SYMPOSIUM S016

Pearls when Caring for the Breastfeeding Patient

Jenny Murase, MD
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Palo Alto Foundation Medical Group
University of California, San Francisco
Disclosures

- Disease State Management Speaker
  - Regeneron (Atopic Dermatitis)
  - UCB (Psoriasis in Pregnancy)
- Advisory Board
  - Dermira
  - UCB
  - Genzyme/Sanofi
- Dermatologic Consulting
  - Ferndale
  - UpToDate
Objectives

- Differential diagnosis and treatment of nipple dermatitis during lactation
  - “Chronic candidal mastitis”
  - Raynaud phenomenon of the nipple
- Lactation safety of commonly prescribed dermatologic medications
Anticipated...

www.memorialwest.com/images/motherbaby.jpg

Reality...

www.dermatology.svhm.org.au/Logos/MCH/Graphic
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)
Safety of medications in lactation

American Academy of Pediatrics

Statement from Committee on Drugs

- “Common reason for cessation of breastfeeding is use of medication by nursing mother...advice (by her physician) may not be warranted.”

- “Most drugs likely to be prescribed to the nursing mother should have no effect on milk supply or on infant well-being.”
Lactation safety classification

- **Safety classifications**
  - Medications and Mother’s Milk, by Thomas Hale, PhD
  - L1 = safest
  - L2 = safer
  - L3 = moderately safe
  - L4 = possibly hazardous
  - L5 = contraindicated
March 2014 Vol 70(3) Journal of the American Academy of Dermatology

- CME Part 1 Safety of dermatologic medications in pregnancy
- CME Part 2 Safety of dermatologic medications in lactation
Steroids in lactation

- **Prednisone (L2)**
  - Wait 4 hrs after taking medicine to breastfeed (no need to “pump and dump”)
  - 80 mg/day infant ingests <0.1% maternal dose = <10% infant’s endogenous cortisol
  - **High dose (>40 mg qd) for long periods** has potential to affect growth/development

- **Topical steroids (L1-3)**
  - Safe to apply directly to the nipple (except Class 1)
Be cautious with topical steroid use on rapidly expanding skin!

- Mid/low potency cortisone bid x 2 wks

Mometasone twice a day for 3 weeks
Immunosuppressants in lactation

- **Topical**: Pimecrolimus and tacrolimus (L2; L4 nipple)
  - Contraindicated only on nipple, since oral absorption in infant could be significant
Immunosuppressants in lactation

- **Systemic**: Biologics
  - IgG transfer into milk significant first 4 days pp
  - Biologics have low oral bioavailability due to their large molecular size and digestive system proteolytic environment
  - Neonatal Fc receptor on intestinal epithelial cells may promote update of undigested IgGs
Level of Agreement with Statement

*Women that are breastfeeding should not be on an anti-TNF treatment*

CRADLE (Concentration of Certolizumab in Mature Breast Milk of Lactating Mothers)

- Highest concentration of CZP in breast milk (0.0768 microgram/ml) is <1% of plasma trough
- Average daily infant dose (0-0.01014 mg/kg/day) and relative infant dose (0.15%) minimal with no safety signals

Antihistamines in lactation

- Preferable to prescribe non-sedating antihistamines; loratadine is first line
- No data to support reduction of milk supply

<table>
<thead>
<tr>
<th>Antihistamine</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brompheniramine</td>
<td>L3</td>
</tr>
<tr>
<td>Chlorpheniramine</td>
<td>L3</td>
</tr>
<tr>
<td>Diphenhydramine</td>
<td>L2</td>
</tr>
<tr>
<td>Hydroxyzine</td>
<td>L1</td>
</tr>
<tr>
<td>Cetirizine</td>
<td>L2</td>
</tr>
<tr>
<td>Fexofenadine</td>
<td>L2</td>
</tr>
<tr>
<td>Loratadine</td>
<td>L1</td>
</tr>
</tbody>
</table>
Cosmetics/surgery in lactation

- Best to avoid cosmetic topical products
- Absorption hydroquinone 35%, minoxidil 1.4%.
- Mother severely poisoned by botulinum toxin did not have toxin or bacteria in breastmilk. No effect on infant.

