

# The Outpatient Breastfeeding Champion Program Session 4



***IABLE***

---

Institute for the Advancement  
of Breastfeeding &  
Lactation Education



- The Instructor has no conflicts of interest to disclose
- Continuing medical education credits (CMEs) and continuing education recognition points (CERPs) for IBCLE are awarded commensurate with participation and complete/submission of the evaluation form
- CMEs can be used for nursing credits



***IABLE***  

---

***Building  
Breastfeeding-Knowledgeable  
Medical Systems & Communities***



## Session 4 OBC

- Sore Nipples- The Most Common Causes
- Managing Nipple Sores
- Breast Swelling and Engorgement
- Infant Biting
- Infectious Causes of Breast/Nipple Pain
- Non-Infectious Causes of Breast/Nipple Pain



3

These are the topics covered in this session

## Objectives for Session 4

- Describe at least 4 common causes of nipple and breast pain during lactation.
- Identify 3 main pieces of advice to give individuals who call with cracked sore nipples.
- Manage initial recommendations for sore nipples over the phone.



4

These are the topics covered in this session

## Objectives for Session 4


- Describe
  - 3 instructions typically given to the lactating parent with acute mastitis.
  - How to advise the lactating parent who might have shingles or herpes on a breast.
  - Typical advice given to an individual with a plugged duct.
  - How to identify and advise care of vasospasm.
  - Initial advice in the care of nipple dermatitis.



5

These are the topics covered in this session

Mom calls you on day 4 pp because her baby, who was nursing fine, now won't latch. Her breasts feel very heavy, and the infant is crying. Your initial recommendations are:


- A. The baby might be sick and should be seen ASAP
-  B. Her breasts are probably engorged and the baby cannot grasp the breast. Express some milk so the breast is more compressible.
- C. She should bottle feed the baby because the baby clearly does not want to nurse anymore.



6

The Correct Answer is B

A parent calls concerned that their term 10-day old baby is nursing too often, every 2 hours, and that his partner does not have enough milk. He reports 3 stools & 6 wet diapers/day. When seen on day 3, the baby's weight was up 1 oz (30g) from day 2. **You advise:**

- A. Everything sounds fine, keep the 2 week exam appt. The feeding frequency sounds normal.
-  B. Ask family to come in for a visit and weight check.
- C. Advise the lactating parent to just pump and bottle feed to see how much milk she has.



7

The Correct Answer is B


A parent called with a concern, so that automatically means that they need reassurance by having the baby weighed.

Some doctors will tell the parent to pump and bottle feed to see their volumes (C). The problem here is that the parent is taking the baby off the breast and giving a bottle. This is not a good idea until the parent is seen. If the baby is weighed and not found to have gained well, then pumping after feeding to measure residual would be reasonable, to determine adequacy of milk production.

This same baby comes in for a weight check.

You advise:

Birth Weight	8 lb 0 oz (3628g)
Day 2	7 lb 9 oz (3430g)
Day 3	7 lb 10 oz (3460g)
Day 10	7 lb 12 oz (3520g)

- A. Things are fine, your baby gained another 2 oz, and has another 4 days to get to birth weight.
-  B. The baby is gaining slowly, lets try to figure out why this is.
- C. The parent's milk production is low and formula should be given after breastfeeding.
- D. B&C



8


The Correct Answer is B

A is not correct, since the baby only gained 2 oz in 7 days. Even though the baby is not too far from birth weight, the most recent weight gain is a problem.

C is not correct because it is possible that the baby is not transferring milk well, and there is plenty of milk in the breasts. We will talk about how to manage this problem later.



Mom calls and states that her 3 week old baby is nursing too often. He wants to nurse every 45 minutes most of the day, and never seems satisfied. Her breasts feel larger and they leak. You advise:

- A. Your milk production is probably low. Give a supplement of formula after nursing.
- B. Your baby is falling asleep at the breast, try to keep the baby awake while feeding. No need to worry.
-  C. Please come in for a visit, to check the infant's weight and observe feeding.



9

The Correct Answer is C


A is incorrect because she feels that her milk production is adequate. If anything, she can express milk after feeding and supplement with expressed breastmilk as needed.

B- it can be hard to keep the baby awake at the breast. This is much easier said than done, and we also don't know if this is the problem

C- this is correct, the baby needs a weight check and to observe a feeding

If mom brings a breast pump, she could pump when she sees you to see how much milk she has left over.

Dad mentions at the 2 week visit that his baby is nursing every hour overnight, and sleeps in the day. He wonders what to do. You advise:

- A. He should get up, give the baby a bottle, and let mom get some rest.
-  B. Don't let the baby sleep away the day. Try to feed the baby often in the day, and try to keep the baby up in the evening.
- C. It is normal, mom should nap in the day with the baby so that she has the energy to be up with the baby at night.




10

The Correct Answer is B

A is not correct. We don't want the lactating parent to sleep all night, since that will lead to a drop in milk production.

C- it is best to not cater to the baby staying awake all night. It is best to get the baby up regularly during the day so that the baby gets his days/nights turned around.

A lactating parent calls, reporting that their 3 week old is fussy and has not stooled for 2 days. They believe their milk production is low because the baby wants to constantly feed at the chest. The other parent wants to give a bottle to the baby. You advise:

-  A. Although this might be a growth spurt, the baby should come in for a weight check.
- B. Because the baby is 3 weeks old, she is in a growth spurt. It will improve in a few days.
- C. The baby is probably having a reaction to something in the parent's diet, so the parent should just pump and give the baby formula for now.




11

The Correct Answer is A

B- you cannot assume that this is a growth spurt. That diagnosis is based on excluding other reasons for fussiness and less stooling. An evaluate is needed to address these concerns.

C- It is not likely that the baby is reacting to something in the milk. Also, this cannot be determined over the phone. They need to be seen for an evaluation to make sure the problem is not something like insufficient milk production.

Dad calls because he wants to give their 1 week old a pacifier. All the baby wants to do is suck at the breast, and he is sick of it. You advise:

- A. Let me talk to mom.
-  B. Let's see the baby in the office. It would be great if both parents could come.
- C. It is fine to give a pacifier as long as the baby is nursing at least every 3 hours.
- D. A & B



12

The Correct Answer is B

C is incorrect because if the baby wants to suck all the time, the baby might not be taking enough calories. The baby needs to be weighed.

