**Success in Early Postpartum:
Causes and Current Evidence Based Practices for Sore Nipples, Thrush, Edema, Engorgement, Mastitis and Plugged Ducts**

Laurel Wilson, BS, IBCLC, CLE, CLD, CCCE

info@motherjourney.com, [www.motherjourney.com](http://www.motherjourney.com)

Research shows that many mothers are afraid of experiencing pain in breastfeeding due to two common challenges, sore nipples and engorgement. Even more concerning is the fact that many women shorten their duration of breastfeeding due to these common issues. In fact, some practitioners still believe (and counsel new moms) that sore nipples and engorgement are a normal part of breastfeeding. Many women also experience early lactation challenges due to plugged ducts, mastitis, and thrush. Current strategies to minimize the risk, as well as manage treatment are not grounded in current evidence. Discover what the latest meta-analysis and research says about how to prevent and treat these early breastfeeding issues and begin to implement practices that really work to keep the motherbaby dyad breastfeeding longer and more comfortably.

**References:**

Abou-Dakn, M., Fluhr, J. W., Gensch, M., & Wockel, A. (2011). Positive effect of HPA lanolin versus expressed breastmilk on painful and damaged nipples during lactation. Skin Pharmacology and Physiology, 24, 27–35.

Adriano, Marrazzu et al. Breastfeeding Medicine. June 2015, 10(5): 232-238. doi:10.1089/bfm.2014.0177.

Ahn, Sukhee, et al. Effects of Breast Massage on Breast Pain, Breast-milk Sodium, and Newborn Suckling in Early Postpartum Mothers. J Korean Acad Nurs. 2011 Aug;41(4):451-459.

Akkuzu, G., & Taskin, L. (2000). Impacts of breast-care techniques on prevention of possible postpartum nipple problems. Professional Care of Mother and Child, 10, 38–41.

Alexander, A., Dowling, D., & Furman, L. (2010). What do pregnant low-income women say about breastfeeding? Breastfeeding Medicine, 5, 17–23.

Allerberger, F. & Wager, M. 2010. Listeriosis: a resurgent foodborne infection. Clinical Microbiology and Infectious Diseases, 16, 16-23.

Anderson, J. E., Held, N., & Wright, K. (2004). Raynaud’s phenomenon of the nipple: A treatable cause of painful breastfeeding. Pediatrics, 113, e360–e364.

Barankin, B., & Gross, M. S. (2004). Nipple and areolar eczema in the breastfeeding woman. Journal of Cutaneous Medicine and Surgery, 8, 126–130.

Berry, Janet et al. Breastfeeding Medicine. June 2012, 7(3): 189-193. doi:10.1089/bfm.2011.0030.

Blair, A., Cadwell, K., Turner-Maffei, C., & Brimdyr, K. (2003). The relationship between positioning, the breastfeeding dynamic, the latching process and pain in breastfeeding mothers with sore nipples. Breastfeeding Review, 11, 5–10.

Bolman, Maya et al. Recapturing the Art of Therapeutic Breast Massage During Breastfeeding. Journal of Human Lactation. August 2013. 29(3). Pp 328-331.

Brent N, Rudy S, Redd B, Rudy T, Roth L. Sore nipples in breastfeeding women: A clinical trial of wound dressings versus conventional care. Archives of Pediatrics and Adolescent Medicine. 1998;152:1077–1082. [[PubMed](http://www.ncbi.nlm.nih.gov/pubmed/9811284%22%20%5Ct%20%22_blank)]

Buchko, B. L., Pugh, L. C., Bishop, B. A., Cochran, J. F., Smith, L. R., & Lerew, D. J. (1994). Comfort measures in breastfeeding, primiparous women. Journal of Obstetric, Gynecologic and Neonatal Nursing, 23, 46–52.

Buck, Miranda et al. Topical Treatments Used by Breastfeeding Women to Treat Sore and Damaged Nipples. [Clinical Lactation](http://www.ingentaconnect.com/content/springer/clac;jsessionid=2fwwkjgahasm5.alexandra), Volume 6, Number 1, 2015, pp. 16-23(8).

Buryk, M., Bloom, D., & Shope, T. (2011). Efficacy of neonatal release of ankyloglossia: A randomized trial. Pediatrics, 128, 280–288.

