Nipple Pain in the Postpartum Period

A Common Midwifery Problem StudentH Autumn 2012

Definition

- Often defined by the quality, characteristics, and duration of the pain.
- Two types of nipple pain have been described:
 - Transient Soreness:
 - Discomfort that occurs during the first week postpartum,
 - Usually peaking at day 3-6 and resolving after that.
 - Discomfort occurs as the baby latches on to and draws breast into her mouth.
 - ∩ Lasts 20-30 seconds
 - Prolonged, abnormal pain:
 - Pain that persists unabated.
 - "Sore nipple" does not accurately describe severe nature of pain.

Population Affected

- Breastfeeding Mothers!
- First-time mothers are more likely to have early nipple pain.
- Other factors that can predispose women to experiencing nipple pain include:
 - Newborn tongue-tie (ankyloglossia)
 - Anatomic variations of infants oral space.
 - High or "bubble -shaped" palate
 - Anatomic variations of maternal nipple size or elasticity
 - Very large or fibrous nipple
 - Retracted or inverted nipples

Prevalence/Incidence

- Nipple pain is the second most common reason for early weaning.
 - May be unavoidable! Normal neonatal suckling can induce skin damage and inflammation to the nipple.
 - 96% of women in a study of 100 breastfeeding mothers experienced sore nipples during the first week, with the majority reaching pain ratings of moderate to intense.
 - Normal in the first week postpartum, usually peaking between days three and six (Tait, 2000).
 - Nipple pain has been reported to last up to six weeks postpartum (Morland-Schultz & Hill, 2005).

Signs and Symptoms

• Quality of pain:

• Stinging, itching, burning, stabbing, aching, sharp, dull, excruciating

• Timing of pain:

- Starts as baby latches onto and draws breast into mouth.
- Can occur throughout the feed, after the feed, and persist/occur between feeds
- Duration of pain:
 - Transient (Considered normal): lasts 20-30 seconds after latch on.
 - Prolonged (Considered abnormal): Pain that persists

Signs & Symptoms Cont.

- Other S/Sx that women may complain of:
 - Malformed nipple post-feed
 - Traumatized, chapped, sore, bleeding, edematous, erythemic, blistered nipples that may or may not have fissures and eschar present (Morland-Schultz & Hill, 2005).
 - Signs of yeast infection: Burning, shooting, stabbing pain that radiates from nipple through breast to chest wall (Heller, Fuller- Stone, & Murase, 2012).
- Nipple pain may occur simultaneously with complaints related to milk stasis/engorgement/plugged duct since poor latch often leads to inadequate milk transfer:
 - Breast tenderness, heat and redness in one area of breast, palpable lump
 - If mastitis develops, fatigue, localized breast tenderness, headache, flulike muscle aches, and fever (Riordan & Wambach, 2010).

Screening: ROS

- Other important questions providers need to ask:
 - Have they seen a lactation consultant?
 - Personal history of atopic dermatitis or psoriasis?
 - What detergents, soaps, or topical substances are they using?
 - Cold sensitivities in Winter months, vasoconstriction of hands and feet with cold exposure, changes in color of nipple?
 - Fever or chills? History of infant oral thrush
 - Cotton bra that is appropriate fit?
 - Type of nursing pads used?

Assessment

- Physical Exam of Mother and Baby
 - Mother:
 - Breast: Engorged? Focal erythema? Tenderness? Plugged ducts?
 - Nipple: Intact? Inverted? Malformed? Erosions, Desquamation? Vesicles? Furrows?
 - Skin: scalp and nails; evidence of atopic dermatitis or psoriasis?
 - Baby:
 - Mouth: Anatomical variations of palate? Tongue-tie? Oral thrush?

Assessing the Nursing Dyad

• Important to observe Mother and baby to see:

- How well baby roots, latches on, suckles;
- Position of the baby at the breast;
- Maternal comfort level during the entire interaction.
- Objective tools can facilitate this assessment and generate meaningful communication:
 - The Infant Breastfeeding Assessment Tool
 - Systematic Assessment of the Infant at Breast
 - The Mother-Baby Assessment
 - LATCH Assessment
 - Lactation Assessment Tool
 - Mother-Infant Breastfeeding Progress Tool.