D- some people will answer D, and that is not entirely wrong. 'A' can be OK, to ask to talk to mom, as long as dad is not excluded from decision making.

At her term baby's 4 week visit, mom wonders if she still needs to wake the baby up every 3 hours at night to nurse. The baby's weight is great. You advise:

- A. You may want to get up to nurse or pump after a 5 hour break at night to prevent mastitis and plugged ducts
- B. It is OK to let the baby sleep as long as she wants, she will probably wake up after 4-5 hours.
- C. You don't need to worry about emptying your breasts at night, they will adjust.
- D. You need to feed the baby every 3 hours at night for at least a few months.
- E. A & B



13

The Best Answer is E

C is incorrect- IF mom takes more than a 5 hour break over night during the first few months postpartum, her production may decrease significantly

D- incorrect. She does not need to feed the baby every 3 hours over night. The baby can sleep for 6-8 hours, but mom should get up to pump after 5 hours, so that she does not drop her milk production

## Finding Additional Lactation Help in Your Community

- The Triage Tools default to referral to lactation consultants/physicians/providers
- Not all communities or individuals have access to these levels of care
- Please share other resources you are aware of in your community, such as doulas, local breastfeeding support groups, or a breastfeeding coalition.



14

This slide is put in now because the participants already reviewed 1 triage tool in session 2, and will review more this session 4. This slide is a reminder that although the triage tools default to LCs and providers, not everyone has access to this level of care.

Ask participants if there are other levels of support that they know of in the community, so that participants can share this info with others

# Breast Pain and Nipple Soreness



## Myths re Sore Nipples

- Having to 'toughen up'
- The baby having a strong suck
- Nursing the baby too much or too long



There are myths out there about sore nipples. Nipples do not become 'tougher' or calloused with feeding.

A strong suck is not an issue. It has much more to do with how the vacuum is applied/where the nipple is in the baby's mouth.

Nursing too long or too much should not cause sore nipples, as long as the latch and positioning are ideal to prevent nipple trauma.



## Nipple Pain Starts Early

- 11-96% of lactating individuals have nipple pain at some point
  - 43% with sore nipples at hospital D/C
  - 73-76% with sore nipples at 3 days pp
  - 19-26% having cracks



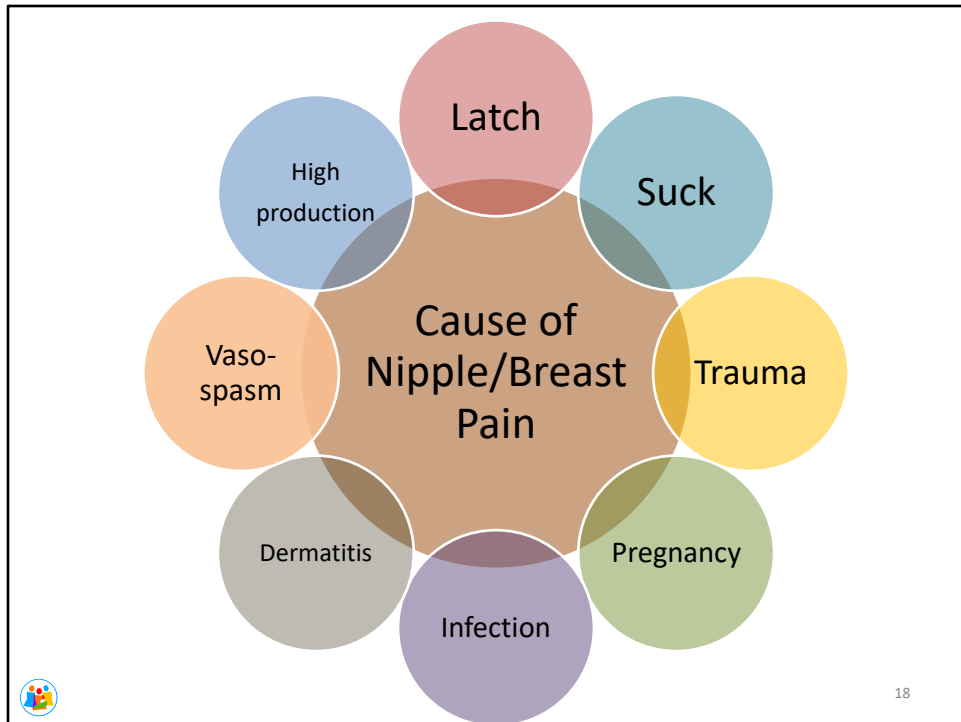
17

Several studies have been done looking to see how common sore nipples are in nursing women.

The incidence of sore nipples varies depending on the study, found to be 11-96% of all women have nipple pain at some point (Blair A. et al Brfeed Review 2003)

In one study, 43% of mothers had sore nipples at hospital D/C (Oliveira JHL 22(3) 2006)

In addition, it has been found that 73-76% of new moms had sore nipples at 3 days pp, with 19-26% having cracks. (Centuori JHL 15(2) 1999)



These are the causes of nipple pain. We are going to go thru these different causes. However, we won't talk about pregnancy. It is important to know that pregnancy can cause nipple pain, and pregnancy can happen even if the parent has not started menstruating yet.



## Engorgement

- Days 3-5 postpartum
- Major reason for sore nipples
  - Leads to a shallow latch



19

We discussed engorgement in detail in session 3.

Engorgement by itself does not cause sore nipples, but engorgement makes it very hard for the baby to latch on deeply. A shallow latch will cause nipple soreness/trauma.

As you know, engorgement occurs when the milk 'comes in' on days 3-5 post.

This is one of the most common times that women will say that they develop sore nipples.

Because the breasts are so full and firm, the baby has trouble latching deeply onto the breast, as we discussed before.



