back slightly and the chin touches the mother's breast first. This will direct the flow of breast milk upward towards the hard palate and not to the back of the baby's throat, making it more comfortable for the baby to manage the breast milk flow (see *Protocol #2: Positioning and Latching* for a discussion on Baby-led latching).
- Finish the first breast first (Renfrew et al., 2004). Allow the baby to breastfeed on the first breast until he is no longer sucking and swallowing effectively. Offer the second breast if the baby is interested.

Some mothers may:

- Offer only one breast at each breastfeeding.
- Offer the same breast from the previous breastfeeding again if the baby wants to breastfeed within $1-1\frac{1}{2}$ hours of the last breastfeeding.
- Offer one breast for two breastfeedings if the breast milk supply is overly abundant.

This will gradually decrease the breast milk supply by decreasing stimulation and breast milk removal from the mother's breasts, so that the breasts can calibrate down to meet the baby's needs. The mother should be informed that as the breast milk supply decreases over a period of weeks or months she may need to begin to offer both breasts at each breastfeeding.

• If the breast where the baby is not feeding becomes uncomfortably full, the mother should express just enough breast milk to relieve the pressure. It is important she understands that she should avoid expressing breast milk between breastfeedings unless absolutely necessary for her comfort.

Additional suggestions to try if the baby is still experiencing difficult . Encourage the mother to:

- Try using a position that will reduce the force of gravity on the mother's breasts to decrease the flow of breast milk and give the baby more control over the breast milk flow:
 - $^{\circ}$ side-lying
 - ° semi-reclined leaning back in a sitting position to breastfeed
 - ° lying on the her back with the baby lying face down on the mother's breast
 - ° sitting while the baby sits upright facing the mother's breast and straddling one of the mother's legs.
- Burp the baby frequently, especially if the baby is continuously gulping loudly throughout the breastfeeding.
- Try the following ideas to initiate letdown prior to a breastfeeding and to relieve the initial letdown before the baby latches:
 - Breastfeed in a quiet, relaxed place.
 - Use relaxation strategies such as a warm shower, heat applied to her back and shoulders, relaxation breathing, a warm drink, supportive positions.
 - Manage pain to support comfort and relaxation, and facilitate breast milk letdown.
 - Initiate breastfeeding before the baby is stressed and crying.
 - Clothe the baby in a diaper only to promote skin-to-skin contact.
 - Support the baby's head higher than tummy in a chest-to-chest position, with the nose approaching the mother's nipple, to facilitate the normal neonatal reflexes and selfattachment behaviours.
 - ° Gently massage her breasts.
 - Gently stimulate the nipples. Gently roll the nipples between the thumb and index finger for several minutes or until the letdown reflex occurs and breast milk leaks.
 - Express some breast milk (*Protocol #19: Expressing and Storing Breast Milk*).

- Express some breast milk first before putting the baby on the mother's breast, as the first letdown reflex is usually the most forceful (*Protocol #19: Expressing and Storing Breast Milk*). Wait to place the baby on the mother's breast until after the sprays of breast milk from the first letdown subside to drips. This may help to prevent the baby from choking on the first forceful letdown. Some mothers may continue to experience a forceful letdown throughout the breastfeeding.
- •Use relaxation breathing exercises or take an analgesic such as acetaminophen or ibuprofen, if the letdown reflex is painful. To inquire about the use of acetylsalicylic acid, i.e., aspirin, the mother should consult with her primary health care provider.

If the baby still refuses the breast after trying the above suggestions, encourage the mother to:

- Express her breasts after each time that the baby is unable to breastfeed effectively.
 - If breastfeeding is stopped for any length of time, encourage the mother to express each breast regularly in order to maintain her breast milk supply. Generally, this should be at least 8 times a day, with a minimum of 1 expression overnight, to mimic the normal feeding pattern.
- If the mother's breasts become uncomfortable or full before the next expression, she should express just enough breast milk to relieve the pressure (*Protocol #19: Expressing and Storing Breast Milk*).
- Feed the baby with expressed breast milk using an alternative feeding method, e.g., cup, spoon, syringe, finger feeding (*Protocol #18: Alternative Feeding Methods*). If expressed breast milk is not available, then an appropriate supplement should be offered (*Protocol #17: Indications for Supplementation or Cessation of Breastfeeding*).
- If the mother inquires about the use of nipple shields to manage overabundant breast milk flow, she should be supported in understanding the possible benefits and risks associated with their use. Offer further assessment and refer for further support as needed (see notes in *General Principles* of *Protocol #10: Ineffective Suck*).
- Seek assistance from a breastfeeding expert or breastfeeding clinic as soon as possible.

