# It's Not Yeast:
# Re-classification of *Candida* Diagnoses in the Lactating Breast (#787800)

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## BACKGROUND

- Healthcare providers treating lactating women for nipple and breast pain often attribute symptomatology to superficial or intraductal *Candida* infection.
- However, no definitive scientific evidence exists to support yeast as an etiologic agent in this population.
- Multiple other diagnoses may present with pain, erythema, and pruritis.

## OBJECTIVE

We sought to determine the frequency of accurate diagnosis of *Candida* in symptomatic breastfeeding women and evaluate patterns of alternative diagnoses.

## METHODS

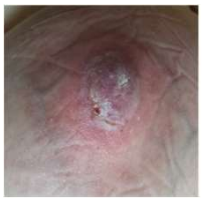
We conducted a retrospective chart review of women referred for evaluation during lactation to a single breast surgeon between July 2016 and August 2019. Women who presented with a referring diagnosis of "yeast" were included in the analysis.

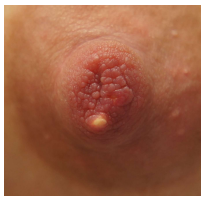
## RESULTS

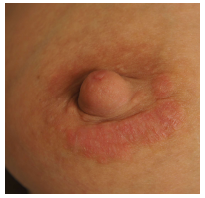
- Twenty five women met inclusion criteria. The mean age was 32 (range 24-43); mean weeks postpartum was 21 (range 2-72). Fifteen patients (60%) were white, while seven (28%) were Hispanic, two (8%) Asian, and one (4%) Middle Eastern.
- Patients had been diagnosed with *Candida* for the following complaints: nipple and/or breast pain (n=17), white nipple lesion (n=8), skin erythema and pruritis (n=4), and/or infant diagnosis of thrush (n=7). Eleven had multiple symptoms.
- All reported minimal to no improvement on any anti-fungal therapy including topical nystatin (n=11), topical miconazole (n=5), gentian violet (n=3), coconut oil (n=3), all-purpose nipple ointment (n=7), and/or oral fluconazole (n=13). Ten patients were using more than one agent.
- Due to lack of resolution, patients were referred for further evaluation.
- To establish a diagnosis and develop a treatment plan, in addition to history and physical examination (Figure 1), milk culture was obtained in four women, punch biopsy in one, and core needle biopsy in one.

- **No woman was confirmed to have a diagnosis of superficial nor intraductal *Candida*.** Final diagnoses are listed in Table 1.
- Treatment included discontinuation of anti-fungals as well as the following interventions: antibiotics and probiotics for subacute mastitis; 0.1% triamcinolone cream for nipple blebs and dermatitis; heat therapy for vasospasm; discontinuation of pumping for hyperlactation and milk crust; and, anti-depressant and counseling for depression.
- All women experienced resolution of symptoms on definitive therapy (range 2-42 days).

Figure 1. Clinical appearance of nipple areolar complex of select patients.


Subacute mastitis


Nipple bleb


Dermatitis

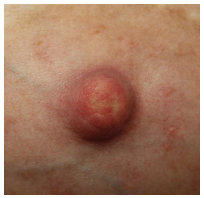

Vasospasm

Table 1. Final diagnoses of the 25 women referred for *Candida*.

| Final diagnosis | Number of Patients |
|---|---|
| Subacute mastitis | 8 |
| Nipple bleb | 6 |
| Dermatitis | 6 |
| Vasospasm | 2 |
| Milk crust | 1 |
| Hyperlactation | 1 |
| Postpartum depression | 1 |

## CONCLUSIONS

- While lactation consultants and physicians traditionally have attributed persistent nipple and breast pain in breastfeeding to a diagnosis of *Candida,* this cohort demonstrates that clinicians should consider multiple other conditions in their differential, both at presentation and when patients fail anti-fungal therapy.
- Accurate, timely diagnosis is crucial as pain is a risk factor for premature cessation of breastfeeding, and prompt symptomatic resolution occurs on appropriate therapy.