Centers for Disease Control and Prevention. Listeriosis. Available from: [www.cdc.gov/listeria/index.html](http://www.cdc.gov/listeria/index.html). Accessed 12/3/2013.

Chapman, Donna. Evaluating the Evidence: Is There an Effective Treatment for Breast Engorgement. Journal of Human Lactation. February 2011. 27(1). Pp. 82-83.

Chiu, Jin-Yu et al. Effects of Gua-Sha Therapy on Breast Engorgement: A Randomized Controlled Trial. Journal of Nursing Research. March 2010. 18(1). Pp 1-10.

Coca, K. P., & Abrao, A. C. F. V. (2008). An evaluation of the effect of lanolin in healing nipple injuries. Acta Paulista de Enfermagem, 21, 11–16.

Cotterman, Jean. Reverse Pressure Softening: A Simple Tool to Prepare Areola for Easier Latching During Engorgement. Journal of Human Lactation. May 2004. 20(2):227-237.

Darmangeat, V. (2011). The frequency and resolution of nipple pain when latch is improved in a private practice. Clinical Lactation, 2(3), 22–24.

Dennis, CL. An All-Purpose Nipple Ointment Versus Lanolin in Treating Painful Damaged Nipples in Breastfeeding Women: A Randomized Controlled Trial.Breastfeeding Medicine. December 2012, 7(6): 473-479. doi:10.1089/bfm.2011.0121.

Dennis CL, Jackson K, Watson J. Interventions for treating painful nipples among breastfeeding women. Cochrane Database of Systematic Reviews 2014, Issue 12. Art. No.: CD007366. DOI: 10.1002/14651858.CD007366.pub2.

Dollberg, S., Botzer, E., Grunis, E., & Mimouni, F. B. (2006). Immediate nipple pain relief after frenotomy in breastfed

infants with ankyloglossia: A randomized, prospective study. Journal of Pediatric Surgery, 41, 1598–1600.

Eglash A, Plane MB, Mundt M. History, physical and laboratory findings, and clinical outcomes of lactating women treated with antibiotics for chronic breast and/or nipple pain. J Hum Lact 2006;22:429–433.

Graves S, Wright W, Harman R, et al. Painful nipples in nursing mothers: Fungal or staphylococal?: A preliminary study. Aust Fam Physician 2003;32:570–571.

Ito, Y. Does frenotomy improve breast-feeding difficulties in infants with ankyloglossia? *Pediatr. Int.* **2014**, *56*, 497–505.

Hale TW, Bateman TL, Finkelman MA, et al. The absence of Candida albicans in milk samples of women with clin- ical symptoms of ductal candidiasis. Breastfeed Med 2009; 4:57–61.

Kent, Jacqueline et al. Nipple Pain in Breastfeeding Mothers: Incedence, Cause and Treatments. *Int. J. Environ. Res. Public Health* **2015**, *12*(10), 12247-12263; doi:[10.3390/ijerph121012247](http://dx.doi.org/10.3390/ijerph121012247)

Kim, H. S., Noh, S. U., Han, Y. W., Kim, K. M., Kang, H., Kim, H. O., & Park, Y. M. (2009). Therapeutic effects of topical application of ozone on acute cutaneous wound healing. *Journal of Korean Medical Science*, *24*, 368–374.

Mangesi, Lindeka et al. Treatments for breast engorgements during lactation. Cochrane Library. September 2010.

Merckoll, P., Jonassen, T. O., Vad, M. E., Jeansson, S. L., & Melby, K. K. (2009). Bacteria, biofilm and honey: A study of the effects of honey on ‘planktonic’ and biofilm-embedded wound bacteria. *Scandinavian Journal of Infectious Diseases*, *41*, 341–347.

Mohammadzadeh, A., Farhat, A., & Esmaeily, H. (2005). The effect of breast milk and lanolin on sore nipples. Saudi Medical Journal, 26, 1231–1234.

Moorhead, Anita M; Amir, Lisa H; O'Brien, Paul W and Wong, Swee. A prospective study of fluconazole treatment for breast and nipple thrush [online]. Breastfeeding Review, Vol. 19, No. 3, Dec 2011: 25-29.

Morland-Schultz K, Hill PD. Prevention of and therapues for nipple pain: a systematic review. J Obstet Gynecol Neonatal Nurs. July – Aug 2005; 34(4): 428-37.