Breastfeeding Assessment

Behavior to Assess	Criteria	Rationale
Rooting	Searches with mouth and face, turns face toward breast	Readiness to feed; intact nerve responses
Angle of gape	120-160 degree angle of jaw	Allows deep latch
Shape of cheeks	Full and rounded; no dimpling or puckering	Normal pressures in mouth
Tongue placement	Under the tongue, extends past lower gum ridge, may extend past lower lip	When tongue is down, milk flows comfortably and well
Audible swallows	Quiet "ta" sound every suck or every few sucks	No clicks, slurps, smacking that indicate loss of seal. (Riordan & Wambach, 2010)

Breastfeeding Assessment

Behavior to Assess	Criteria	Rationale
Mouth "sealed" on breast	Tongue cupped around breast; lips flanged; can't easily pull off	Seal indicates adequate intraoral pressures for milk flow
Smooth rhythm of suckle/swallow/breath	Long bursts of sucking with swallows and breathing; short pauses	Coordination needed for adequate intake
Comfortable nipple and breast	May feel nipple extend and stretch; no pain or pinching	Pain indicates poor latch or other problem
Nipples shape postfeed	Same shape as before feed; wet	Distortion indicates poor latch or suck
Breast fullness postfeed	Softer after feed than before; may not be "empty"	No change in fullness indicates lack of milk transfer (Riordan & Wambach, 2010)

Differential Diagnosis

- Mechanical irritation from problems with infant attachment to the nipple or congenital anomalies of the mouth.
- Plugged lactiferous ducts; Yeast infections; Bacterial infections
- Psoriasis; Atopic dermatitis
- Irritant contact dermatitis; Allergic contact dermatitis
- Herpes Simplex Virus
- Vasospasm/Raynaud's phenomenon of the nipple

Management

- Main goals are three-fold:
 - Identify and correcting underlying cause
 - Manage pain
 - Expediting healing
- General pain management strategies include:
 - Feed on less painful side first
 - Place nipple shield over nipple
 - Wear breast shells between feeds to protect wounded skin from clothing
 - Air-blocking products such as lanolin or hydrogels
 - Warm water compresses
 - Ibuprofen 400 mg every 4 hours

Tx of Mechanical Irritation

- Important to remember that most early nipple pain is mechanical in origin and therefore can be addressed by helping to ensure proper positioning and attachment. If due to congenital oral anomaly then surgery may be preferred method for improving latch.
- First strategy is to release baby from breast and start over. Some or all of the following strategies may apply:
 - Put baby skin to skin
 - Allow for self-attachment
 - Hold baby in different positions (vertically, horizontally, or at 45 degree angle) and ensure that breast is positioned deep in baby's mouth.
 - Hold baby high on mother's chest with entire body facing mother and ears, shoulders, and hips in alignment.
 - Ensure infants mouth is open wide before latch on
 - Position nipple asymmetrically in middle top half of infant's mouth
 - Gently press on baby's chin to pull it downward and make sure lips are flanged outward.

Midwifery Management

• Role of midwife

- Do not just rely on nurses or other staff to address breastfeeding issues. Be sure to assess breastfeeding at hospital discharge and at all postpartum visits (Strong, 2011).
- Midwife model of care naturally fits with evidence of what women want from postpartum breastfeeding support
 - Acknowledgement and validation of experiences and emotions (Gaffy & Taylor, 2005).
 - Increased sensitivity to the meaning and significance of breastfeeding to maternal self-esteem and perceived ability to mother (Nelson, 2006).
 - Reassurance and encouragement (Gaffy & Taylor, 2005; Larson et al., 2008)
 - Empowerment and facilitative approach in teaching (The Joanna Briggs Institute, 2012).

Midwifery Management Cont.

• Implications of nipple pain on breastfeeding success

- Most pain is associated with poor latch, which can quickly lead to inadequate infant milk intake and milk retention in breast, ultimately resulting in mammary involution (Riordan & Wambach, 2010).
- Pain can also interfere with milk-ejection reflex.
- Pain is physiological and psychological stressor highly associated with depression. Nipple pain is associated with increased depression scores (McClellan et al., 2012).
- Importance of Referrals: Don't have to be able to do it all, but don't dismiss it either! Help her get help!
 - Lactation consultants may be more experienced in assessing breastfeeding and latch problems.
 - Pediatrician if concern of congenital oral anomalies
 - O Dermatologists if concerned about dermatitis, psoriasis (Tait, 2000).

