Mastitis--Plugged Ducts and Breast Infections

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We provide articles from our publications from previous years for reference for our Leaders and members. Readers are cautioned to remember that research and medical information change over time.

A call from a mother who has mastitis can be a challenge. The mother is often distraught, very uncomfortable, and concerned about her own health as well as any potential risk of infection to her baby. Leaders who are helping a mother with mastitis need to recognize the importance of helping to resolve the immediate problem and exploring the possible causes so the mother can avoid a relapse.

What Is Mastitis?

Mastitis is the clinical term for a breast infection. Dr. Ruth Lawrence, in the 1989 edition of her book Breastfeeding: A Guide for the Medical Profession, describes mastitis as an "infectious process in the breast producing localized tenderness, redness, and heat, together with systemic reactions of fever, malaise, and sometimes nausea and vomiting." Breast infections are often preceded by plugged ducts that have gone unnoticed or untreated, or cracks in the nipple through which an infectious organism gains entrance to the breast tissue.

Dr. Helene Bertrand Cantlie describes two types of mastitis--cellulitis and adenitis. She explains that cellulitis is an infection of the connective tissue while adenitis is an infection in the milk duct. In either case, mastitis usually affects only one breast. In some cases, particularly with recurrent bouts of mastitis, a doctor may want to take a culture of the woman's milk in order to identify the offending organism and prescribe the appropriate antibiotic.

Dr. Lawrence suggests that with the "first recurrence of mastitis, cultures should be sent of the breast milk as well as from the infant's nasopharynx and oropharynx." Cultures of the breast milk "should be taken after the breast has been cleansed with water and the mother's hands have been thoroughly washed. The milk stream should be initiated by manual expression and the first three milliliters discarded to get a midstream clean-catch specimen" (Lawrence, 1989).

In addition to antibiotic therapy, most doctors agree that mastitis should be treated by continued breastfeeding on both sides. Breastfeeding "dilates the mammary blood vessels, thus improving the flow of blood to the area. The flow of milk also helps to clear milk ducts of infective organisms" (Cantlie, 1988).
Continued breastfeeding is important during a bout of mastitis because weaning would increase the mother's chances of developing a breast abscess. An abscess is more complicated to treat, often requiring surgery to drain the infection. Continued breastfeeding will not be harmful to the infant because the mother is likely to have passed on bacteria from her milk before she experiences symptoms of mastitis (Cantlie, 1988). Weaning would deprive the infant of antibodies to the bacteria that would be transmitted through the mother's milk.

The mother needs to reduce the fullness as much as possible at each feeding to ease the inflammation and expel any milk plugs that may be present. Some babies may be reluctant to breastfeed on the infected breast because of an elevated sodium content in the milk. If the baby cannot be persuaded to nurse, the mother needs to express milk to keep her breast soft.

Normally, the mother should be advised to breastfeed on the affected side first. However, some mothers find it too painful to follow that advice. They may prefer to breastfeed on the unaffected side first, then switch to the affected side after the milk has let down. Some mothers express or pump some milk from the affected side while breastfeeding on the unaffected side.

Margaret Neville and Marianne Neifert, in Lactation: Physiology, Nutrition, and Breastfeeding, say "the adage 'Flu in the breastfeeding mother is mastitis until proven otherwise' should be considered whenever malaise and fever coexist in the nursing mother" (Neville and Neifert, 1983). If a woman recognizes the signs of mastitis early enough, the following techniques can help to alleviate the problem: resting in bed, applying warm compresses, gently massaging over the affected area starting behind the soreness, and breastfeeding frequently on both sides using different positions. However, any time a lactating woman with these symptoms has a fever for more than twenty-four hours she should contact her physician because she may need antibiotics in addition to the above suggestions.

Causes of Mastitis

Basically anything that restricts the milk flow or makes the mother vulnerable to illness can cause plugged ducts and mastitis. A mother may be faced with one or more of these causes at any time throughout the breastfeeding experience:

- **Missed Feedings and Irregular Breastfeeding Patterns.** When babies begin to sleep through the night, the mother's breasts can become overfull, leading to engorgement, plugged ducts, and mastitis. When an older baby breastfeeds one night and sleeps through the next, the mother's breasts may become stimulated and then engorged, which could cause problems. In addition, when a mother's schedule becomes so busy that she misses feedings or does not breastfeed long enough, she may experience overfull or engorged breasts that can lead to problems with the milk flow.
- **Restrictive Clothing.** A bra that is too tight or clothing that applies pressure to the breasts can restrict the flow of milk. "Nursing bras should be properly fitted. The mother should lean forward when putting on a bra so that the entire breast falls in the bra cup. No breast tissue should be pinched under the edge of the cup or bra. This is especially important when wearing an underwire bra" (Gubala and Berg, 1988). Other types of clothing that can restrict milk flow and cause mastitis are heavy shoulder purses or diaper bags, baby carriers, breast pads, and tight bathing suits.

- **Pressure to Breasts.** Any activity that applies pressure to the breasts can restrict milk flow. Grasping the breast too tightly while breastfeeding can apply undue pressure to the breast. The mother sleeping on her stomach, or the baby sleeping on top of the mother, can put pressure on breast tissue. Other activities that can restrict milk flow include: exercising the upper arm excessively, jogging without a supportive bra, pushing a lawn mower or vacuum cleaner, jumping rope, raking leaves, and shoveling snow. These activities usually do not cause problems for lactating mothers. However, they should be considered when women experience recurrent mastitis.

