

Overcoming challenges faced by breastfeeding mothers



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Background

Women who are breastfeeding often consult their general practitioner (GP) with concerns about nipple and breast pain, or the adequacy of their milk supply. Common concerns for their breastfed infant include slow weight gain, 'fussiness' with breastfeeding and 'funny stools'.

Objectives

This article offers suggestions for clinicians to support breastfeeding women and their infants.

Discussion

Good attachment to the breast is important to reduce nipple pain and trauma, and to ensure adequate breast drainage and ongoing milk supply. Other causes of nipple pain include vasospasm, dermatitis and infection. Breast pain may be due to blocked ducts, mastitis or abscess. Very early mastitis may be treated by improved emptying. Slow weight gain in a breastfed infant may indicate a medical problem or low supply of breast milk. Some infants have breastfeeding challenges because they are small or premature, or from anatomical issues affecting feeding. In such cases, further help from a lactation consultant may be beneficial.

The postpartum period is a time when new mothers and their infants attend general practices frequently.¹ Breastfeeding rates are high in the early weeks,² yet many women seek help while they are learning this new skill. General practitioners (GPs) can provide support to families while they manage the common concerns and diseases related to breastfeeding and the young infant.

Maternal factors

Nipple pain from breast attachment

Many new mothers experience sore or damaged nipples in the early days and weeks of breastfeeding. The best way to minimise pain and damage is to help mothers learn how to attach the infant to the breast. There is no one correct way to do this, and many mothers complain of feeling confused by the wide range of advice given by health professionals. Every baby-mother dyad is unique; no two mouth and nipple shape pairings are the same, even between twins. The general principles are that the infant should be close to the mother's body and take a wide mouthful of breast.

Here is one useful method:

- The mother should be sitting comfortably, preferably in a chair where she can lean backwards. She should be encouraged to wriggle forward in the chair, and then lean back, adopting a semi-reclining, 'deck chair' position. Her feet should be on the ground, back supported and shoulders relaxed down (Figure 1). This is the opposite of the commonly seen posture of a woman leaning hunched over the infant with one hand holding the infant's head or neck and the other holding her breast.
- The infant should be lying across the mother's body, with the nose lined up with the mother's nipple.
- Bring the infant's chin towards the breast and wait for their mouth to open wide.
- The infant's head should be tilted slightly back in a 'drinking position' as they are brought to the breast (Figure 2).
- The mother supports the infant across the back with her arm, not gripping the head or neck.



Figure 1. Comfortable breastfeeding position



Figure 2. Infant well attached to the breast

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- If the infant's chin is touching the breast and the mother brings the infant's bottom in close with her hand, the infant's nose will be free.

Sometimes, anatomy prevents comfortable attachment. For example, the mother's nipples may be flat or inverted, or the infant's tongue movement may be restricted.³ If improving positioning and attachment does not relieve pain, it may be necessary to express the breasts, by hand or pump, to maintain milk supply while allowing the nipples to heal. The breasts need to be expressed every three hours or so. Short-term use of nipple shields may help. Although the evidence does not indicate that using creams accelerates nipple healing,⁴ mothers often find it soothing to apply a purified lanolin cream. Hydrogel dressings

provide some relief, although it is not clear if they aid wound healing on the nipple.

Nipple infection

When the nipple is damaged and purulent exudate is visible, a bacterial infection is likely. Swabbing is not usually necessary. Mupirocin ointment is effective against *Staphylococcus aureus* and can be applied three times a day after feeds.⁵

When nipple pain is persistent and occurs constantly, not just on attachment, *Candida* infection may be considered. The areola usually appears pink and may be associated with radiating breast pain. Characteristically, nipple thrush occurs after a course of antibiotics in women who are prone to vaginal thrush. Treatment regimens are varied.⁶ Burning pain is non-specific and the differential diagnoses include nipple trauma and vasospasm.

Rarely, a *Herpes simplex* infection presents as an isolated, extremely painful vesicular eruption that develops into sores on the nipple and areola.⁷ This can be confirmed by *Herpes* polymerase chain reaction (PCR). The infant should not breastfeed or drink expressed milk from the affected side until the sores have healed.