Controversy

- No one topical agent showed superior results in the relief of nipple discomfort (Morland-Schultz & Hill, 2005).
- Are nipple treatments harmless even if they cannot be proven effective?
- Should we discourage the use of ointments and creams due to lack of evidence supporting their benefit, or are they an important form of cultural nurturing, or "mothering the mother?" (Riordan & Wambach, 2010)

- Heller, M., Fullerton-Stone, H., & Murase, J. (2012). Caring for new mothers: diagnosis, management, and treatment of nipple dermatitis in breastfeeding mothers. *International Journal of Dermatology*, 51, 1149-1161. Retrieved from <u>www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu</u>
 - This review contains a detailed discussion on the clinical evaluation and management of common causes of nipple dermatitis during lactation. It contains pertinent background information, a sample history intake forms, differential diagnosis and key clinical features of various causes, and management plans. While it's target audience is dermatologists, it is a great clinical resource for all primary care providers. In addition to traditional treatments, it also includes some CAM therapies.

- McClellan, H., Hepworth, A., Garbin, C., Rowan, M., Deacon, J., Hartmann, P., & Geddes, T. (2012). Nipple pain during breastfeeding with or without visible trauma. *Journal of Human Lactation*, 28, 511-521. doi: 10.1177/089033441244464
 - The purpose of this retrospective, descriptive study was to investigate and compare the pain experienced by breastfeeding women by measuring the type, effect, and severity of the pain using the McGill Pain Questionnaire, Brief Pain Inventory, and Visual Analogue Scale. The results showed that nipple pain has far reaching ramifications and they conclude that more research is needed into the causes of nipple pain in order to implement effective interventions. They also suggest that detailed pain assessments may assist in evaluating whether or not a particular intervention is successful.

- Morland-Schultz, K., & Hill, P. (2005). Prevention and therapies for nipple pain: a systematic review. Journal of Obstetric, Gynecologic and Neonatal Nursing, 34, 428-437. doi: 10.1177/0884217505276056
 - This systematic review included 11 studies from 1983-2004 that examined the prevention and treatment of nipple pain and trauma. It contains a thorough background section that includes information on incidence and duration, theoretical causes, prenatal preparation, and infant sucking. The studies reviewed examined numerous different prevention and treatment therapies, including many CAM options such as black tea bags, Vit A ointment, warm water compress, and lanolin. The review concluded that no one topical agent is superior, and that emphasis needs to be placed on education of positioning and latch on techniques.

- Strong, G. (2011). Provider management and support for breastfeeding pain. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 40, 753-764. doi: 10.1111/j 1552-6909.2011.01303.x
 - This retrospective, descriptive of study aimed to describe the pain reported by a convenience sample of 117 breastfeeding women during the first year postpartum and the management of the pain as recorded in the medical records. The study found what they assessed to be inadequate breastfeeding support and management, and that non-evidence based recommendations were routinely practiced, and that providers most often used prescription medication to treat the problem. They conclude that primary care providers and other health care professionals can impact breastfeeding positively by adopting evidence-based practice guidelines.

 Tait, P. (2000). Nipple pain in breastfeeding women: causes, treatment, and prevention strategies. Journal of Midwifery & Women's Health, 45, 212-215. Retrieved from

www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu

• This review article describes problems and conditions that may lead to nipple to pain, signs and symptoms of these various causes, diagnosis and treatment plans, and comfort measures. It includes detailed sections of anatomic factors, infectious factors, prevention, treatment, and healing strategies.

Additional References

- Gaffy, J., & Taylor, J. (2005). What information, advice, and support do women want with breastfeeding? *BIRTH*, *3*, 179-186. Retrieved from <u>www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu</u>
- Hill, P., & Johnson, T. (2007). Assessment of breastfeeding and infant growth. Journal of Midwifery & Women's Health, 52, 571-578. doi: 10.1016/j.jmwh.2007.07.009
- The Joanna Briggs Institute. (2012). Best practice information sheet: women's perceptions and experiences of breastfeeding support. Nursing and Health Sciences, 14, 133-135. Retrieved from www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu
- Nelson, A. (2006). A metasynthesis of qualitative breastfeeding studies. Journal of Midwifery & Women's Health, 51, e13-e20. Retrieved from www.ncbi.nlm.nih.gov.offcampus.lib.washington.edu
- Riordan, J., & Wambach, K. (2010). Breastfeeding and Human Lactation. Sudburry, MA: Jones and Bartlett Publishers.