Objectives

- Differential diagnosis and treatment of *nipple dermatitis* during lactation
  - “Chronic candidal mastitis”
  - Raynaud phenomenon of the nipple
Anticipated...

Reality...
Lactation consultants

- Assist with positioning head, body, and mouth to provide the best “latch” (problem in 95% of cases)

Breast Pain

- Problem with latch
- Underlying dermatologic problem (atopic dermatitis, psoriasis, or allergic contact dermatitis)
- Plugged ducts
- Fungal infection (Candida)
- Bacterial infection (Staph aureus)
- Vasospasm (Raynaud phenomenon)
Underlying dermatologic condition

- History of atopic dermatitis or psoriasis
Underlying dermatologic condition

- Contact allergy to bras or lanolin
- Tea bags (tannic acid), honey (spores of Clostridium botulinum), banana or papaya peels (high # microorganisms)
Blisters

- Critical to differentiate milk blisters from herpes simplex viral infection (life threatening, infant requires IV acyclovir)

Recurrent milk blisters:
- use lowest settings
- verify breast shield size

Milk blister (plugged lactiferous duct)

Photo compliments of Dr. Honor Fullerton
Galactocele (milk cyst)

Plugged duct

Milk stasis

Mastitis

Breast abscess (S. aureus)

- Mastitis: fever and malaise; culture & rx amoxicillin, cephalosporins, clindamycin, erythromycin, or dicloxacillin 10-14 days; continue breastfeeding!
- No improvement 48 hrs, U/S for abscess; repeated aspirations
Axillary mammary tail

Mastitis (pt afebrile): A result of staph or candida?

- Burning, stabbing pain; flaky/shiny skin
- Most pts will be given diagnosis of “candidal” mastitis; 93% of MD’s do not cx
Recognizing candida in the infant

- 25% vaginally delivered infants are infected
- Half of infants (1 wk-18 mos) will culture positive, but only 25% exhibit sx
Bacteria vs. Candida

- Baby’s mouth: visual examination
- Bacterial culture of skin: swab any eroded areas, areola, on nipple, between breasts)
- Bacterial culture of breast milk

- Fungal cx not possible: requires special processing w/ iron to overcome effect of lactoferrin in milk.  

Truly “candidal” mastitis?

100 women/infants at 2 wks pp

23% colonized (23/100)
  87% sx (20/23)
  75% infant sx of thrush (15/20)

25% none (5/20)

77% not colonized (77/100)
  16% sx (12/77)
  13% no (3/23)

84% no (65/77)

Note: sx = pain, skin changes
Clinically suggestive of mastitis

Most colonized w/ candida had sx of mastitis.
Most not colonized w/ candida did not have sx of mastitis.

Truly “bacterial” mastitis?

- 50% breast pain had positive staph culture
- If cx staph, treat with oral abx 4-6 wks
  - Works better: 79% imp w/ oral vs. 16% topical
  - Reduce risk of mastitis: 25% if not tx’d, 5% if tx’d
- Study of 69 women with deep breast pain
  - 50% + cx, 50% - cx: both improved at same rate on antibiotics!! (ave. 6 wks abx, 94% resolution)
  - 50% reported relief with antifungals

(Are we treating the inflammation or infection?)

Which patient will culture positive for staph?
Raynaud Phenomenon

- Reported in up to 20% of women of childbearing age in the hands and feet
- Of those presenting to a dermatology lactation referral center with nipple pain, 25% of women were diagnosed with Raynaud phenomenon
Raynaud Phenomenon

- **Diagnostic criteria**
  - Chronic deep breast pain (> 4 weeks) that responded to therapy for Raynaud phenomenon and had at least 2 of the following:
    - 1. Observed or self-reported color changes of the nipple, especially with cold exposure (white, blue, or red)
    - 2. Cold sensitivity or color changes of the hands or feet with cold
    - 3. Failed therapy with oral antifungals.

- **Nifedipine** 30 mg SR tab qhs in 2 wk courses, often require a few courses

- **Side effects:** postural hypotension, headaches

- **Avoid cold, caffeine, and tobacco**
History for nipple dermatitis

- Seen lactation consultant for latch?
- History of Atopy? Psoriasis (Koebnerize)?
- Any substances applied to breast (lanolin, tea bags)
- Temperature sensitivity (Raynaud’s symptoms)?
- Increase risk factors for candidal infection:
  - History of gestational diabetes?
  - On multiple antibiotics recently?
  - Diaper rash in infant or thrush in mouth?
- Increase risk factors for bacterial infection
Quality of Pain

- **Let down pain:** mild pain first few mins, then 12-15 mins after nursing; improves over weeks

- **Candida:** moderate pain worst w/ latch, throughout nursing, \textit{radiating/hot} w/ refill; dramatic relief 1-3 days w/ oral antifungals

- **Raynaud’s:** moderate pain before/during/after nursing, \textit{throbbing}, possibly color change
Multifactorial etiology: Dermatologists are in an excellent position to diagnose, manage, and treat!

Concept courtesy of Dr. Honor Fullerton

- Atopic dermatitis
- Candidal infection
- Raynaud’s

- Allergic contact dermatitis
- Plugged duct
- Bacterial infection

http://www.lirmm.fr/bib-icons/Stanford/smile.frown.gif

http://www.lirmm.fr/bib-icons/Stanford/smile.frown.gif
Pain management

- Warm water compresses superior in reducing pain (vs. lanolin or applying breast milk)
- Ibuprofen 400 mg q4h (max 2400 mg/day)
- Hydrogels (glycerin breast pads)
  - Replace every 1-3 days, clean with soap/water

http://images.google.com/images?hl=en&q=Soothies&um=1&ie=UTF-8&sa=N&tab=wi
Management: topical therapy

- Eczematous dermatitis
  - Mid/low potency cortisone bid x 2 wks
  - Mometasone twice a day for 3 weeks

Mometasone twice a day for 3 weeks
Management: topical therapy

If suspect infection...

- Gentian violet 3-7 days [max 0.5%] or 1 ml nystatin susp baby’s mouth each feed
- Wash linens and bras in hot water/1 cup vinegar daily
Management: oral therapy

- Continue breastfeeding as pain allows even if infection is present
- Fungal infection: Fluconazole 400 mg x 1 then 100 mg bid for at least 2 wks
- Bacterial infection: Cephalexin (or amoxicillin) for 2 wks
- Raynaud: Nifedipine 30 mg SR tab qhs for 2 wks
Resources

Comprehensive review article and patient questionnaire.

Pregnancy-Associated Hyperkeratosis of the Nipple

- Physiologic change of pregnancy
- May be symptomatic and persist postpartum

Photos courtesy of Dr. George Kroumpouzos
Take-home points

- Not possible to culture candida of breast milk in commercial lab (“chronic candidal mastitis”)
- Consider candida, staph, and Raynaud phenomenon in cases of chronic mastitis.
References

- **Mastitis Articles**

- **Lactation Consultant Reference Text**
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