Mastitis Prevention and Treatment Policy

Maternity, Obstetric and Gynaecology

Warning – Document uncontrolled when printed

Policy Reference:	**Date of Issue: September 2020**
Prepared by: Catherine Munro – Breastfeeding co-ordinator	**Date of Last Review: March 2024** **Date of Next Review: March 2026**
Lead Reviewer: **Karen Mackay – Infant feeding advisor**	**Version:** 2
Ratified by:	**Date:**
EQIA for Fairness – Yes	**DATE EQIA:** http://intranet.nhsh.scot.nhs.uk/Staff/EqualityAndDiversity/EqualityImpactAssessment/Pages/Default.aspx
Distribution Obstetricians All Midwives GP's Community Midwifery Units & Teams	
Method E-mail ✓ Intranet ✓	

Record of changes

Date	Author	Change
4/2024	Karen Mackay	Equality and Diversity section up-dated
4/2024	Karen Mackay	Darker skin tones added to symptoms
4/2024	Karen Mackay	Treatment – warm/hot compresses removed
4/2024	Karen Mackay	Treatment – emptying breast advice removed
4/2024	Karen Mackay	ABM reference changed to new ABM mastitis protocol

With thanks to:

Mr Ian Daltrey – Consultant Breast Surgeon – NHS Highland
Alison Macdonald – Area Antimicrobial Pharmacist – NHS Highland

For their support and expertise in the formation of this policy.

Data Protection Statement

NHS Highland is committed to ensuring all current data protection legislation is complied with when processing data that is classified within the legislation as personal data or special category personal data.

Good data protection practice is embedded in the culture of NHS Highland with all staff required to complete mandatory data protection training in order to understand their data protection responsibilities. All staff are expected to follow the NHS policies, processes and guidelines which have been designed to ensure the confidentiality, integrity and availability of data is assured whenever personal data is handled or processed.

The NHS Highland fair processing notice contains full detail of how and why we process personal data and can be found by clicking on the following link to the 'Your Rights' section of the NHS Highland internet site.
http://www.nhshighland.scot.nhs.uk/Pages/YourRights.aspx

Equality and Diversity

It is the aim of this Policy to ensure that the individual needs of mothers and their babies are given due consideration. In order to understand individual need staff also need to be aware of the impact of any barriers that we may inadvertently have in place in how we provide services.

Staff are advised to:

- Check whether mothers require any kind of communication support including an interpreter to ensure that they understand any decisions being made.
- Ensure that they are aware of any concerns a mother may have about coping with breastfeeding and any decisions made.
- Ensure that any mother who has a disability that may require individualised planning re breastfeeding practice is appropriately supported.
- Ensure that gender-inclusive terms are used should parent(s) prefer this terminology. Suggested terms in breastfeeding and human lactation (Bartek et al, 2021) are useful and are suitable substitutes when gender-inclusive language is appropriate.

Traditional terms	Gender-inclusive terms
Mother, father, birth mother	Parent, gestational parent; combinations may be used for clarity, such as “mothers and gestational parents”
She, her, hers, he him, his	They/them (if gender not specified)
Breast	Mammary gland
Breastfeeding	Breastfeeding, chestfeeding, lactating, expressing, pumping, human milk feeding
Breastmilk	Milk, human milk, mother’s own milk, parent’s milk, father’s milk
Breastfeeding mother or nursing mother	Lactating parent, lactating person, combinations may be used for clarity, such as “breastfeeding mothers and lactating parents”
Born male/female (as applied to people who identify as anything but cisgender	Noted as male/female at birth or recorded as male/female at birth or assigned male/female at birth.

Contents

	Page number
1. Purpose	5
2. Outcomes	5
3. Definition	5
4. Prevalence	5
5. Symptoms	6
6. Causes	6
7. Effective management of breast fullness and engorgement	7
8. First Line Management of Mastitis	8
9. References	9

1. Purpose

The purpose of this policy is to ensure that all staff within NHS Highland and The Highland and Argyll and Bute Councils understands how to reduce the incidence of mastitis, recognise early clinical signs of mastitis and provide prompt treatment of the condition.

The policy aims to allow urgent referral of a woman with a suspected breast abscess to secondary care for investigation and management.