## Review of Engorgement Treatment

**What are means of treating engorgement?**  
**What is the best way to prevent engorgement?**



**Just as a review of session 3**, the General principles include:

- Use heat before nursing to promote milk flow
- Cold compresses in between nursing to reduce edema
- Reverse Pressure Softening
- Breast lymphatic massage before feeding/pumping
- Hand express some colostrum before latch.
- Prevent engorgement by nursing frequently.

## Cracked Nipple Treatment

- Moist Wound healing
  - Don't let nipple stick!!
    - Antibacterial ointment
    - Coconut oil or olive oil
    - Lanolin
    - Breastmilk
    - Medicinal Honey
  - Nonstick pad or parchment paper
- Decrease trauma- improve latch!!
- Treat underlying skin pathology
  - ? Dermatitis/psoriasis



21

### **Cracked Nipple Treatment (This is a picture of a scabbed nipple)**

Moist Wound healing- this is the principle used among health professionals. Wounds don't heal well when air dried and allowed to scab. Don't let the nipple stick to the breast pad or bra, as the wound is ripped and traumatized every time the nipple is uncovered!! Options to apply on the nipple wound include 1) an antibacterial ointment, such as Bacitracin or mupirocin ointment. An antibiotic ointment is a good idea if the nipple would look infected, with pus-like discharge, 2) Medicinal Honey, such as Medihoney, It does not carry the risk of botulism. 3) Coconut oil or olive oil, 4) Lanolin, 5) Breastmilk. After putting on the ointment, Medihoney or anything else, cover the nipples with a nonstick pad, such as those made by Telfa or Curad, or a generic brand. Parchment paper also works well and is much less expensive. It is important to make sure that the baby can **latch deeply** to avoid nipple trauma. This means trying to decrease the edema to decrease trauma- improve latch!!

### **Treat underlying skin pathology**

If the parent has a history of psoriasis or eczema, or another form of skin disease, refer to their physician for evaluation

# Triage Tool

## Sore Nipples

### Group 2



22

#### **Sore Nipples Triage Tool- Session 4**

Have Group 2 take out their script for Sore Nipples, and find a Group 1 trainee, who will be the Breastfeeding Champion

This is your second baby

Your baby is 3 weeks old

You had cracks of your nipples in the hospital, then the pain seemed to improve, and now the nipples hurt again. The cracks are not healed yet. It hurts to latch the baby on. You don't know if you can keep nursing the baby with this degree of pain.

You don't have a fever, redness or swelling

- This is your second baby
- Your baby is 3 weeks old
- You had cracks of your nipples in the hospital, then the pain seemed to improve, and now the nipples hurt again. The cracks are not healed yet.
- It hurts to latch the baby on.
- You don't know if you can keep nursing the baby with this degree of pain.
- You don't have a fever, redness or swelling



## Discussion Sore Nipple Case

- What are some pieces of advice that can help this parent right away, to decrease their pain?
- What are things that you can do as a breastfeeding champion to help this mom, if she comes in to see you in person?



24

What are some pieces of advice that can help this parent right away, to decrease their pain?

- Try taking something OTC for pain
- Nonstick pads with bacitracin ointment
- Try just pumping

What are things that you can do as a breastfeeding champion to help this parent, if they comes in to see you?

- Make sure latch is deep and baby is positioned properly
- Teach how to use their pump
- Teach how to break the seal when taking the baby off the breast



Underlying Problem	Management Strategy
Infant movement limitations due to torticollis, fractured clavicle, etc	Work on positioning, and refer for more help for underlying problems
Prematurity/Low tone/sleepiness	Limit time at breast, pump to maintain production, supplement
Broad flat nipples	Roll out nipples before latch, soften areola
Overactive letdown	Change positioning, reduce milk production
Infant disinterest due to low flow	Supplement with a feeding tube at the breast/chest
Oral defensiveness	Bottle/finger feeding, speech eval
Tight lingual frenulum	Clip the tongue tie
Oromotor dysfunction	Speech eval
Latch refusal	Infant-led latch

This chart demonstrates typical management strategies that lactation consultants use for certain problems that cause traumatic nipple pain.

You don't need to go over these in detail, but perhaps explain a few problems and solutions very briefly.

The goal of this slide is for the instructor to demonstrate to attendees that there are more advanced issues that lactation consultants deal with, which are beyond the scope of this training course.



Before clipping



After clipping



26

Here is an example of a tongue tie before and after clipping

A tongue tie is a common reason why infant latch and suck can cause nipple trauma.

The baby cannot extend the tongue far out beyond the lower gum line,

So the nipple is not swept back deeply into the mouth.

Instead, the nipple is caught between the tongue and the hard palate, causing trauma.



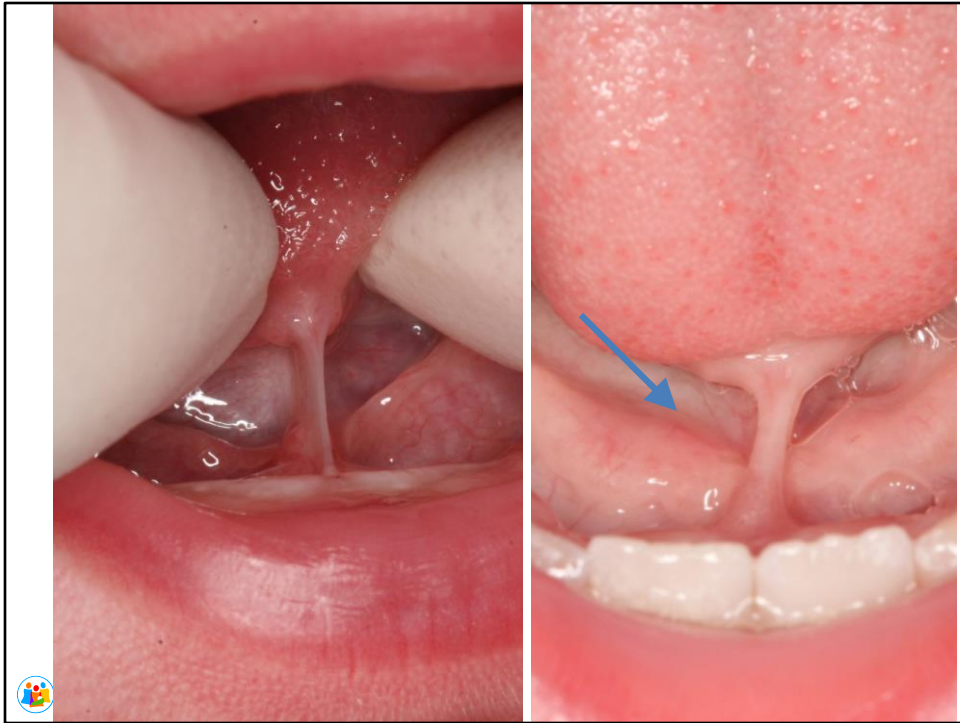
Before treatment



After laser treatment



This is a picture of a tongue tie before and after laser treatment



Here are 2 other examples of tongue tie, both of which extend to the tip of the tongue.. On the right side, you can see that the tongue tie is much thicker than the left. The person on the R is also older (has teeth)