Nipple vasospasm

Another cause of radiating nipple and breast pain is vasospasm (or Raynaud's phenomenon of the nipple). Women typically experience pain when the temperature drops, and may notice that the nipple tip becomes white or sometimes purple in the cold. Most women with nipple vasospasm can manage by keeping their nipples warm, wearing heat packs or insulated breast pads and taking a magnesium supplement (up to 600 g).^{8,9}

A minority of women who have significant vasospasm pain may require medication to relieve the pain. If required, nifedipine can be used, starting with a low dose (20 mg slow release daily) and monitoring closely for adverse effects.¹⁰

Nipple eczema/dermatitis

Nipple atopic eczema or contact dermatitis usually occurs in mothers feeding slightly older infants, often around six months of age. Women describe a red, itchy rash that tends to spread, but with a definite edge. It is safe and effective to prescribe a strong steroid, such as mometasone ointment daily, with instructions to apply thinly after the infant has had a feed, for up to 10 days.¹¹ If a rash is crusty or weepy, a secondary bacterial infection is likely and should be treated as well. If the rash does not respond, the rare breast cancer, Paget's disease, should be considered.^{11,12}

Persistent pain

Persistent pain with breastfeeding can be complex and multifactorial. Clinicians should consider management of mechanical influences, such as poor latching or ongoing

pump use and central nervous system modulation mediated by cognitive and social states, and predisposing factors, as described in the *Breastfeeding pain reasoning model*.⁵

Blocked ducts

Some women develop recurrent blocked ducts – lumps occurring within the breast, but without fever or the systemic symptoms of mastitis. These are usually caused by poor drainage of milk and it is worthwhile spending time to address the possible causes (eg tight clothing, pressure from a hand or a seat belt, sleeping on the stomach). Blocked ducts may occur after longer than usual breaks between breastfeeding, or expression or excessive arm exercise. Sometimes a blockage on the nipple tip (visible as a white spot) is responsible for the obstruction. The blister can be lifted with a needle tip or, if persistent, a daily dab of steroid ointment (eg mometasone) covered with plastic wrap to increase absorption could be tried.¹³

Mastitis

In mastitis, a segment of the breast is red, swollen and tender, and there is concurrent fever, myalgia, shaking, headache and nausea. If recognised very early, mastitis can be managed by increasing milk drainage from the breast (eg increasing feeds and/or expressing), applying heat before a feed and cold packs after a feed. Very gentle massage of the affected area during feeding may help. Analgesia, such as an oral nonsteroidal anti-inflammatory drugs (NSAIDs), is recommended.¹⁴

If symptoms persist for longer than 24 hours, if the woman is unwell, or if the nipple is obviously damaged and a portal for bacteria, an anti-staphylococcal antibiotic such as flucloxacillin or cephalexin (500 mg qid) should be commenced.^{15,16} If the woman does not respond within 48 hours, consider admitting her to hospital for intravenous antibiotics, and sending a sample of the milk for culture to rule out a methicillin-resistant *Staphylococcus aureus*.¹⁴ Probiotics – strains of *Lactobacilli* isolated from human milk – may be a new strategy to treat and prevent mastitis, but clinical evidence is currently lacking.¹⁷

A breast abscess may occur about one week after the initial infection, causing localised symptoms, and can be confirmed by diagnostic ultrasonography. The acute systemic symptoms may have resolved. The abscess can be drained under ultrasound visualisation with co-administration of an anti-staphylococcal antibiotic. Women can continue to breastfeed, but require support as this is often a distressing experience.

Low supply of breast milk

A common concern of mothers who are breastfeeding is low supply of breast milk. For some mothers, this may represent a perceived rather than real issue of low supply.¹⁸ Providing information on what constitutes ‘normal’ newborn feeding behaviour may provide reassurance. For example, it is normal

for infants to ‘cluster feed’ during a particular part of the day. A change to an infant’s feeding pattern, such as increased frequency of feeds, or a feeling of softer breasts, may concern the mother; however, these may be normal changes that are unrelated to a lowered supply.

It is normal for the mother to produce a small volume of colostrum in the days after the birth. At around day three postpartum, the process of ‘the milk coming in’ (secretory activation) occurs and milk is produced in larger volumes. From this point, breast milk production is predominantly under autocrine control.¹⁹ This means that as more milk is extracted through breastfeeding or expressing, more milk will be made. Thus, newborn babies should be kept close to the mother and offered frequent breastfeeds (eight or more feeds per 24 hours). Practices such as introducing spacing of feeds, pacifiers, formula feeds and nipple shields can potentially interfere with this physiological process of milk production.¹⁸

Low supply of breast milk may be caused by postpartum haemorrhage, retained placenta, maternal illness, underdeveloped breasts (insufficient glandular tissue) or past breast surgery. Sleepiness or illness in an infant, or poor latch, may also contribute to a lowered maternal milk supply.¹⁸ In addition to increasing the frequency of feeds, the mother may consider expressing her milk or commencing a galactagogue such as domperidone (10 mg tds).²⁰

Medications for breastfeeding women

Most breastfeeding women need to take medications, either short term or longer term for chronic conditions. It is important to understand that the breastfed infant receives a much smaller amount of maternal medications than the fetus is exposed to during pregnancy.²¹ Clinicians should not rely on the product information as their only source for safety recommendations during lactation (see Table 1 for reliable sources).