2. Outcomes

This policy aims to ensure that the care provided improves outcomes for mother and child and their families by:

- Increasing the numbers of babies breastfeeding exclusively in NHS Highland.
- Increasing the number of babies breastfeeding at 6-8 weeks in NHS Highland.
- Reducing the incidence of mastitis occurring through effective infant feeding practices.
- Enabling women to recognise signs of effective milk transfer and be able to self-report any problems.
- Managing engorgement effectively to reduce the incidence of mastitis.
- Recognising early clinical signs of mastitis and enabling prompt and timely treatment for both mastitis and abscess.
- Referring to appropriate clinical specialist.
- Continued support and follow up following mastitis or abscess treatment and diagnosis.

3. Definition

Mastitis is an inflammatory, painful condition of the breast which may or not be accompanied by infection. Mastitis can be classified as:

- Non-infectious: Breast inflammation due to a non-infectious and/or idiopathic cause.
- Infectious: Breast tissue is infected through a lactiferous duct or trauma to the nipple.

The most common organism associated with infectious mastitis is Staphylococcus aureus, including strains of MRSA if the infection is hospital acquired (NICE 2018[1]). Breast abscess is a severe complication of mastitis. It is painful and caused by bacterial infections. Other complications of mastitis include sepsis, scarring and re-current mastitis.

4. Prevalence

10-33% of lactating women develop mastitis, most within six weeks post-partum (WHO 2000[2]). Breast abscesses develop in 0.1% – 3% of lactating women (BMJ 2019[3]).

5. Symptoms

Mastitis usually affects just one breast and symptoms can develop quickly.
Symptoms of mastitis include the following:

- Breast pain.
- Enlargement of breast.
- Red and hot area of breast – usually wedge shaped in appearance. Please note that in darker skin tones redness may not be evident any may look like darkening of skin. Sometimes there can be no colour change.
- Breast lump or area of hardness.
- Sudden onset of fever and flu-like symptoms.

It is not possible to distinguish clinically between non-infectious and infectious mastitis. Suspect infectious mastitis if:

- There is trauma to the nipple that looks infected.
- Symptoms do not improve or are worsening after 12-24 hours of effective milk removal.

A breast abscess can be suspected if the woman has:

- A recent history of mastitis.
- Fever +/- general malaise, although these may have improved if antibiotics have been taken.
- A painful, red and swollen breast, +/- a lump, with heat and swelling of the overlying skin.
- The lump may be fluctuant (moveable and compressable) with skin discolouration, blistering +/- peeling.
- The nipple shape maybe distorted.

All women with a suspected breast abscess should be urgently referred to the on-call surgical team for confirmation of diagnosis and treatment.

6. Causes

The two principle causes of mastitis are:

- Milk stasis (milk is not being removed from the breast effectively). This is usually the primary cause for lactational mastitis.
- Infection (stagnant milk which provides an excellent medium for bacterial growth).

Milk stasis is caused by in-effective removal of milk from the breast. This can be because of:

- Ineffective positioning and attachment to the breast causing poor milk transfer.
- A blocked duct.
- Restricting frequency +/- length of feeds.
- Infrequent feeding.
- Missing feeds i.e. in an older baby who suddenly sleeps through the night or a mum who returns to work.

- Painful nipples, resulting in a reluctance for mum to feed baby at breast.
- Use of a dummy, which can lead to missing feeding cues and prolonging time between feeds.
- Unnecessary use of formula supplementation, especially in the first 6 weeks following birth or in an older baby who has previously been exclusively breastfed.
- Using a preferred breast frequently, therefore allowing milk stasis in the other breast.
- A tight bra which may restrict milk flow, especially one which is underwired.
- White spot on nipple (also called milk blister or bleb).
- Ineffectively managed engorgement.

7. Effective management of breast fullness and engorgement

All breastfeeding mothers will experience breast fullness, usually between the second and sixth days following delivery, (NICE 2018[1]) when the mature milk 'comes in'. If breasts become hard, hot and painful it is likely the mother is suffering from engorgement. The mother may also start to feel unwell and may develop pyrexia. The baby may struggle to latch due to the fullness of her breast. Even if the baby does latch, it is likely that milk flow is restricted due to compression of the milk ducts from breast oedema, therefore it is absolutely vital that engorgement is resolved to ensure a continued milk supply.