Morrill, J. F., Heinig, M. J., Pappagianis, D., & Dewey, K. G. (2004). Diagnostic value of signs and symptoms of mammary candidiosis among lactating women. Journal of Human Lactation, 20, 288–295.

Murimi, M., Dodge, C. M., Pope, J., & Erickson, D. (2010). Factors that influence breastfeeding decisions among Special Supplemental Nutrition Program for Women, Infants, and Children participants from central Louisiana. Journal of the American Dietetic Association, 110, 624–627.

O’Sullivan, S., & Keith, M. P. (2011). Raynaud phenomenon of the nipple: A rare finding in rheumatology clinic. Journal of Clinical Rheumatology, 17, 371–372.

Page, Tamara et al. The Management of Nipple Pain and/or Trauma Associated with Breastfeeding. Joanna Briggs Institute; Best Practice. 2009; 13940:1-4.

Panjaitan, M., Amir, L. H., Costs, A.-M., Rudland, E., & Tabrizi, S. (2008). Polymerase chain reaction in detection of Candida albicans for confirmation of clinical diagnosis of nipple thrush. Breastfeeding Medicine, 3, 185–187.

Polin, Richard. Fetal and Neonatal Physiology, 4th Edition. Elsevier Press.

Pugh, L. C., Buchko, B. L., Bishop, B. A., Cochran, J. F., Smith, L. R., & Lerew, D. J. (1996). A comparison of topical agents to relieve nipple pain and enhance breastfeeding. Birth, 23, 88–93.

Robson, V., Dodd, S., & Thomas, S. (2009). Standardized antibacterial honey (Medihoney) with standard therapy in wound care: Randomized clinical trial. *Journal of Advanced Nursing*, *65*, 565–575.

Sakazaki, F., Kataoka, H., Okuno, T., Ueno, H., Semma, M., Ichikawa, A., & Nakamuro, K. (2007). Ozonated olive oil enhances the growth of granulation tissue in a mouse model of pressure ulcer. *Ozone: Science & Engineering*, *29*, 503–507.

Sankanagoudar, Poomima et al. Effect of Therapeutic Non-Thermal Ultrasound on Postpartum Symptomatic Breast Engorgement. Indian Journal of Physiotherapy and Occupational Therapy. 2011. 5(2). Pp 108-113.

Sayyah, M. M., Rashidi, M. R., Delazar, A., Madarek, E., Kargar Maher, M. H., Ghasemzadeh, A., Tahmasebi, Z. (2007). Effect of peppermint water on prevention of nipple cracks in lactating primiparous women: A randomized controlled trial. International Breastfeeding Journal, 2, 7.

Schwartz K, D’Arcy H, Gillespie B, et al. Factors associated with weaning in the first 3 months postpartum. J Fam Pract 2002;51:439–444.

Snyder, J.B. Bubble palate and failure to thrive: A case report. *J. Hum. Lact.* **1997**, *13*, 139–143.

Walker, Marsha. Are There Any Cures for Sore Nipples? Clinical Lactation, 4(3), pp. 106-115, 2013.

Watson Genna, C. (2013). Supporting sucking skills in breastfeeding infants. Burlington, MA: Jones & Bartlett Learning.

Witt, Ann et al. Role of Oral Antibiotics in Treatment of Breastfeeding Women with Chronic Breast Pain Who Fail Conservative Therapy. Breastfeeding Medicine. 2014. Vol 9: No. 2. DOI: 10.1089/bfm.2013.0093

Wong, BB et al. The effectiveness of cabbage leaf application (treatment) on pain and hardness in breast engorgement and its effect on the duration of breastfeeding. Joanna Briggs Institute. 2012. 10(20).

Wu, M., Chason, R., & Wong, M. (2012). Raynaud’s phenomenon of the nipple. Obstetrics and Gynecology, 119, 447–449.

Ziemer, M. M., Paone, J. P., Schupay, J., & Cole, E. (1990). Methods to prevent and manage nipple pain in breastfeeding women. Western Journal of Nursing Research, 12, 732–744.

Zhou, Yingfeng. Prevention of Breast Engorgement Among Postpartum Women in an Obstetric and Gynecological Hospital: A Best Practice Implementation Project. Joanna Briggs Institute. 2013. 11(6).