# Hyperlactation

- Common symptoms
  - Pain mainly when full
  - Frequent breast fullness
  - Recurrent mastitis
  - Stringy milk
  - Infant choking at the breast
  - Infant feeds on one side only for short periods
  - High production when pumping
    - People who are well matched typically express approx. 4-5 oz total every 3 hours



29

Hyperlactation is a common cause of sore nipples and sore breasts.

The pain is mainly going to be present when the breasts feel full. Pain improves after feeding, when there is less milk in the breasts.

People with hyperlactation have a higher risk of mastitis because they are often not emptying their breasts as completely and/or as often as others who have milk production that is well matched to the infant's needs.

Sometimes the milk can appear stringy or have mucous globs.

Infants often have symptoms when the milk production is high- the milk flow can be brisk and heavy, leading the infant to choking during letdown. Because of the high production they will typically feed from just 1 side.

People identify high production when they pump high volumes. Typical milk production is around 4-5 oz every 3 hours

## Acute Mastitis



Now let's talk about mastitis.

An old adage is that 'Flu in the lactating individual is mastitis until proven otherwise'. This is because mastitis feels like the flu, with achy joints, fever, chills and headache. Sometimes the lactating individual does not realize that one or both breasts are pink and tender. This is because her whole body is sore. In addition, in early mastitis the breast changes are a light pink, which can be hard to see depending on skin color, ability to see the breast, and lighting in the house.

## Acute Mastitis Symptoms

- Flu symptoms
- Breast pinkness- early stage
  - Harder to identify on darker skin
- Breast swelling and redness later
- Possible nipple sores
- Often preceded by 'plugged ducts'



31

### **Symptoms of Acute Mastitis**

'Flu' - with body aches, headache, fever, and nausea

Early on there is minimal breast pain and pinkness, but these symptoms worsen over time. The pink changes might be harder to identify on darker skin.

In a day or 2 the breast can become swollen, more red, firm, and very tender

Nipples may have open sores or blisters

Many women notice that mastitis will follow a plugged duct, or she notices more frequent plugged ducts while she has mastitis.



**What Do You Think Are  
Risk Factors for Mastitis?**

 10

Pose this question to the group. The answers will be on the next slide





Source: US Breastfeeding Committee

## **Mastitis- Associated Risk Factors**

Systematic Review

- 25% risk in first 26 weeks
- Nipple damage/pain
- Use of topical products
  - Creams, nipple shield
- Staph aureus in milk
- Infant carrier of staph aureus
- History of mastitis in the past
- Multiparity
- Tight bra

Wilson E, Wood SL JHL 2020 online

© TABLE 33

### **Who is at risk for developing mastitis?**

This data comes from a recent systematic review of articles regarding the risk of mastitis.

Women who are at higher risk include:

- Mothers who are in the first 26 weeks postpartum
- History of nipple damage/pain. The nipple wounds are the entrance way for infection. For this reason, it is so important to work on proper latch and positioning early.
- Use of topical products, such as creams and nipple shields. This may be because people who are using these products already have nipple damage or pain.
- Staph aureus bacteria in milk
- IF the infant carries staph in their nose or has a staph infection on the skin
- History of mastitis with the current infant or previous infants
- Multiparity
- Tight bra

## Complications of Mastitis

- 8-19% of women have recurrent episodes of mastitis
- 3-10% of women with mastitis develop abscesses



34

### **Complications of Mastitis**

8-19% of women who develop mastitis have recurrent

3-10% of women with mastitis go on to develop abscess formation

## Mastitis Treatment

- Determine if due to over production/overfullness
- Rest
- Either warm or cold compresses (whichever feel better)
- Stay on a regular nursing or pumping schedule (do not over-pump)
- Antibiotics if ill
- Anti-inflammatories-ibuprofen



35

How do we treat mastitis?

First we want to determine if overfullness is the reason for the mastitis. This is a non-infectious mastitis, due to over fullness and swelling, causing the breast to feel warm and red. The mother will not typically have a fever, body aches, headache, or feel overall ill.

The individual needs to rest, apply moist heat or ice to the breast, whichever feels better, to the breast every few hours for about 15 minutes, and nurse or pump on a regular schedule. Do not increase frequency of pumping, as that will drive up production and increase risk of further infections

The milk is safe to give to the baby.

Antibiotics that are anti-staph are needed if the lactating person is ill with fever, body aches, and feeling generally ill. Common antibiotics include: dicloxacillin, clindamycin, cephalexin, augmentin

Anti-inflammatories can help with fever, body aches, and decrease breast pain.

Ibuprofen is the safest anti-inflammatory during lactation.

