



Lauren Maggi, March 3, 2024

## Evaluation and management of Mastitis and Breast Abscess

### 1. Definition or Key Clinical Information (Blackmon et al., 2023; Mayo Clinic, 2022; ):

Lactational mastitis is from prolonged engorgement of the milk ducts, with infection from bacterial entry through breaks in the skin, as well as milk stasis. Breast abscess (BA) can come from mastitis that isn't adequately treated or due to a blocked duct that causes a collection of puss. A physical assessment, a breast ultrasound to detect breast abscess, and a history to check for a history of mastitis or recurrent plugged ducts that may indicate increased risk, is needed for diagnosis. Lactational mastitis occurs in 7%-10% of breast/chestfeeding parents. Recurrence rate for lactational mastitis is 3% to 11%. BA incidence ranges from 3% to 11%.

### 2. Assessment

#### i. Risk Factors (Blackmon et al., 2023; Li et al., 2022)

- Nipple cracks and fissures, increased maternal stress, lack of sleep, tight fitting bras, the use of anti-fungal creams, poor milk drainage due to infrequent feedings, oversupply, rapid weaning, illness in the mother or child, and clogged ducts, history of recurrent clogged ducts or mastitis
- Specific to BA- mastitis from staphylococcus or MRSA, being 42 days or more postpartum, onset time since mastitis being 2 days or more, and lesions on the nipple/areola area

#### ii. Subjective Symptoms (Blackmon et al., 2023; KellyMom, 2011)

- Erythema, pain, swelling, fever of 100.4 degrees Fahrenheit or greater, chills, myalgias, malaise, nipple pain and/or breast pain while nursing, stringy/clumpy expressed milk, baby refusing to nurse, blood in milk

#### iii. Objective Signs (Blackmon et al., 2023)

- Focal area of erythema, swelling of the affected area, fever of 100.4 degrees Fahrenheit or greater, visibly injured nipple, skin eruptions (BA specific)

#### iv. Clinical Impressions (Blackmon et al., 2023; KellyMom, 2011)

- Has a history of anemia, mastitis, or recurrent plugged ducts
- Has had a recent hospital stay (BA specific)
- Appears to have chills, myalgias, and/or malaise
- Client reports they have recently weaned

#### v. Clinical Test Considerations (Blackmon et al., 2023; KellyMom, 2011)

- Covid, flu, and/or RSV test if there are systematic symptoms-refer to urgent care or PCP
- Milk culture if there are cracked nipples or an increased risk of MRSA-refer to OB/GYN or breast specialist
- Breast ultrasound if BA is suspected-refer to OB/GYN, ED, or Breast Specialist

#### vi. Differential Diagnosis (Blackmon et al., 2023)

MCU Practice Guideline Template

v. Winter 2024

-Breast engorgement, clogged duct, galactocele, inflammatory breast carcinoma, idiopathic granulomatous mastitis, flu/viral illness, thrush

### **3. Management plan**

#### **i. Therapeutic measures to consider within the CPM scope (Barker et al., 2020; International Breastfeeding Centre, 2021; Kaplan, 2012; KellyMom, 2011; University of Iowa, 2023; Yu et al., 2022)**

-Massage, vibration, heat before/while nursing, cold inbetween for inflammation and pain, “haakaa hack” (epsom salt and hot water in haakaa suctioned to breast with water covering nipple), dangle soak in hot water and epsom salt, dangle feeds, baby’s nose towards plug while nursing, frequent emptying of breasts, nursing at least every 2 hours, removing milk by expression after nursing, decrease intake of saturated fats, ibuprofen or acetaminophen for pain and fever

-Wish Garden Herbs Happy Duct Tincture (follow label instructions), probiotic, Vitamin C (3000-5000 mg/day while treating mastitis), sunflower or soy lecithin (1200 mg 4x/day), raw garlic (2-5 cloves chopped and swallowed whole), echinacea tincture (3-4x/day that totals 900mg while treating mastitis)

-Fenugreek seed poultice (steep several oz. of fenugreek seeds in 1 c. of water, let cool and mash them, place on a clean cloth, warm, and use as poultice or plaster on the affected area), dandelion compress (1 oz. minced dandelion root in 2-3 c. water until 1/2 the liquid remains, use the brew as a compress)

#### **ii. Therapeutic measures commonly used by other practitioners (Miller & King, 2019; Pal et al., 2023; Pileri et al., 2022)**

-Antibiotics for mastitis (for routine cases amoxicillin-clavulante, Dicloxacillin, and Flucloxacillin, if there is a penicillin intolerance use cephalexin, and if there is beta-lactem allergy use clarithromycin)-will need prescribed by a physician

-Ultrasound-guided needle aspiration with or without antibiotics for BA-by OB/GYN, ED physician, or Breast Specialist

#### **iii. Ongoing care (Kellymom, 2011)**

-Call back if the fever lasts over 12 hours (without medication), re-evaluate for referral if symptoms do not resolve in 24-48 hours or worsen, call for follow-up in 12-24 hours, further investigation and referral to OB/GYN, IBCLC, or breast specialist if more than 2-3 recurrences in the same spot, if client receives antibiotics and complains of sore nipples evaluate for thrush

#### **iv. Indications for Consult, Collaboration, or Referral (Kellymom, 2011)**

-If mastitis presents in both breasts, baby is less than 2 weeks old, the patient has recently had a hospital stay, there is infection of the nipple, there is blood and/or pus present in expressed milk, there is red-streaking on the breast, there is a sudden increase of temperature, or symptoms are sudden and severe, refer for antibiotics to PCP, ED, or urgent care

-If there is a suspected abscess or primary treatments for mastitis are not creating improvement in 48 hours, refer to OB/GYN, ED, or breast specialist

-If there is dimpling of skin refer to OB/GYN or breast specialist

#### **v. Client and family education (Blackmon et al., 2023; Kellymom, 2011)**

-Handouts for plugged ducts, how to avoid mastitis, and how to properly empty the breasts

-Education on when to call back, how to decrease and manage pain, and reassurance it is safe to nurse with mastitis

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