# MASTITIS AND BREAST ABSCESS (LACTATIONAL) – READMISSION FOR TREATMENT

*This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.*

## 1. AIM

- Effective management of a woman admitted with suspected mastitis and/or a breast abscess

## 2. PATIENT

- Woman within six weeks postpartum, readmitted with a diagnosis of lactational mastitis and/or a breast abscess
- Her neonate(s)

## 3. STAFF

- Medical, nursing and midwifery staff
- Clinical Midwifery Consultant 2 (CMC2) Lactation

## 4. EQUIPMENT

- Dressing pack
- Water for irrigation/normal saline
- Sterile gloves
- Sterile container for culture
- Bacterial swab (if required)

## 5. CLINICAL PRACTICE

- Assess and manage woman as per Appendix 1
- Obtain breastmilk sample for culture and sensitivities from **both** breasts prior to commencing antibiotic treatment by:
    - explaining procedure to woman and gaining verbal consent
    - giving woman written/visual instructions (Appendix 2 – Collecting Midstream Breastmilk for Culture)
    - following option 1 or option 2 in Appendix 2
    - transporting samples to pathology immediately with request for microscopy, culture and sensitivities (M, C and S)
- Advise Clinical Midwifery Consultant 2 (CMC2) Lactation when woman is admitted as inpatient
- Attend to routine admission procedures including completion of SESLHD 'Mastitis: Breast Examination Form'
- Arrange diagnostic ultrasound if breast abscess is suspected, or mastitis is not resolving after 48 hours of antibiotics
- Consult the Breast Surgical Team if abscess diagnosed as management/treatment of abscess may require ultrasound guided drainage or surgical intervention.
- Obtain abscess specimen by:
    - explaining procedure to woman and gaining verbal consent
    - dipping tip of swab into open abscess site to coat with exudate
    - sealing and labeling swab
    - transporting sample to pathology with request for M, C and S
- Contact obstetric medical team/breast surgical team with pathology results of breastmilk and/or abscess culture once available
- Discuss with Clinical Nurse Consultant (CNC) Infection Control if results indicate the presence of a methicillin-resistant microorganism (MRSA) or Group B Streptococcus

**Conservative Management:**

- Use positive language to support maternal and neonatal wellbeing
- Support the woman-neonate relationship by encouraging rooming-in or if neonate is admitted to NCC or SCH woman and neonate should remain together as much as possible
- Encourage adequate rest, fluids, a nutritious diet and analgesia

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- Educate woman about mastitis and provide SESLHD leaflet: Mastitis – Causes, prevention, treatment https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/Planning_and_Population_Health/Health_Promotion/Healthy_Weight/docs/breastfeeding/Breastfeeding_Mastitis_SESLHD.pdf
- Provide consistent breastfeeding/breast care advice (Appendix 3)
- Advise woman to continue breastfeeding or expressing for effective and adequate milk removal, as this is the most important step in treating mastitis
- Avoid abrupt weaning as this will increase the duration and severity of infection
- Perform a thorough feeding assessment to ensure optimal attachment and milk transfer
- Ensure woman has a copy of the written breastfeeding plan (available on the RHW Public Drive), with an additional copy to be placed in her bedside folder. Document plan in woman's medical record
- Record the neonate's feeds as this will assist with feeding assessment and identification of contributing factors
- Perform hand hygiene and clean equipment prior to each breastfeed/express
- Apply warm compress and gentle massage to the affected breast before feeds or expressing and cold compresses or cabbage leaves (depending on the woman's preference) after feeds
- Provide woman with expressing equipment if unable to attach neonate on affected side
- Avoid constrictive clothing/bra which can lead to suboptimal breast drainage
- Avoid use of breastmilk substitutes unless there is an acceptable medical reason or woman has made an informed choice to formula feed
- Provide support for woman who has decided to cease breastfeeding by:
    - demonstrating and providing individual supervision of safe formula preparation, cleaning and storage
    - providing education about the gradual weaning process
    - providing relevant written information:
        - SESLHD – Weaning or Suppressing Lactation https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/Planning_and_Population_Health/Health_Promotion/Healthy_Weight/docs/breastfeeding/Breastfeeding_WeaningSuppressing_SESLHD.pdf
        - SESLHD - Preparing Formula Feeds and Sterilising Bottles https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/SGSHHS_CFHN/documents/PreparingFormulaFeedsandSterilisingBottles.pdf
        - RHW 'Formula Feeding Information for Parents' located on the RHW P Drive

