Breast and Nipple Candidiasis

ICD-10 B37.89 maternal candidiasis, nipple or breast
ICD-10 Code P37.5 neonatal candidiasis

Candida of the nipple and/or breast (ductal) can cause severe breast and nipple pain which may result in early termination of breastfeeding. The diagnosis of candida in the breastfeeding dyad is based on clinical signs and symptoms and the exclusion of other common causes of symptoms including mastitis, eczema, bacterial infection, and Raynaud's Syndrome. Diagnosis of candidal infection of the breast is challenging and research in this area is ongoing.[1,2]

Signs and Symptoms of Candidiasis

Mother

- Deep stabbing or burning pain radiating throughout the breast toward the end or after feeding (rule out improper latching)
- Pain in both nipples or breasts is common
- Itchy, flaky or shiny nipples (rule out dermatitis)
- Nipples redder or pinker than usual or areola blanching
- Absence of pyrexia
- Signs of fungal infection in baby's mouth or diaper region
- History of vaginal candidiasis in pregnancy or frequent infections
- History of antibiotic use in mother or baby

Baby

- History of oral or diaper candidal infection
- Reluctant infant feeding (e.g., arching away from the breast during feeding)
- Excessive tongue thrusting
- Short and erratic feeds

When candidiasis is identified in either infant or mother, both always should be treated simultaneously.

Treatment of the Mother[3]

Curtaneous Candidiasis

Treat with topical antifungals including:

- Miconazole
- Clotrimazole
- Nystatin (limited effectiveness due to resistant strains)
- Gentian Violet diluted to 0.25–1% (Note: limit use to once daily for 3–7 days to prevent mucosal irritation)

Note: with the exception of Gentian Violet, most topical treatments require application to the nipple 4–8 times after breastfeeding for 14 days.

Persistent or Invasive Candidiasis

Treat with oral fluconazole:

- Fluconazole 200–400 mg followed by 100–200 mg daily for 14–21 days (oral medication of choice since transfer into milk and infant are low)
- Secondary option ketoconazole may be considered
- Painkillers such as ibuprofen may be indicated for severe breast pain

Treatment of the Infant[3]

Agents that may be used include:

- Nystatin applied topically to the oral cavity after every feed

- Gentian Violet diluted to 0.25–1% (Note: limit use to once daily for 3–7 days to prevent mucosal irritation)
- Encourage consistency. Mothers should wash their hands thoroughly before and after applying the gel

Infant feeding during treatment

Women experiencing severe breast pain who are having difficulty breastfeeding their infant are advised to express their breast milk. Refer patients to appropriate health professionals for breastfeeding support during treatment.

Follow-up care

If symptoms persist for 2–3 weeks following these treatments, then bacterial infection is possible. Further investigation is recommended which may include a laboratory assessment of breast milk.

Associated breast care and lifestyle measures

Women with breast and nipple candidiasis are also advised to take the following measures:

- Ensure the infant is properly positioned and latches onto the breast.
- Wash hands often and thoroughly especially before and after applying any creams.

- Wash clothing and materials that will come into contact with the breast in hot soapy water and air dry outside. Cotton bras are recommended.
- Keep the nipples dry. Ideally, breast pads should not be used. If breast pads are used, avoid cloth pads. Change disposable pads frequently.
- Rinse nipples with warm water after each feed. Pat dry with a clean towel and air dry with a hair dryer on a low setting.
- Pacifiers also may contribute to yeast infections and should be avoided when possible. If used, sanitize by boiling for five minutes. Anti-bacterial sanitizing agents may not effectively destroy yeast organisms like C. albicans.

Risk Factors for Breast and Nipple Candidiasis

Candida thrives in moist, warm environments. During lactation, the breast and nipple are more vulnerable to candida, particularly if there is:

- Nipple damage in early breastfeeding (may be due to improper latching)
- Use of antibiotics in pregnancy or immediately after delivery
- Previous long-term antibiotic use
- Previous vaginal candidiasis infection

- Use of breast pads, which create a moist environment around the nipple and allow yeast to multiply
- Chronic illness, including HIV, diabetes or anemia

References

1. Lawrence R, Lawrence R. Breastfeeding A Guide for the Medical Profession. 8th ed. Philadelphia, PA: Elsevier; 2016.
2. Spencer J. Common problems of breastfeeding and weaning. Up To Date. Literature review current through July 2015. Updated July 27, 2015.
3. Hale T, Berens P. Clinical Therapy in Breastfeeding Patients. 3rd ed. Amarillo, TX: Hale Publishing; 2010.

The science of breastfeeding medicine is an evolving field. Please contact us if you have any suggestions regarding the content of these materials at CDPHWICRBL@cdph.ca.gov or 800-852-5770. To contact your local WIC office please see MyFamily.WIC.ca.gov.

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Rev 02/21