## Abscesses during Lactation



- Require drainage
- Continue antibiotics, rely on culture results
- Continue nursing or pumping; do not increase frequency of drainage
- Baby may nurse if milk is not purulent



36

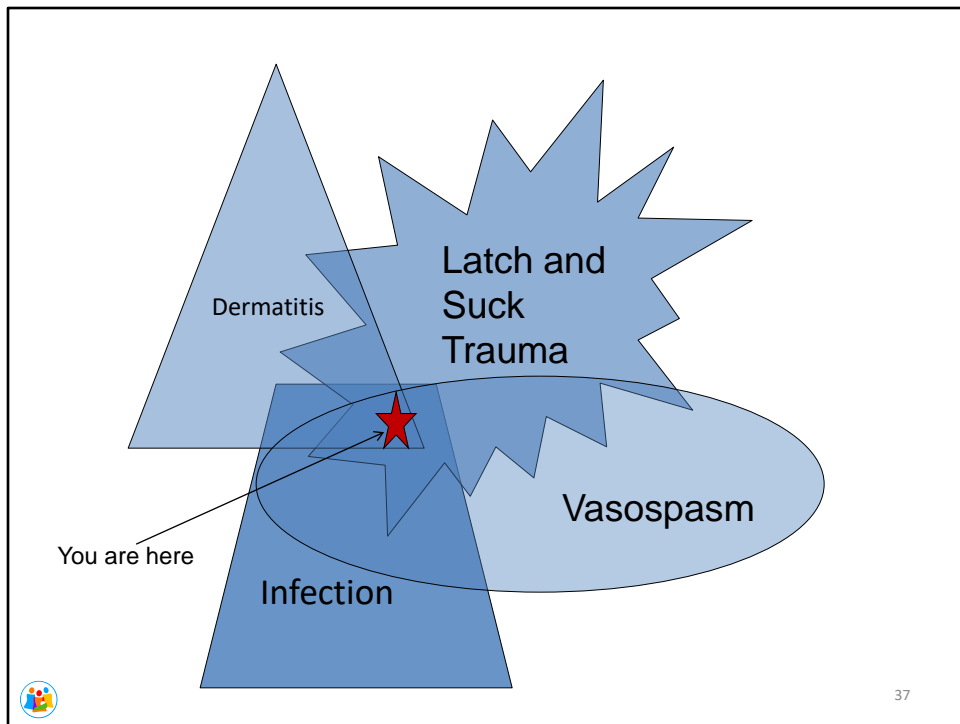
How do we treat abscesses?

If the abscess is small, a needle can be put into the abscess to withdraw the fluid. Larger abscesses need to be open and drained, or a drain can be placed by the radiologist, to allow the material to drain out over a few days.

Antibiotics are given during the time treatment.

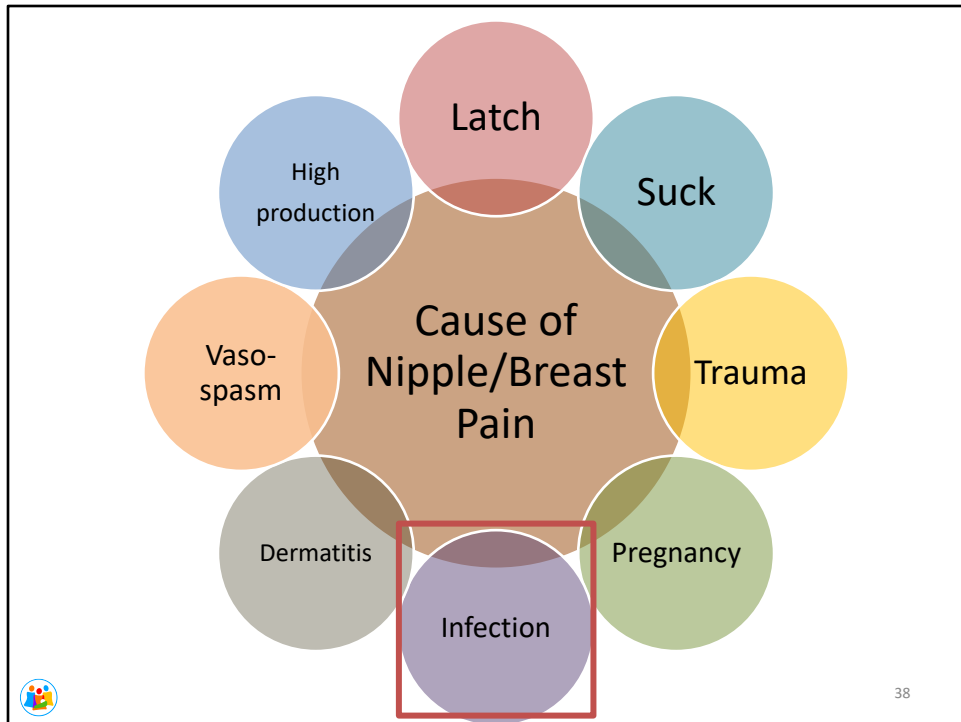
The fluid withdrawn from the abscess is cultured to identify the bacteria

Breastfeeding/pumping should continue as usual, and the milk can be given to the baby unless it has a great deal of pus in it



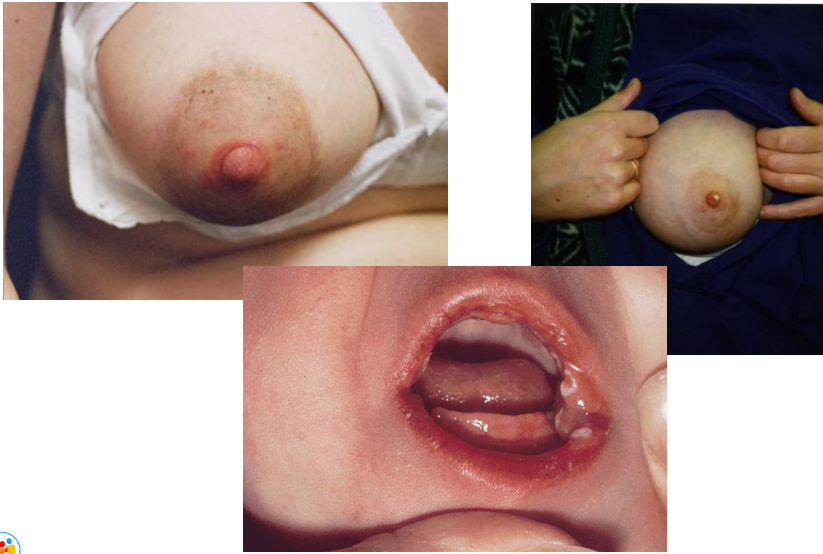
This is a schematic demonstrating the concept that breast pain and nipple pain can be very complex.