**Pharmacological Management:**

- Ensure breastmilk sample for M, C and S has been taken prior to commencement of antibiotics
- Use antibiotic pharmacotherapy for infective mastitis as per current Antimicrobial Guidelines (Obstetric)
- Consider local resistant patterns for MRSA if no improvement within 48 hours

**Management/Treatment of Neonate(s) Accompanying Unwell Mother**

- Admit neonate as an inpatient, not as a boarder, and notify neonatal medical team to admit
- Commence neonate on the Standard Neonatal Observation Chart (SNOC) if ≤ 28 days of age, or Standard Paediatric Observation Chart (SPOC) if > 28 days of age
- Review, assess, triage and admit unstable/sick neonate to the Newborn Care Centre (NCC) as required
- Monitor maternal compliance with antibiotic treatment and notify neonatal medical team if woman is non-compliant
- Notify neonatal medical team if any positive culture for mother

**Follow Up and Contacts at discharge**

- Advise woman to see her general practitioner (GP) if no improvement within two days to assess culture and sensitivities, and duration of antibiotics prescribed
- Ensure woman is aware of discharge breastfeeding support services:
    - Child and Family Health Breastfeeding Support Group Clinics
    - RHW Breastfeeding Support Unit (first two weeks postpartum)
    - Australian Breastfeeding Association
    - Private International Board Certified Lactation Consultant(IBCLC) lactation consultants
    - MotherSafe
- Follow neonatal medical team advice with regard to neonate at discharge

# MASTITIS AND BREAST ABSCESS (LACTATIONAL) – READMISSION FOR TREATMENT cont'd

## 6. DOCUMENTATION

- SMOC
- SNOC
- SPOC
- Medical record
- SESLHD Mastitis: Breast Examination Form
- Neonatal Care Plan

## 7. EDUCATIONAL NOTES

**Engorgement**

- Defined as generalised involvement of both breasts that are warm and flushed, often with a glassy translucent appearance and the nipple may be flattened.
- Can occur within four to five days postpartum or with sudden weaning
- Washed cabbage leaves have been documented as a treatment to reduce swelling in cases of engorgement. There is currently insufficient evidence to recommend the widespread use of this particular treatment. However, the application of cold cabbage leaves may be soothing, is unlikely to cause harm, and is readily available.

**Mastitis**

- Defined as inflammation of a segment of breast tissue.
- Lactational mastitis occurs when pressure builds within the alveoli from stagnant or excess milk. This results in cellulitis of the interlobular connective tissue within the mammary gland.
- Mastitis can occur during pregnancy.
- Mastitis is a common preventable complication postpartum. Half of all cases occur in the first four weeks postpartum but can occur at any stage during lactation.
- Predisposing factors include:
    - nipple trauma (usually colonised Staphylococcus Aureus)
    - engorgement and blocked ducts or white spot on the nipple
    - missed feeds or infrequent and scheduled feeds
    - hyperlactation
    - rapid weaning
    - pressure or trauma to breast
    - maternal fatigue/illness

**Infective Mastitis**

- Defined as mastitis with an accompanying bacterial infection of the tissue
- Associated symptoms include:
    - local, wedge-shaped redness and tenderness
    - temperatures ≥38.5°C
    - rigors, myalgia and systemic illness
- During mastitis, there are changes to the biochemical and cellular composition of breastmilk. These changes result in increased breast permeability, reduced milk synthesis and raised concentrations of immune component.
- It is safe to continue breastfeeding during an episode of mastitis.
- The most common infective pathogen is Staphylococcus aureus (S. aureus) or Staphylococcus epidermidis less commonly, beta-haemolytic streptococcus.
- Bilateral mastitis is usually caused by a streptococcus or community acquired methicillin-resistant S. aureus (MRSA). The Infectious Disease (ID) team need to be notified if woman is suspected colonised with MRSA
- While laboratory investigations are not routinely performed for mastitis, it is recommended that if the case is severe or unusual e.g. unresponsive to first-line treatment, breastmilk culture and sensitivity testing should be undertaken.

**Breast Abscess**

- Defined as a well-defined area - hard, red and painful.
- Occurs in 3% of women with unresolved mastitis.

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- Initial symptoms of fever may have resolved.
- A diagnostic breast ultrasound to identify any collection of pus/fluid is indicated in cases of mastitis where there has been little response within 48 hours to appropriate management.
- Prompt, effective management of infective mastitis can reduce risks of a breast abscess forming.