Table 1. Reliable sources of information about medicine use in breastfeeding women

Telephone	Drug information services, pharmacists at tertiary maternity hospitals
Books	<i>The women’s pregnancy and breastfeeding medicines guide</i> Thomas Hale’s book <i>Medications and mothers’ milk</i> <i>Australian medicines handbook</i> Therapeutic Guidelines
Websites	LactMed, also available as an app on iTunes and android stores, http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT InfantRiskCenter, www.infantrisk.com/categories/breastfeeding

Infant factors

Slow weight gain in the breastfed infant

Slow weight gain in an infant may be the first sign of low breast milk supply in the mother.²² Some infants may have reduced urine output and reduced bowel motions, or are unsettled.

If slow weight gain is thought to be due to the infant's inadequate intake, the aim is to give the infant more calories while trying to build up the mother's breast milk supply by increasing the frequency of feeds. If slow weight gain persists, the mother may need to give complementary feeds via a bottle, syringe, cup or supplemental feeding line. Expressed breast milk, formula or donor milk can be used.

'Fussy' breastfeeding infants

Breastfeeding can become challenging for the mother when infants become 'fussy' at the breast. In some cases, infants may even refuse to breastfeed. Common causes of fussiness with feeding include latching issues, low supply or oversupply of breast milk, or infant discomfort. Causes of discomfort include gastrointestinal (eg gastroesophageal reflux disease [GORD]) or musculoskeletal (eg torticollis) issues. Management of these problems includes addressing possible maternal and infant factors and referral to a lactation consultant.

Infants with feeding challenges

Breastfeeding may be more challenging for infants born prematurely and for low birth weight infants. Late-preterm (34–36 weeks gestation) infants may appear mature, but are often poor feeders.²³ Challenges with feeding also occur in infants with abnormalities of their oral anatomy, such as cleft lip/palate, laryngomalacia or tongue tie, or experiencing trauma from delivery (eg cephalhaematoma). Referral to a lactation consultant is recommended for these infants.

'Funny stools' in the breastfed infant

Parents often become concerned with changes to their infant's stools. In many cases, informing parents on what constitutes 'normal stooling' can provide reassurance. In the first six to eight weeks, a fully breastfed infant should pass two or more soft motions per day. In some cases, fewer motions may indicate inadequate milk intake. From eight weeks, the stooling patterns can be highly variable, ranging from a motion after every feed to one every 10 days.²⁴ Stools of a breastfed infant can vary in colour and consistency. Commonly, they have an non-offensive smell and appear loose like seedy mustard or pumpkin soup. If an infant is happy and gaining weight appropriately, further investigation is not required.

Frequent, loose, green or frothy stools may be caused by lactose overload.²⁵ These infants typically feed well, gain a lot of weight and their mothers often have an oversupply. Symptoms may improve if the infant is fed predominantly from one breast per feed because emptying the first breast more fully reduces the risk of the infant receiving too much foremilk (higher volume, lower fat milk).

Infants with a viral illness of the gut or upper respiratory tract may pass green, mucousy stools. Persistent green stools in an infant may also be a result of the breastfeeding mother consuming a lot of green vegetables, green food dye, medications or supplements. Infants starting solids will often have significant changes to the colour and consistency of their stools.

Implications for general practice

New mothers have many concerns about infant feeding and newborn behaviour. GPs need to provide support and appropriate advice, including referral to lactation consultants where indicated. Clinical practice guidelines are available to guide doctors caring for breastfeeding women, and good information is available online for families (Table 2).

Table 2. Other resources about breastfeeding

For health professionals

Breastfeeding clinical practice guidelines (Royal Women's Hospital) www.thewomens.org.au/health-professionals/maternity/breastfeeding-service

Academy of Breastfeeding Medicine protocols (25 guidelines for the care of breastfeeding mothers and infants) www.bfmed.org/Resources/Protocols.aspx

For parents

Australian Breastfeeding Association (includes useful table about expressing and storing breast milk) www.breastfeeding.asn.au

Breastfeeding fact sheets (Royal Women's Hospital) www.thewomens.org.au/health-information/breastfeeding

Raising Children Network (includes videos for parents) http://raisingchildren.net.au/breastfeeding_videos/newborn_breastfeeding_videos.html