It can be a combination of nipple trauma, which may lead to infection + vasospasm, and then coupled with dermatitis due to putting different creams on the sore nipples. Almost all individuals with a history of sore nipples and deep breast pain have more than 1 issue that is associated with the pain. Therefore, these problems can be complex, and take awhile to resolve.



Next we are going to talk about infections

## Breast Pain- Yeast or Bacterial?



39

Now we will talk about a fairly common presentation of pain in lactating individuals. Many lactating individuals will complain of feeling stinging, burning and sharp shooting pains in their nipples, with the pain often radiating deep into the breasts. Many lactating individuals assume that they have a yeast infection in their nipples, especially if the baby was diagnosed with recent oral thrush. However, we will discuss that often times this is not yeast, and is bacterial in nature.

## Typical Clinical Scenario about Yeast



- A lactating parent calls, her 10 week old was recently diagnosed with thrush. She is noticing a burning/itchy sensation to her nipples, and would like to have something for the yeast infection of her nipples.



40

Read the scenario. This is a very common question that you may encounter. As an aside, it is important to understand how yeast presents in the baby's mouth. Usually a white tongue by itself is not yeast. Almost all babies have white tongues (except for the baby in this picture!) The infant should have white patches in the linings of the cheeks and linings of the inner lips in order to make the diagnosis of thrush in the mouth.



## 'Yeast' Overgrowth of the Nipple/Areolar Regions

- Typical sx
  - Burning, itching, 'shards of glass', sharp shooting pain, redness of nipples
- Classic risks
  - Infant oral thrush
- Often treated by phone
- Symptoms are most often not due to yeast



Nipple with dermatitis, not yeast



41

### **'Yeast' Overgrowth of the Nipple and Breast**

Yeast (*Candida albicans*) lives in and on our bodies normally. It is when it becomes out of balance with the "good" bacteria that it can cause symptoms. So it is not an "infection" in the sense it is somewhere where it does not belong

#### **Typical Symptoms**

The typical symptoms of what many consider yeast include nipple burning, itching, 'shards of glass' pain in the nipples, sharp shooting pains, and nipple redness. . It occurs on BOTH sides. There is no evidence as of now that yeast can "infect" the breast...most breast pain associated with red and sore nipples is referred pain from the nipples.

#### **Classic Risks**

Lactating parents are at risk for candida infection of the nipples if the infant has oral thrush (yeast), or if they have diabetes.

#### **Often treated by phone**

Lactating individuals often call their doctor's office and describe their symptoms, and are given treatment in the form of topical creams or oral anti-fungals. Unfortunately, many of these lactating individuals don't improve 100%. They often improve to a certain degree because they usually don't have a yeast infection.

#### **Symptoms are often not due to yeast**

There are several other reasons for nipple pain, such as over production, vasospasm or mammary dysbiosis. Yeast is very over-diagnosed.

## When to Treat for Yeast

- Nipples symptoms
  - Redness, shiny
  - Pain, +/-itching
  - AND infant has known oral thrush
- If nipples don't look red, refer for evaluation before treatment



42

### **When to Consider Treatment for Yeast**

#### **Nipple symptoms**

The nipples should look red at the base like we saw in our previous photo, and often the skin will look shiny

The nipples will be painful and possibly itchy.

#### **Known Infant Thrush**

If the baby has been diagnosed with thrush AND lactating individual has symptoms of nipple redness, soreness and itchiness, it is certainly reasonable to treat with antifungals

#### **If nipples look normal and she has pain**

If the lactating individuals nipples appear normal, they are not red at all, it would be best to refer them to a knowledgeable provider before treating her with antifungals.

# How to Treat Yeast

## Parent

- Only treat if
  - baby has thrush AND parent has symptoms AND nipples appear to have thrush
- If nipples appear to have thrush, but baby does not, best to culture the nipples for thrush.
- Treatment options:
  - Topical nystatin ointment
  - Topical clotrimazole cream
  - Oral fluconazole x 10 days



## Infant

- Treat if baby has thrush
  - Nystatin drops
  - Oral fluconazole
- No need to treat baby for parent symptoms, if baby has no thrush

43

## How to Treat Yeast

### Parent

Only treat the lactating parent for yeast if the baby has known thrush, and the lactating parent has nipple pain and or itching, and she also has nipple redness. As in the previous slide, if she does not have any nipple redness, it would be best to not treat and have her see a provider. If she has redness that appears to be thrush, but the baby does not have thrush, best suggestion would be to have her nipples tested for thrush with a gram stain and/or culture.

Treatment options for the parent include

-Topical nystatin ointment (prescription); Topical clotrimazole cream, (over-the-counter as a 1% cream), or oral fluconazole for 10 days (prescription).

### Infant

Only treat the infant for yeast if it is clear that the baby has thrush.. Treatment can include oral nystatin drops or oral fluconazole. It is not reasonable to treat the baby for thrush if the parent has symptoms but baby has no signs of thrush. In that case, the parent probably does not have thrush, because the baby does not.

See ABM Protocol #26: Persistent Pain with Breastfeeding:

<https://abm.memberclicks.net/assets/DOCUMENTS/PROTOCOLS/26-persistent-pain-protocol-english.pdf>

## Symptoms of Subacute Mastitis or Mammary Dysbiosis

- Usually nipple pain
- Deep breast pain after feeding
- Breasts feel tender
- Recurrent plugged ducts
- Nipple scabs



44

### **Symptoms of a Subacute Mastitis or Mammary Dysbiosis** **Nipple Pain**

The nipples are usually tender and latch hurts. Often the lactating parent will describe extreme nipple pain in the shower or when the nipples are touched.

### **Deep breast pain after feeding**

This problem is often considered 'yeast' because of the sharp shooting breast pains and dull aching after feeding. Sometimes the pain starts about 30 minutes after nursing or pumping has finished.

### **Breasts feel tender**

The parent will describe having breast tenderness when holding the baby against their chest, or when hugging the baby

### **Recurrent plugged ducts**

The parent often describe having repeated plugs in their breasts. This is often associated with a decrease in her supply.