Between breastfeedings, encourage the mother to:

- Express just enough breast milk to relieve pressure if the mother's breasts are uncomfortably full.
- Avoid expressing breast milk unless absolutely necessary for her comfort.
- Seek assistance from a primary health care provider, breastfeeding expert or breastfeeding clinic if the above suggestions do not help with an overabundant breast milk supply/overactive letdown reflex. An evaluation for prolactinoma is recommended if the hyperlactation persists for more than 1–2 weeks.
- Hold her baby skin-to-skin, with or without attempting to have the baby latch. A baby may be so stressed trying to cope with the flow that the baby becomes disorganized. Holding the baby in a prone position on the mother's chest can help the baby to become calm and to self-regulate.

Later Phase (3-6 months)

- If the baby is refusing the mother's breast, refer to *Protocol #9: Breast Refusal or Difficulty Achieving or Maintaining a Latch.*
- If the mother is experiencing decreased breast milk supply, refer to *Protocol #12: Insufficient Breast Milk Supply*.

General Principles

Optimizing breastfeeding by following the principles of early and frequent feeding, breastfeeding when the baby is calm and showing early feeding cues, ensuring effective positioning and latching techniques, including baby-led latching and skinto-skin contact, and finishing the first breast first to promote a balanced breast milk production, can often prevent or help a mother to manage an overabundant breast milk supply or forceful letdown.

The Feedback Inhibition of Lactation (FIL) factor will reduced breast milk production to calibrate it to match the baby's needs. The amount remaining in the mother's breast represents what the baby does not need as long as the mother does not further express breast milk to drain her breast (see *How the Breast Works*). The mother should feel she needs to remove just enough breast milk for comfort, not to drain the breast.

Some mothers may produce more breast milk than is required for their babies' immediate needs. This may or may not combine with an overactive or forceful letdown reflex, causing the baby to receive too much breast milk too quickly.

A baby who gets too much breast milk too quickly may become fussy and swallow too much air as a result of struggling with the breast milk overflow. The baby may choke, cough, or struggle at the breast shortly after beginning the breastfeeding. Coping with this may exhaust the baby and the baby may even come off the breast several times during the breastfeeding. Often the mother's breast milk will spray.

An overabundant breast milk supply or forceful letdown may lead to an ineffective latch and suck pattern. The baby may be unable to obtain or maintain an effective latch. The baby may swallow enough breast milk at the beginning of the letdown reflex and may never establish a coordinated suckswallow-breathe pattern.

When latched effectively, the baby is better able to maintain the latch and manage the flow of breast milk. Supporting the baby to latch in a vertical chestto-chest position, so that the nose is approaching the nipple and the chin touches the mother's breast first, ensures that baby's head will be able to tilt back slightly. This tilt of the head will direct the flow of breast milk upward at the hard palate and not directly to the back of the throat. For an adult this might compare to experiencing difficulty swallowing when water is squirted from a hose or sports water bottle towards the back of the throat. The adult would be able to swallow more easily if the water were squirted up at the roof of the mouth.

For the baby, it means that he simply gulps from the flow and does not have to suckle, thereby not initiating the tongue movements that are an important part of the suck cycle (*Protocol #3: Signs of Effective Breastfeeding* regarding the suck cycle, and *Protocol* #2: *Positioning and Latching*).

Untreated overabundant breast milk supply/ overactive letdown reflex may lead to partial or complete breast refusal and a decreased breast milk supply at about 2–3 months after birth. Breastfeeding may have become a chronic negative experience for the baby and/or there may be cumulative effects of inadequate removal of breast milk from the breasts.