### 8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- NSW Ministry of Health PD 2017_013 Infection Prevention and Control Policy
- NSW Ministry of Health PD2018_034 Breastfeeding in NSW: Promotion, Protection and Support .
- SESLHDPR/352 Mastitis (Lactational) Treatment
- SESLHDGL/063 Care of infant feeding equipment within SESLHD facilities
- Sepsis in Pregnancy and Postpartum Period
- Antimicrobial Guideline (Obstetrics)
- Suppression of Lactation and Weaning
- Nipple Pain or Damage in the Postpartum Period
- Formula Feeding for a Neonate

### 9. RISK RATING

- Low

### 10. NATIONAL STANDARDS

Standard 5 - Comprehensive Care

### 11. REFERENCES

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**REVISION & APPROVAL HISTORY**
Reviewed and endorsed Maternity Services LOPs 8/3/19
Approved Quality & Patient Safety Committee 16/7/15
Reviewed and endorsed Maternity Services LOPs 7/7/15
Approved Quality & patient Safety Committee 21/6/12
Obstetrics LOPs group May 2012

**FOR REVIEW: MARCH 2024**

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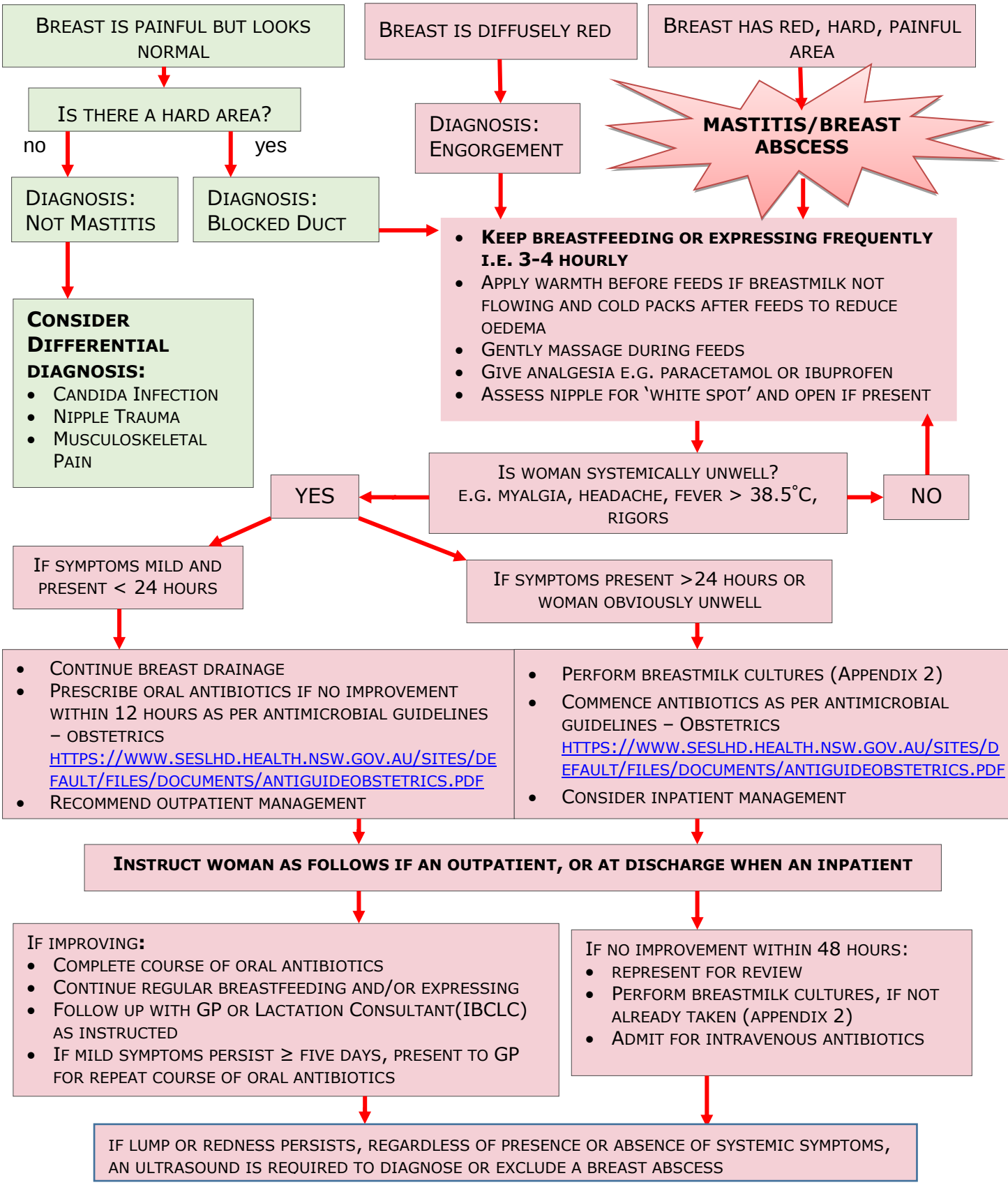
**APPENDIX 1**