### **Nipple Scabs or Cracks**

Nipples might have yellowish scabs at the tips, like the photo in this slide. Many parents have normal appearing nipples, and others might have cracks in their nipples that are not healing.

## Management of Mammary Dysbiosis

- This is a bacterial-overgrowth situation
- Breast exam and breastmilk culture
- Reduce any over-production of milk
- Antibiotics based on culture results
- Probiotics with Lactobacillus Salivarius and Lactobacillus Fermentum
  - Uncertain if it will help
- Refer to breastfeeding specialist for management if possible



45

### **Management of a mammary dysbiosis**

#### **This is a bacterial-overgrowth situation**

Many lactating individuals will be told that they have a yeast infection. There is often 40-60% improvement in the pain with anti-fungals, likely because most individuals have this bacterial-overgrowth situation.

#### **Breast exam and breastmilk culture**

These parents need a breast exam and a breast milk culture, that should be done by a knowledgeable professional

#### **Reduce any over-production**

Lactating individuals with an oversupply of milk will have very similar symptoms of breast and nipple pain. Treatment of over production is needed to help resolve the symptoms. The easiest way to do this is with block feeding, when the parent nurses from one breast for a 3 hour stretch, then nursing from the other for a 3 hour stretch. They continue to do this 24 hours a day. Usually within 2 days the supply is down significantly.

#### **Antibiotics based on culture results**

The decision on antibiotics will be based on culture results

#### **Probiotics**

Some research shows that taking lactobacillus salivarius and lactobacillus fermentum might help breast infections, but it is unclear, there is not enough evidence for this yet. These are expensive.

**If mammary dysbiosis is suspected** refer to a physician who is a breastfeeding medicine specialist, if possible.



This is a picture of herpes lesions of the breast. You can see that these are no longer blistered, but are in the healing stage with scabs formed.

# Herpes on the Breast

- Herpes Simplex
  - Can cause herpes in infant
  - The lactating parent is infected from nursing toddler with cold sores
- Management
  - Avoid direct contact of lesions with baby
  - Express and discard milk on affected breast
  - OK to nurse on an unaffected side
    - Often is on both breasts
  - Cover lesions until scabbed over
  - Anti-viral medication



47

## Herpes Simplex on the Breast

### Herpes Simplex

Herpes Simplex can cause severe illness in an infant, so we don't want infants exposed to this. Most lactating individuals who develop herpes simplex on their nipples/breasts contract the herpes from the infant or child, who had a case of cold sores.

### Management of herpes simplex

#### **Avoid direct contact of lesions with baby**

When the lesions are blistered, they can give the baby herpes. Herpes infections in young infants can be fatal. If the parent contracted the blisters from a toddler with herpes around the mouth, then it probably won't matter as much if the toddler keeps nursing with the nipple blisters. But once the parent has herpes, it can come back and infect a new baby. So if the lesions occur after the birth of another infant, the new baby should not be exposed to the lesions.

#### **Express and discard milk on affected breast**

To prevent exposing a new baby to herpes lesions, the parent will need to express and discard the milk from the affected breast, until the lesions are scabbed over. The parent can continue to nurse on the other side. The parent should keep the lesions covered until the lesions are scabbed over.



# Shingles on the Breast

- Shingles- reactivated chickenpox
  - Blisters spread chickenpox
- Occur on 1 side of body
- Can develop over 1 breast region
- Management
  - Avoid direct contact of lesions with baby
  - Express and discard milk on affected breast
  - OK to nurse on the other side
  - Cover lesions until scabbed over
  - Anti-viral medication



48

## Shingles on the Breast

### Shingles- Reactivated Chickenpox

Shingles is an illness that is caused by the chickenpox virus. Once a person has had chicken pox or has received the vaccine, the virus lives in the person's body. At some point a large % of the population has an outbreak of shingles, which occurs along one nerve. It will occur as painful blisters along one side of the body. If it occurs in an area exposed to the baby, the baby can contract chicken pox.

### Management of shingles

#### Avoid direct contact of lesions with baby

When the lesions are blistered, they can give the baby chickenpox

#### Express and discard milk on affected breast

To prevent exposing a new baby to the shingles lesions, the parent will need to express and discard the milk from the affected breast, until the lesions are scabbed over. The parent can continue to nurse on the other side. The breast with the lesions should be kept covered, so that the baby is not exposed to the lesions until they are scabbed over.



## Non-Infectious Causes of Pain

- Nipple Dermatitis
- Vasospasm
- Plugged Ducts
- Blebs
- Other nipple trauma
  - Biting