An overabundant breast milk supply and/or forceful letdown may mask a baby's weak or ineffective suck, when the baby does not need to suckle to obtain breast milk. If optimizing breastfeeding has not improved the situation, the baby should be assessed further by the primary health care provider and/or breastfeeding expert.

Explosive and watery green stools may be a sign of pseudo lactose malabsorption caused by the baby receiving too much lower fat breast milk too fast. Historically, there may have been a misunderstanding that the breast milk flowing at the start of a feeding (sometimes called foremilk) has a higher level of lactose than the later breast milk (hindmilk). In fact, the concentrations of protein and lactose remain constant throughout the breastfeeding: it is only the fat concentration that varies, rising progressively during the breastfeeding. In effect, the low-fat breast milk feedings result in rapid gastric emptying, which in turn may lead to frequent breastfeedings. A high feeding frequency means that the baby receives a higher volume of lower fat breast milk thereby, increasing the lactose load (Woolridge & Fisher, 1988).

The fat content of breast milk changes during a breastfeeding. The baby initially receives breast milk that is lower in fat and there is a disproportionate ratio of fat to lactose (milk sugar). As the breastfeeding progresses, the fat content of the breast milk increases inversely proportional to breast emptiness.

When the mother switches breasts before the baby is finished with the first breast, the baby may receive mostly lower fat breast milk at that breastfeeding. The lower fat content in the diet may cause rapid gastric emptying and too much lactose reaching the intestines too soon.

If there is not enough of the enzyme lactase in the baby's digestive system to break down and absorb this rapid loading of lactose, the baby may show symptoms of lactose malabsorption that may resemble lactose intolerance, e.g., crying, gas, and explosive watery-greenish bowel movements.

A baby who receives large amounts of lower fat, low-calorie breast milk may present with inadequate weight gain. The maximum capacity for volume may be reached before the baby is able to obtain adequate calories (Woolridge & Fisher, 1988).

A mother expressing breast milk for comfort should limit the amount to avoid stimulating the breast to produce more breast milk.

A mother with an overabundant breast milk supply/ forceful letdown reflex is more prone to recurrent plugged ducts and mastitis due to inadequate removal of breast milk from the breast.

An overabundant breast milk supply/forceful letdown reflex that is treated will usually resolve within a few days or weeks. If the above strategies have not improved the situation, Lawrence suggests that the mother should be evaluated by her health care provider for a possible prolactinoma (2011).

Block Feeding – If the overproduction of breast milk has not improved by optimizing breastfeeding management (early and frequent feeding, breastfeeding when the baby is calm and showing early feeding cues, ensuring effective positioning and latching techniques, including baby-led latching and skin-to-skin contact, and finishing the first breast first), some lactation practitioners may recommend block feeding or Full Drainage and Block Feeding (FDBF) to reduce the oversupply. This treatment sequence was originally described by van Veldhuizen-Staas (2007) and is also described by Wilson-Clay (2008). It begins with "as-complete-aspossible" mechanical drainage of both breasts (for some women, mechanical drainage may be enough). Mechanical expression is more efficient and faster than hand expression, although possibly, may not keep up with the pace of breast milk replacement. The baby, now able to latch onto the drained breast, is offered both drained breasts until satisfied. The rest of the day is divided into equal blocks of time of 3, 4, 5 or more hours. The same breast is offered without restriction throughout each time block. At the end of a time block or a multi-hour sleep, the baby will be offered the other breast for all feedings within the next time block – one breast per time block. Intervals between the blocks will gradually increase as symptoms decrease (van Veldhuizen-Staas, 2007, and Wilson-Clay, 2008).

Dysphoric Milk Ejection Reflex (D-MER – Some women experience a feeling of abrupt dysphoria or negative emotions that occurs just before breast milk release, usually continuing for no more than a few minutes. It may be related to inappropriate dopamine activity at the time of letdown, and may disappear suddenly or dissipate slowly. No research has been published yet, only case reports (Heise, A. M. Wiessinger., 2011). Lawrence advises that antidepression therapy seems to work, and some clinicians suggest herbal remedies (2011).

There is a website where mothers may connect with each other: <u>http://www.d-mer.org/Home_Page.html</u>.

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