

Mastitis: Updated Guidance- Topic of the Month

Mastitis is a common concern for many lactating participants and often leads to breast/chestfeeding cessation. New research has provided updated, evidence-based guidance on how to manage conditions on the mastitis spectrum to help families resolve their concerns as quickly as possible and minimize its impact on their infant feeding goals.

What is the new guidance?

The Academy of Breastfeeding Medicine (ABM) develops clinical protocols for managing complications affecting lactation success. In 2022, the ABM revised Clinical Protocol #36, The Mastitis Spectrum, to offer updated guidance around pathophysiology, diagnosis, and management of conditions found within the spectrum. The protocol addresses engorgement, plugged ducts, inflammatory and bacterial mastitis, and abscess. The underlying concern with all these conditions is inflammation, often occurring in the context of hyperlactation and dysbiosis. Below we will go into each condition in more detail.

Engorgement

Engorgement typically occurs between days 3-5 postpartum with lactogenesis II, or "milk coming in". It may be delayed as late as days 9-10 due to cesarean birth and other medical factors. Symptoms include bilateral breast/chest pain, firmness and swelling. These symptoms are similar to those on the mastitis spectrum; however, postpartum engorgement is a common and short-term condition related to increased milk volume, interstitial swelling, and excess blood flow.

When baby is nursing on demand or an adequate pumping schedule is maintained, engorgement typically resolves in a couple days. Reverse Pressure Softening can be helpful if the infant is having difficulty latching due to swelling in the areola/nipple.

Plugged Ducts

A plugged duct is an area of the breast/chest where inflammation has occurred causing reduced milk flow. Previously, it was thought that thickened milk formed a "plug" that impeded milk flow. This is likely not the initial cause of the problem. Current evidence reveals that the milk ducts themselves are narrowed due to inflammation, restricting milk flow. When milk isn't flowing freely, the fat globules can clump together to form a plug. The plug is unable to flow through the already narrowed ducts. Using an analogy of a straw, if a straw is being squeezed from the outside, it will slow or block the flow of liquid. Symptoms of plugged ducts include a sore area that may feel like a small, firm lump or a larger firm section of the breast/chest, without fever or skin discoloration.

Mastitis

Mastitis is an inflammation of breast tissue that sometimes results in an infection. Inflammatory mastitis occurs when ductal narrowing worsens and the area becomes swollen, painful, warm, and discolored. Systemic symptoms such as fever, chills, and increased heart rate can occur as a result of the inflammatory response without an infection.

Bacterial mastitis occurs when a bacterial organism disrupts the breast microbiome. Once thought to occur when bacteria enters through damaged nipple skin, new research suggests that the infection results from mammary dysbiosis brought on by numerous factors including parental genetics and medical conditions, exposure to antibiotics, use of probiotics, frequent breast pump use, and Cesarean births.

Bacterial mastitis is not contagious. It is safe to continue providing baby with the parent's milk and no additional sterilization of feeding supplies beyond standard cleaning recommendations are necessary.

Abscess

When bacterial mastitis does not resolve with treatment, an abscess can form. An abscess is a well-defined area of infected fluid and pus. An abscess requires medical intervention to drain the infected fluid.

Treatment and Prevention Strategies:

DOs

- Maintain a normal feeding or pumping schedule rather than frequent attempts to "fully drain" the breast.
- Apply ice or cold packs.
- Wear a comfortable, supportive bra.
- Gentle massage or lymphatic massage may help reduce swelling.
- Advise the participant to discuss acetaminophen or ibuprofen with their primary care provider (PCP) to reduce swelling and provide pain relief.
- Advise the participant to be assessed by their primary care provider if symptoms worsen or persist for more than 24 hours. The PCP may recommend antibiotics and/or probiotics if a bacterial infection is present.

DONTs

- Deep massage is NOT recommended on the breast/chest tissue as this furthers inflammation and worsens the mastitis spectrum conditions.
- Minimize use of breast pumps and avoid nipple shields.

- Avoid applying heat.
- Avoid massagers, electric toothbrushes, or other vibrating devices to massage the breast.
- Avoid soaking the breast with saline, castor oil, or any other topical products.

Example Scenario:

Jada is the mother of 3-week-old Amir. Jada reports that Amir nurses every 2-3 hours, but her breasts always feel full. Amir is well past his birth weight and has lot of wet and dirty diapers. Jada texted Aliyah, her peer counselor, for help because she woke up with a tender, firm area on her breast that didn't get better after Amir nursed this morning.

(**Note:** A WIC CPA or DBE may fill the role of Aliyah in this scenario if the agency does not have a Peer Counselor.)

Jada: HELP! When I woke up this morning, I had a hard lump in my right breast and it's really painful.

Aliyah: I'm so sorry that you're in pain. Is it okay if I give you a call so you can tell me more about what's going on for you?