<table>
<thead>
<tr>
<th>Hydroquinone</th>
<th>L3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minoxidil (topical)</td>
<td>L2</td>
</tr>
<tr>
<td>Botulinum toxin A</td>
<td>L3</td>
</tr>
<tr>
<td>Anesthetics</td>
<td></td>
</tr>
<tr>
<td>- Lidocaine</td>
<td>L2</td>
</tr>
<tr>
<td>- Epinephrine</td>
<td>L1</td>
</tr>
</tbody>
</table>
- **Galactocele** (milk cyst)
- **Plugged duct**
- **Milk stasis**
  - **Mastitis**
    - Inflammation of breast tissue
    - 3-26% chance
- **Breast abscess**
  - (S. aureus)
  - 5-10% chance

- Mastitis: fever and malaise; culture & antibiotics for two weeks; continue breastfeeding!
- No impt 48 hrs, U/S for abscess; repeated aspirations.
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)
- 25% none (5/20)

77% not colonized (77/100)
- 16% sx (12/77)
- 84% no (65/77)

75% infant sx of thrush (15/20)

13% no (3/23)

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.

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Clinically suggestive of mastitis

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

Which patient will culture positive for staph?
<table>
<thead>
<tr>
<th>Antibiotics</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penicillins</td>
<td>L1</td>
</tr>
<tr>
<td>Cephalosporins</td>
<td>L1-2</td>
</tr>
<tr>
<td>Erythromycin</td>
<td>L3 (early)</td>
</tr>
<tr>
<td>(newborn pyloric stenosis)</td>
<td>L1 (late)</td>
</tr>
<tr>
<td>Azithromycin</td>
<td>L2</td>
</tr>
<tr>
<td>Rifampin</td>
<td>L2</td>
</tr>
<tr>
<td>Clarithromycin</td>
<td>L2</td>
</tr>
<tr>
<td>Trimethoprim-sulfamethoxazole</td>
<td>L2 (folate suppl)</td>
</tr>
<tr>
<td>Quinolones</td>
<td>L2-3 (cipro colitis)</td>
</tr>
<tr>
<td>Tetracyclines</td>
<td>L2-3 (L4&gt;3wks)</td>
</tr>
</tbody>
</table>

**Topical**
- All topicals are safe

**Oral**
- Monitor for GI sxs, candidasis, or allergic response
- Avoid erythromycin when newborn
- Avoid long term use of tetracyclines
Antibiotic Safety for MRSA Postpartum Mastitis

- Continue to breastfeed on affected breast!
- Clindamycin safe (one infant with bloody stools)
- Ciprofloxacin (one infant pseudomembranous colitis)
- Doxycycline binds calcium salts so limited bioavailability; do not use for more than 3 weeks
- TMP-SMX: avoid in neonates, hyperbilirubinemia, G-6-PD deficiency

Axillary mammary tail

Antifungals

**Topical**
- All topicals are safe (#1 nystatin & clotrimazole)

**Topical antifungals**

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Level</th>
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<tbody>
<tr>
<td>Nystatin</td>
<td>L1</td>
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<tr>
<td>Clotrimazole</td>
<td>L1</td>
</tr>
<tr>
<td>Terbinafine</td>
<td>L2</td>
</tr>
<tr>
<td>Ciclopirox</td>
<td>L3</td>
</tr>
<tr>
<td>Selenium sulfide</td>
<td>L3</td>
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Antifungals

Oral

- Fluconazole: 90% peds use in infants <6 mos
- Itra-/Ketoconazole absorption low (milk is alkaline)

<table>
<thead>
<tr>
<th>Oral antifungals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Griseofulvin</td>
<td>L2</td>
</tr>
<tr>
<td>Fluconazole</td>
<td>L2</td>
</tr>
<tr>
<td>Ketoconazole</td>
<td>L2</td>
</tr>
<tr>
<td>Itraconazole</td>
<td>L2</td>
</tr>
<tr>
<td>Terbinafine</td>
<td>L2</td>
</tr>
<tr>
<td>Amphotericin B</td>
<td>L3</td>
</tr>
</tbody>
</table>
Antiviral therapy

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

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
Multifactorial etiology:
Dermatologists are in an excellent position to diagnose, manage, and treat!

- Atopic dermatitis
- Candidal infection
- Raynaud’s

- Allergic contact dermatitis
- Plugged duct
- Bacterial infection

Concept courtesy of Dr. Honor Fullerton
Take-home points

- Reassure new mothers that the majority of oral and topical medications are safe.
- Safe to continue to breastfeed on prednisone (wait 4 hours prior to feeding) and do not need to remove topical corticosteroids from the nipple.
- Continue to breastfeed on affected breast in mastitis patients.
Lactation Consultant Reference Text


- March 2014 Vol 70(3) Journal of the American Academy of Dermatology
  - CME Part 2 Safety of dermatologic medications in lactation
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