- **Use of Artificial Nipples.** Meeting a baby's sucking needs with pacifiers or using bottles to supplement feedings can affect the way the baby suckles. Nipple shields can also affect the flow of milk through the breast and put a woman at risk for plugged ducts and mastitis.

- **Abrupt weaning can also lead to mastitis.** When a mother's milk supply is decreased slowly, as in gradual weaning, her breasts usually adjust without causing problems. However, when breastfeeding is cut back significantly over a short period of time, she is more likely to experience overfull breasts.

- **Low Resistance to Infection.** If a mother is anemic, experiencing undue stress or fatigue, or not eating well, her resistance to infection is lowered. During these times, she needs to be especially careful not to alter her normal breastfeeding patterns and put herself at risk for plugged ducts or mastitis. Also, cigarette smoking can lower a woman's resistance to infection and inhibit the milk ejection reflex (Minchin, 1991).

- **Teething.** When a baby cannot tolerate long feedings because the sucking causes pain, too much milk may remain in the mother's breasts so she may need to hand express or pump her milk.

- **Incorrect Positioning or Suckling.** When a baby is not positioned at the breast correctly or is unable to suck efficiently, the milk flow is reduced; plugged ducts and mastitis may follow. In some cases of improper positioning or suckling, the mother's nipples become sore or cracked. Painful nipples can cause a mother to avoid breastfeeding on the sore side.

- **Breast Abnormalities.** "Any surgery to the breast (biopsy, breast reduction, breast augmentation, tumor or cyst removal, and the resulting scar tissue) carries a risk of plugged ducts and breast infections. Women with fibrocystic breasts may also be at increased risk. Past injuries, such as severe bruising (as caused by the steering wheel in an auto accident) or abscess scars may pose problems" (Gubala and Berg, 1988). In very rare cases when plugged ducts or mastitis always occurs
in the same area of one breast, the mother may choose to breastfeed only from the other breast.

- **Failure to Clear a Plugged Duct.** Any time a woman has a plugged duct that is not expelled or is very slow to be absorbed into the surrounding breast tissue, she is at risk of developing mastitis.

- **Yeast Infections.** Yeast (fungus) infections in the mother or thrush in the baby’s mouth can lead to breast inflammation and possibly mastitis. A woman who treats mastitis with antibiotics and does not see improvement within twenty-four hours may want to call her doctor and request that a culture be done on her breast milk and baby’s mouth to check for the possibility of a yeast infection.

- **Employment.** Women employed outside the home need to be aware of the warning signs of mastitis, especially when they first return to work and are adjusting to the demands of work and motherhood. Separated from their babies, they need to pump regularly to avoid overfull breasts, plugged ducts, and possible mastitis. In addition, employed mothers need to schedule their days to allow adequate time to rest and care for themselves as well as their babies.

**Recurrent Mastitis**

Recurrent mastitis can be a devastating blow to a woman's breastfeeding experience. While the highly dedicated mother may struggle through many bouts of mastitis without fear of failure, trying to breastfeed while frequently experiencing sore breasts or feeling weak and ill from mastitis leaves many women questioning their commitment to breastfeeding. In addition, the mother whose milk tastes salty from the higher sodium content during a bout of mastitis may get frustrated trying to keep her baby interested in breastfeeding long enough to soften her overfull breasts.

While the list of possible causes of mastitis is too comprehensive to cover at a regular Series Meeting, Leaders who help women with chronic mastitis should take time to explore every possible cause with the mother. It may be overwhelming to discuss all the causes of mastitis in one or even two conversations with a mother. Leaders typically need to talk frequently with mothers who suffer from recurrent mastitis, perhaps calling them every few days through an illness and once a month thereafter to see if they are still facing problems.

Leaders should encourage women with recurrent mastitis to check their breasts regularly for any signs of plugged ducts and watch carefully for flu-like symptoms. At the first sign of recurrent mastitis, Leaders should emphasize the importance of going to bed and breastfeeding as frequently as possible in hopes of eliminating the problem. In addition, if a mother has mastitis that is being treated with an antibiotic, Leaders should encourage the mother to complete the full course and not discontinue the medication as soon as she begins to feel better.

Some women with chronic mastitis have been treated successfully with long-term antibiotic prophylaxis. Following the usual course of antibiotics to treat the current infection, these women have been treated with low-doses of antibiotics taken once a day.
for two or three months to prevent recurrent episodes (Hoffman and Auerbach, 1986; Cantlie, 1988).

Leaders can inform women who experience chronic plugged ducts that dietary changes may also be helpful. Dr. Lawrence recommends adding one tablespoon of lecithin a day to the diet to help women avoid recurrent plugged ducts. Some mothers find they experience fewer plugged ducts when they eliminate or at least reduce the amount of saturated fats in their diets.

La Leche League Leaders can do a great deal to help women with mastitis by providing information about the proper management of breastfeeding and helping women to avoid problems. Through their guidance, Leaders support and educate the woman who experiences mastitis.

References


Basic Treatment of Mastitis

- Frequent breastfeeding to keep breast soft.
- Apply heat and use gentle massage.
- Resting in bed if at all possible.
- Use of antibiotics if fever persists for more than 24 hours.