Jada: Yes!

Aliyah: Hi Jada. I'm glad that you reached out so we can figure out what's going on and how to help you feel better. Tell me more about how you're feeling. Do you have any other symptoms like body aches or a fever?

Jada: I feel a little sore and run down, but I took my temperature and it's only 98.8°F. My breasts always feel full even though Amir is nursing a lot.

Aliyah: Do your breasts feel softer right after Amir nurses?

Jada: They feel a little softer, but it doesn't take long before they feel full and heavy again.

Aliyah: How is Amir doing? Has he had a doctor's checkup since you left the hospital?

Jada: His doctor was really impressed by his weight gain at his last checkup. He poops every single time I feed him.

Aliyah: I'm so glad to hear that Amir is doing well. You're doing such a great job feeding him! Now we need to focus on helping you feel better. Is the lumpy area of your breast warm to the touch or do you notice any changes in your skin?

Jada: No, it's just really sore.

Aliyah: It sounds like your body is really good at making milk. Sometimes, when we make more milk than our baby needs, we can get plugged ducts. This happens when the swelling in our breasts pushes on the ducts, making them narrow and stopping the milk from flowing easily.

Jada: I make a lot of milk! I've been pumping to make a stash of milk in my freezer for when I go back to work in a couple weeks. I'm running out of room in my freezer!

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Aliyah: That's great that you are prepared for your return to work, but since your body is making so much milk, we're going to want to slow it down a little to help you feel more comfortable.

Jada: I just want to avoid mastitis. That happened to my sister, and she said it was miserable!

Aliyah: I'm sorry that your sister had to experience mastitis. It is miserable! Have you already tried anything to help with your breast fullness or the sore area?

Jada: No, I wasn't sure what to do.

Aliyah: Can I share with you some tips to help it feel better?

Jada: Yes, I'll try anything, so I don't get mastitis.

Aliyah: You may see different suggestions if you look online or talk to your sister; because they just updated the recommended tips to help with plugged ducts, many of those may still be outdated. Until the sore spot goes away, I would just nurse Amir as you typically do when he lets you know he's hungry, but not add in any extra pumping.

Jada: Is there anything I can do for the pain?

Aliyah: Cold packs can help you feel less pain and bring down the swelling. You can call your doctor to ask about taking over the counter pain medications.

Jada: I still have some Ibuprofen left that I was taking when I first came home from the hospital after delivering Amir. I'll call my doctor about taking it again.

Aliyah: You'll also want to call your doctor if you feel worse or develop a fever. Is it okay if I text you tomorrow to see how you are doing?

Jada: That'd be helpful.

Aliyah: You're doing a great job with Amir! I hope you're able to get some extra rest and are feeling better soon with the tips we talked about.

Key takeaways:

- -Mastitis and related conditions are caused by inflammation.
- -Deep massage and heat should be avoided.
- -Recommend maintaining a normal feeding or pumping schedule and ice packs and antiinflammatories to reduce swelling and discomfort.

Resources

<u>Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022</u> (Breastfeeding Medicine (ABM), 2022)

<u>Lymphatic Massage for the Breast During Pregnancy and Lactation</u> (Institute for the Advancement of Breastfeeding & Lactation Education (IABLE), 2022)

Mastitis- A Matter of Inflammation (La Leche League Canada (LLLC), 2022)

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<u>Managing Plugged Ducts</u> (Institute for the Advancement of Breastfeeding & Lactation Education (IABLE), 2022)

Reverse Pressure Softening (Arizona Department of Health Services - WIC Program, 2020)

Reverse Pressure Softening (Australian Breastfeeding Association (ABA), 2020)

References - Complete Listing of Hyperlinks:

<u>Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022</u> (https://www.bfmed.org/assets/ABM%20Protocol%20%2336.pdf)

<u>Lymphatic Massage for the Breast During Pregnancy and Lactation</u> (https://youtu.be/-0Uwx7L47cg)

Mastitis- A Matter of Inflammation (https://www.lllc.ca/sites/default/files/Mastitispdf.pdf)

Managing Plugged Ducts

(https://thepixelfarm.com/iable/membercontent/BFHandouts/iable_bf-ed_managing_plugged_ducts.pdf)

<u>Reverse Pressure Softening</u> (https://www.azdhs.gov/documents/prevention/nutrition-physical-activity/breastfeeding/reverse-pressure-softening.pdf)

<u>Reverse Pressure Softening</u> (https://vimeo.com/423859079)

Minnesota Department of Health - WIC Program, 625 Robert St N, PO BOX 64975, ST PAUL MN 55164-0975; 1-800-657-3942, health.wic@state.mn.us, www.health.state.mn.us; to obtain this information in a different format, call: 1-800-657-3942.

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