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References

1. Gunn J, Lumley J, Young D. Visits to medical practitioners in the first 6 months of life. *J Paediatr Child Health* 1996;32(2):162–66.
2. Australian Institute of Health and Welfare. 2010 Australian national infant feeding survey: Indicator results. Canberra: AIHW, 2011.
3. Garbin CP, Sakalidis VS, Chadwick LM, et al. Evidence of improved milk intake after frenotomy: A case report. *Pediatrics* 2013;132(5):e1413–17.
4. Dennis CL, Jackson K, Watson J. Interventions for treating painful nipples among breastfeeding women. *Cochrane Database Syst Rev* 2014;12:CD007366.
5. Amir LH, Jones LE, Buck ML. Nipple pain associated with breastfeeding: Incorporating current neurophysiology into clinical reasoning. *Aust Fam Physician* 2015;44(3):127–32.
6. The Royal Women’s Hospital. Breast and nipple thrush: Clinical guideline. Parkville: The Royal Women’s Hospital, 2016. Available at www.thewomens.org.au/health-professionals/maternity/breastfeeding-service [Accessed 28 June 2016].
7. Amir L. Nipple pain in breastfeeding. *Aust Fam Physician* 2004;33(1–2):44–45.
8. Royal Women’s Hospital. Nipple vasospasm: Fact sheet. Parkville, Vic: Royal Women’s Hospital, 2016. Available at www.thewomens.org.au/health-information/breastfeeding/breastfeeding-problems/nipple-vasospasm [Accessed 28 June 2016].
9. Buck ML, Amir LH, Cullinane M, et al. Nipple pain, damage and vasospasm in the first eight weeks postpartum. *Breastfeed Med* 2014;9(2):56–62.
10. Barrett ME, Heller MM, Fullerton Stone H, Murase JE. Raynaud phenomenon of the nipple in breastfeeding mothers: An underdiagnosed cause of nipple pain. *Arch Dermatol* 2012:1–7.
11. Amir LH. Eczema of the nipple and breast: A case report. *J Hum Lact* 1993;9(3):173–75.
12. Barrett ME, Heller MM, Fullerton Stone H, Murase JE. Dermatoses of the breast in lactation. *Dermatol Ther* 2013;26(4):331–36.
13. O’Hara MA. Bleb histology reveals inflammatory infiltrate that regresses with topical steroids: A case series. *Breastfeed Med* 2012;7(Suppl 1):S–2.
14. Amir LH, The Academy of Breastfeeding Medicine Protocol Committee. ABM clinical protocol #4: Mastitis, revised March 2014. *Breastfeed Med* 2014;9(5):239–43.
15. Antibiotic Expert Group. Antibiotic: Skin and soft tissue infections: Mastitis. In: eTG complete [internet]. Melbourne: Therapeutic Guidelines Limited, 2016. Available at https://tgldcdp.tg.org.au/viewTopic?topicfile=skin-soft-tissue-infections-bacterial#toc_d1e1310 [Accessed 8 July 2016].
16. Moorhead A, Amir LH. Supporting breastfeeding: Victorian breastfeeding guidelines. Melbourne: Department of Education and Early Development, 2014.
17. Amir LH, Griffin L, Cullinane M, Garland SM. Probiotics and mastitis: Evidence-based marketing? [Commentary]. *Int Breastfeed J* 2016 (in press).
18. Amir LH. Breastfeeding: Managing ‘supply’ issues. *Aust Fam Physician* 2006;35(9):686–89.
19. Neville MC, Morton J. Physiology and endocrine changes underlying human lactogenesis II. *J Nutr* 2001;131(11):3005S–08S.
20. Grzeskowiak LE, Amir LH. Pharmacological management of low milk supply with domperidone: Separating fact from fiction. *Med J Aust* 2014;201(5):257–58.
21. Hale TW, Kristensen JH, Ilett KF. The transfer of medications into human milk. In: Hale TW, Hartmann P, editors. *Textbook of human lactation*. Amarillo, TX: Hale Publishing LP, 2007; p. 465–77.
22. Powers NG. How to assess slow growth in the breastfed infant. Birth to 3 months. *Pediatr Clin North Am* 2001;48(2):345–63.
23. Boies EG, Vaucher YE, Academy of Breastfeeding Medicine. ABM clinical protocol #10: Breastfeeding the late preterm infant (34(0/7) to 36(6/7) weeks gestation) (first revision June 2011). *Breastfeed Med* 2011;6(3):151–56.
24. Tunc VT, Camurdan AD, Ilhan MN, et al. Factors associated with defecation patterns in 0–24-month-old children. *Eur J Pediatr* 2008;167(12):1357–62.
25. Woolridge M, Fisher C. Colic, ‘overfeeding’, and symptoms of lactose malabsorption in the breast-fed baby: A possible artefact of feed management? *Lancet* 1988;2(8607):382–84.

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