Feedback Inhibitors of Lactation (FiL) are proteins which are contained within the milk itself. They alert the milk producing cells to stop producing milk if the breasts are full. It is vital to continue feeding or pumping to reduce the build-up of FiL and to relieve engorgement. If breast milk is not removed effectively, the build-up of FiL will result in a decreased on-going supply of breastmilk. (UNICEF, 2016[4]).

To enable effective management of engorgement and to prevent mastitis the following is vital:

- A full breastfeeding assessment should be made by either the midwife, health visitor or infant feeding support worker.
- Gentle hand expression to soften the nipple to enable effective attachment.
- Mothers should be supported to improve infant's attachment to the breast if on breastfeeding assessment is found to be ineffective.
- Feeds should not be restricted in either time or length.
- Mothers need to be taught how to hand-express when breasts are too full for baby to attach.
- A breast pump may also be used but the importance of being able to hand-express cannot be underestimated.
- When using a breast pump, it is vitally important to ensure pump shields are fitted for the mum and that pumping is not timed or restricted. Pumping should cease when the milk flow subsides for example.
- Simple analgesia should be encouraged.

8. First Line Management of Mastitis

- A full breastfeeding history and assessment must be taken. Observe a full breastfeed and assess if her breastfeeding technique and the infant's attachment are effective. If ineffective, advice and guidance on how this can be improved should be given.
- A feeding assessment using the UNICEF UK Baby Friendly Initiative feeding assessment should be performed:
  Midwifery breastfeeding assessment tool
  https://www.unicef.org.uk/babyfriendly/wpcontent/uploads/sites/2/2018/07/breastfeeding_assessment_tool_mat.pdf
  Health visiting assessment tool
  https://www.unicef.org.uk/babyfriendly/wpcontent/uploads/sites/2/2018/07/breastfeeding_assessment_tool_hv.pdf
- Ensure frequent, effective breastfeeding starting with the affected breast first and allowing baby to feed as long and as frequently as he wants.
- "Emptying the breast" should not be attempted by prolonging feeds or expressing extra between feeds. Current research has indicated that increasing supply beyond normal responsive feeding requirements could make the inflammation worse. (ABM 2022[5])
- If the mother finds that breastfeeding is too painful to feed from the affected side or the baby does not breastfeed from the affected side, she needs to express at least 8 times in 24 hours. Sudden cessation of breastfeeding leads to a greater risk of an abscess developing.
- Ibuprofen 400mg three or four times a day after food +/- Paracetamol 1g four times a day can be recommended to treat the inflammation and pyrexia. Relieving symptoms of pain may also help with the let-down reflex.
- Although warmth can help mums with pain and can aid a let-down, using compresses that are too hot can increase swelling and inflammation and cool compresses may help to ease symptoms. (ABM 2022[5])
- Avoiding firm pressure and excessive massage to the breast by using an electric toothbrush, for example, is also not recommended to reduce nipple damage and inflammation. (ABM 2022[5])
- Support the woman with encouragement, reassurance and rest.
- Continue to observe for effective positioning and attachment to enable effective milk removal.

If symptoms are not improving or are worsening after 12-24 hours despite effective milk removal, oral antibiotics will need to be prescribed. Re-assurance needs to be given that antibiotics are safe to take while breastfeeding.

Please follow the North Highland Mastitis and Breast Abscess Management Pathway available from the TAM https://patientinfo.nhshighland.scot.nhs.uk/Covid-19/North%20Highland%20Mastitis%20and%20Breast%20Abscess%20Management%20Pathway%20-%20Final.pdf

9. References

1 https://cks.nice.org.uk/topics/mastitis-breast-abscess/

2.https://apps.who.int/iris/bitstream/handle/10665/66230/WHO_FCH_CAH_00.13_eng.pdf;jsessionid=3397337C88B7493C5CACA2D72BD31C32?sequence=1

3. BMJ (2019) *Best practice – mastitis and breast abscess.* BMJ Best Practice. BMJ Publishing Group. http://bestpractice.bmj.com

4. https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/breastfeeding-resources/breastfeeding-and-relationship-building-workbook/

5. Mitchell, K. B., Johnson, H. M., Rodríguez, J. M., Eglash, A., Scherzinger, C., Zakarija-Grkovic, I., Cash, K. W., Berens, P., Miller, B., & Academy of Breastfeeding Medicine (2022). Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine, 17(5), 360–376. https://doi.org/10.1089/bfm.2022.29207.kbm