

# Lactation Suppression: Forgotten Aspect of Care for the Mother of a Dying Child

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In April 2001, an End-of-Life Palliative Care Protocol for Newborns was published in *Journal of Perinatology and Neonatal Network* (Catlin & Carter, 2001a & b). The protocol covers such issues as (a) definition of and need for palliative care in the NICU; (b) description of palliative care for newborns, including categories of candidates; (c) planning and education needed to begin palliative care services for newborns; (d) relationships between community and tertiary centers and palliative care; (e) essential components of optimally supporting neonatal death; (f) family care: cultural, spiritual, and practical needs; (g) ventilator withdrawal, including pain and symptom management and medications; (h) when death does not occur after cessation of life-extending interventions; (i) family follow-up care; and (j) necessary ongoing staff support. The protocol has been well accepted and the primary investigators, Dr. Brian Carter from Vanderbilt University and Anita Catlin, DNSc, FNP, have been traveling to assist facilities in the implementation of the protocol on their units.

At a recent training in Berkeley, CA, at Alta Bates Summit Medical Center, internationally board certified lactation consultant (IBCLC) Debra Busta Moore, MSN, noted an important issue was missing from the protocol. Although emotional care for the bereaved mother was listed, no mention was made of the issue of breast milk cessation or donation. Busta Moore suggested a procedure be added to the protocol to handle the milk production of a woman whose baby is dying. Whether the mother has just given birth, has a child that has lived a time in the NICU or at home, or one that is a bit older and dies unexpectedly when in the hospital for a corrective surgical procedure, supporting her with valid information on stopping breast milk production is an essential nursing concern. The following information will provide a review of what is known about milk cessation and how this ties into Busta Moore's suggestions for assisted palliative care.

In our efforts to meet the Healthy People 2010 recommendations, nationwide support for breast feeding initiatives have taken place (Hill, 2000; Tiedje, Schiffman, Omar, Wright, Buzzitta, McCann, & Metzger, 2002). About 64% of women in the United States are now breast feeding in the hospital, up from 61% in 1982 (Hill, 2000). It is uncertain how many women are encouraged to breast feed their infants

in neonatal or pediatric intensive care units. For premature infants, worldwide estimates range from 33% to 91%, with the United States in the lower range and Scandinavian countries at the higher ranges (Pinelli, Atkinson, & Saigal, 2001).

Very little information exists in the literature on lactation suppression for those women who cannot or do not breast feed. In a comprehensive educational review of alternative nutrition with bottle feeding for newborns (PBM Products, 2001), no mention is made of lactation suppression. Spitz, Lee, and Peterson (1998), in a 100-year review of the literature, found nothing new or helpful to induce milk suppression or to treat the pain or discomfort of engorged breasts. Yet a mother who has established a full milk supply through breastfeeding or pumping will need counseling on strategies to diminish her milk production. Under the tragic circumstances of a baby's death, the mother's comfort must not be overlooked (Merewood & Philipp, 2001). Abrupt cessation of breastfeeding or pumping may lead to severe engorgement, extreme pain in the breasts, and possibly to mastitis.

Suppression of lactation prior to the 1990s was done with medications that influenced the brain's directions to the breast regarding milk production, such as *parlodol* and *bromocriptine*. These were eventually found to have other brain-related side effects and taken off the market for milk cessation (Stehlin, 1990). Ice use was suggested in 1966 (Bristol, 1966), and both fluid restriction and forced fluids had time of popularity. Breast binding with ace wraps became the next form of care, with little scientific supportive evidence. A recent clinical study by Swift and Janke (2003) compared a control group using a support bra with an experimental group having their breasts bound. Swift and Janke found the women with bound breasts had more leakage, more pain, and needed more pain medication than the nonbound group. A study by a group of nurses in Sweden (Radestad, Nordin, Steineck, & Sjogren, 1998) did find that for women who had lost a baby, breast binding served as a concrete reality of the loss and aided in the grieving process. The use of cabbage leaves has often been suggested to ease the pain of lactation suppression. Several early reports indicated comfort to mothers, and this is a frequently recommended practice. Yet in a Cochrane Library examination of evidence (Snowden, Renfrew, & Woolridge, 2003), cabbage leaves and other vegetable substances on the breast did not show greater comfort than the placebos. It was suggested that placement of the leaves on the breast and the massage of placement may be the helpful issue. The same results of improvement equal to the placebo occurred for the use of ultra sound to the breasts. Prevention of engorgement was recommended.