**Assessment and Management of Lactating Woman Presenting with Breast Pain and Possible Mastitis/Abscess**

**PRESENTING SIGNS/SYMPTOMS:**

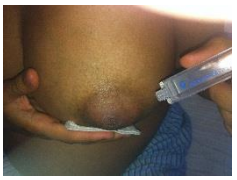



ACKNOWLEDGEMENT: ADAPTED FROM THE ROYAL WOMEN'S HOSPITAL MELBOURNE VICTORIA

**APPENDIX 2**

COLLECTING MIDSTREAM BREASTMILK FOR CULTURE

| OPTION I | |
|---|---|
| YOU WILL NEED:<br>TWO STERILE CONTAINERS<br>NORMAL SALINE OR WATER<br>GAUZE | |
| Wash your hands |  |
| Feed baby on affected breast for five minutes |  |
| Wash your hands |  |
| Clean breast, nipple, and areola with water or normal saline |  |
| Express and collect approximately two teaspoons into two separate sterile specimen containers.<br>Take care not to let your breast, nipple or fingers touch inside of specimen container |  |
| Give sample to midwife/nurse immediately to label, confirming your details are correct |  |
| Breastmilk sample must be sent to pathology as soon as possible<br>If delayed i.e. > four hours, breastmilk sample must be refrigerated immediately |  |

| OPTION II | |
|---|---|
| YOU WILL NEED:<br>THREE STERILE CONTAINERS<br>NORMAL SALINE OR WATER<br>GAUZE | |
| Wash your hands |  |
| Express one teaspoon of milk into one container (store this milk for your baby) |  |
| Clean breast, nipple, and areola with water or normal saline |  |
| Express and collect approximately two teaspoons into two separate sterile specimen containers<br>Take care not to let your breast, nipple or fingers touch inside of specimen container |  |
| Give sample to midwife/nurse immediately to label, confirming your details are correct |  |
| Breastmilk sample must be sent to pathology as soon as possible<br>If delayed i.e. > four hours, breastmilk sample must be refrigerated immediately |  |

**Breastmilk samples are to be collected from both breasts, for all women**

**APPENDIX ~~3~~**

## ADVICE FOR WOMAN READMITTED FOR TREATMENT OF INFECTIVE MASTITIS

1. Wash your hands or use antiseptic hand rub prior to breastfeeding or expressing
2. Apply warm pack/washer for two minutes to your breast prior to each breastfeed
3. If you are unable to breastfeed, then express, initially by hand, then using electric breast pump
4. Gently massage your breast and hand express whilst standing or sitting under a warm shower. This can be helpful
5. Gently massage the affected area of your breast towards the nipple before and during breastfeeds/expressions
6. Breastfeed from affected breast first, two feeds in a row after admission. Express the other breast for comfort if your baby does not feed from it. Then, alternate the starting breast with each feed
7. Ensure your baby is deeply and asymmetrically attached, with the breast softening during the feed. If your baby is unable to fully soften the affected breast, assist by hand or pump expressing – this is most important in the initial 48 hours after admission
8. Avoid putting pressure on the breast either with tight clothing or with your finger when breastfeeding
9. Aim to position your baby with his/her chin pointing towards the affected area
10. If pain is inhibiting milk ejection reflex (letdown), begin feeding on the unaffected side, and switch breasts as soon as letdown occurs
11. If breast engorgement is inhibiting letdown, either hand express or try reverse pressure softening. The aim is to push fluid in the tissue under the nipple and areola further back into the breast, to relieve the pressure. To do this, apply pressure with 2-3 fingers of each hand placed at the side of and close to the nipple and hold for 1-3 minutes. Or, use all fingertips of one hand around the areola and push in, holding for 1-3 minutes, until the tissue softens. Your midwife will guide you
12. Apply washed, cold cabbage leaf or a cold pack after each breastfeed
13. Wake your baby for a feed, if breasts are full and uncomfortable
14. Make sure you breastfeed every 2-3 hours, 8-12 feeds in 24 hours. Breasts should be either fed from and/or expressed at least every 3 hours
15. Have rest as much as possible. Ensure adequate fluid intake
16. You can access community supports on discharge:
    a. Australian Breastfeeding Association
    b. your General Practitioner
    c. RHW Lactation Consultant: (02) 93826341