Engorgement, however, does play a function in rapidly stopping milk production. Accumulation of milk that results in engorgement creates a chain of events that lead to cessation of the lactation process. If the breasts remain in an engorged state, a protein called feedback inhibitor of lactation (FIL) accumulates in the mammary gland. This protein, along with reduced capillary blood flow and involution of the milk secreting gland, leads to suppression of milk produc-

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tion (Walker, 2000). Although engorgement is the stimulus for stopping lactation quickly, *painful* engorgement is not required and can be avoided by the following protocol.

Removing just enough milk to reduce the pressure in the breasts, but not enough to empty them, will gradually diminish milk production without excessive discomfort for the mother. The frequency and duration of pumping will vary from one woman to another, depending on the amount of milk she is producing, the frequency of emptying her breasts, and the length of time since the birth of her baby. Unless the mother is experienced with manual expression, she should be provided with a good quality breast pump (Biancuzzo, 1999). Every effort should be made to secure a breast pump promptly, as any delay will result in additional pain. A well fitting bra will provide needed support to heavy breasts. The mother will pump to comfort and gradually go longer between expressions and pump for shorter periods. A typical schedule for the mother who has been pumping or feeding approximately every 3 hours might be:

- Day 1, pump for 5 minutes every 4-5 hours
  - Day 2, pump every 6 hours for 3-5 minutes
  - Day 3-7, pump just long enough to relieve discomfort
- In addition:
- Warm showers will help induce milk leakage and reduce pressure
  - Ice packs or cold cabbage leaves inside the bra will decrease local pain and swelling
  - Ibuprofen or acetaminophen can be helpful for pain relief
  - Continuous support should be provided for a family that is suffering an unanticipated loss or loss of a desired child
  - Certain physiological issues should be explained to the woman. It is normal for drops of milk to be present in the breasts for weeks or even months after breastfeeding and/or pumping is discontinued. Uterine cramping and bleeding may occur as the breasts are emptied. The hospital unit should have peripads available to assist the mother who may still have lochia being expelled.

Each mother should be made aware of her options. A woman who chooses not to pump her breasts, either for personal or practical reasons, should wear a well fitting bra and may use the other comfort measures as described. The mother who knows that her baby is likely to die within a day or two after the birth and does not stimulate her breasts may or may not produce enough milk to cause engorgement. She should, however, be given anticipatory guidance. Occasionally, a dying baby may still be able to breastfeed. This option should also be offered to the family when the baby might be capable and the mother would like to do so.

A woman who has a large amount of milk, either in storage or in production, may donate milk to a milk bank. Women with dying infants may wish to continue to pump in order to help other infants. Throughout the world, donor milk banks are well accepted. In the United States, they may be considered more like alternative medicine (Arnold, 2001). There is a Human Milk Banking Association in the United States. In 1999, there were 332,700 ounces of milk processed in seven banks and three new banks opened (Tully, 2000). Donor milk is used for infants with HIV-AIDS, adopted infants, infants with feeding intolerance or growth failure on formula, infants whose mothers are on chemotherapy (Tully, 2000), mothers with active tuberculosis, or mothers without breast tissue from surgery or radiation (PBM, 2001). In the United States, screening of breast milk is conducted (Tully, 2000; Tully, Jones, Tully, 2001). Of 770 potential donors in the year 2000, initial screening was positive for 4 mothers with various hepatitis antigens, which proved negative for disease on follow up. Pasteurization at

62.5 degrees centigrade for 30 minutes is recommended (Tully et al., 2001; Wight, 2001) to eliminate risks of transmission of viral and bacterial infectious agents. Pasteurization does not affect the transfer of immunoglobins, enzymes, hormones, and growth factor. Donor milk is often recommended for necrotizing enterocolitis and sepsis. Donation of milk may help the grieving mother to find some meaning in the experience of her baby's death.

Provision of culturally-sensitive emotional and spiritual support have been well documented and have been incorporated into the practice of all nurses who support women with dying infants (MCN, 2001). This article serves as a reminder to consider, too, the physical needs of the previously breastfeeding woman who has lost a child.

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