49



### **Other Causes of Nipple Pain**

Just read these, as we will discuss them in detail in the next slides

## Common Causes of Nipple Dermatitis



- Eczema
- Psoriasis
- Allergic reaction



50

### **Let's first talk about Nipple Dermatitis**

**Causes often include:**

**Underlying Eczema**

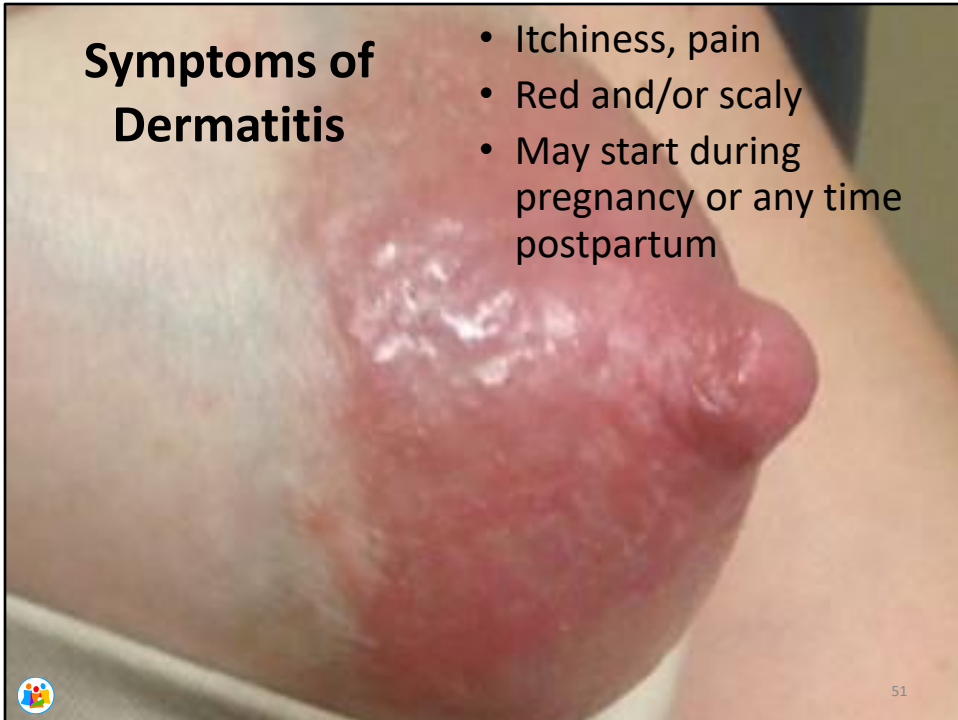
**Underlying psoriasis**

**A reaction to something that mom has come into contact with.**

Reactions can be quite varied. Reactions can occur from things that come into contact with the breasts, such as breast pads or nipple creams. Sometimes parents have a reaction to something that is in the baby's mouth, such as antibiotics or foods, once they start solids. For example, if the parent is allergic to penicillin and the baby is given Amoxicillin for an ear infection, the parent can develop a rash on the nipple/areolar region.

## Symptoms of Dermatitis

- Itchiness, pain
- Red and/or scaly
- May start during pregnancy or any time postpartum



### Nipple and Areolar Dermatitis

#### **Itchiness, pain**

Nursing is often uncomfortable

#### **Red, scaly**

The nipples will almost always look red and scaly in Caucasians. The redness might be hard to see in women of color, and instead the skin may appear irritated, raised, and scaly

**May start during pregnancy or any time postpartum**

## Treatment of Dermatitis



- Identify underlying cause
- Avoid irritants
- Frequent repeated moisturization with an oil/non-petroleum jelly
- Topical steroids are typically needed
  - see her primary care provider or dermatologist for treatment



52

### Treatment of Dermatitis

#### **Identify underlying cause**

This is a process that providers do regularly when a person presents with a rash. In lactating individuals, it is important to find out if the parent has underlying eczema or psoriasis

#### **Avoid irritants**

Once certain irritants are suspected, ask the parent to avoid them

#### **Frequent repeated moisturization with an oil/petroleum jelly**

Irritated skin tends to improve with moisturization using an oily barrier, such as coconut oil or petroleum jelly

#### **Topical Steroids**

Topical steroids tend to work well to reduced nipple pain, cracking and irritation, but the breastfeeding champions should not recommend steroids until the parent is seen by their physician or other provider

#### **If not improving, see a dermatologist**

If the rash is not improving, they may need to see a dermatologist for a biopsy. A rare form of breast cancer is called Paget's disease, which can present as a dermatitis of the nipple

## Classic Sx and Signs of Vasospasm of the Nipples



- Nipple turns pale-blue-red
- Burning nipple pain
- Sharp breast pains
- Pain lasts variable duration of time
  - Color changes are assoc with pain
- Triggered by cold
  - Not just associated with feeding



53

### **Lets talk about Vasospasm of the Nipples**

This is a common problem that can cause pain. It is also known as Raynaud's syndrome

#### **Classic symptoms include:**

**Nipple go thru a cycle of color changes.** These occur because there is a decrease in blood flow to the nipples First the nipples turn pale, then dusky or blue, and then flush-red when the blood supply returns- this is the typical pattern of vasospasm

#### **Nipple and breast pain can last a variable amount of time**

The pain is associated with the color changes. Once the nipples are flush-red again, the pain is often going away. The pain is a frequent burning of the nipples and sharp pains into breasts. Some parents describe a constant burning of the nipples during, after and between feedings. This is most often due to vasospasm.

#### **Triggered by cold**

Lactating individuals will notice vasospasm with feeding, especially if the infant is biting or causing suck trauma. A cold environment will also induce the same pain from vasospasm.



Here is a picture of a nipple that is pale in the early blanching vasospasm phase. Vasospasm usually starts as blanching, then proceeds to purple changes (cyanosis), then flush-red.



This is a picture of a nipple that has vasospasm. It is in the purple, or cyanotic stage.

## Treatment of Vasospasm

- Avoid infant biting
- Apply heat immediately after nursing
- Keep breasts warm
  - Flannel or wool pads
  - Foot warmers applied to backs of nursing pads- do not allow these to directly touch the breast/nipple!
  - Medications



Source: US Breastfeeding Committee

### **Treatment of Vasospasm**

#### **Avoid infant biting**

Take the baby off the breast at the end of feeding when the baby is non-nutritively sucking, meaning when the baby is no longer swallowing.

#### **Apply heat immediately after nursing**

There are a few ways to do this. The parent can apply a heating pad on the low setting to the nipples after covering with a bra for a few minutes after nursing. Another way is to apply warm moist compresses. Disposable diapers make nice moist compresses. The gel in the diaper retains heat well.

#### **Keep breasts/nipples warm**

Wear warm clothes, keep bra on. Use wool or flannel nursing pads, or pieces of such fabric inside bra.

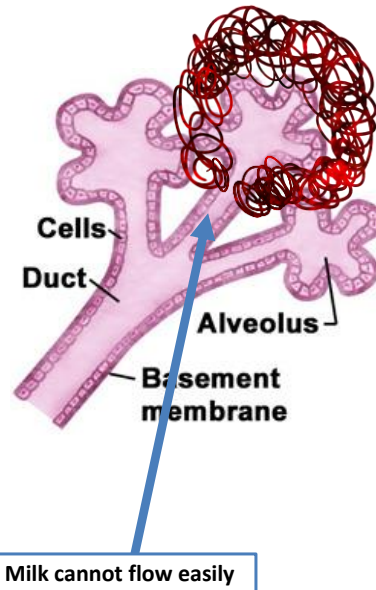
#### **Medications**

Certain medications that are also used for Raynauds of the hands and feet can open the blood vessels and prevent the blood vessels from clamping down, causing the vasospasm.



## What is a Plugged Duct?

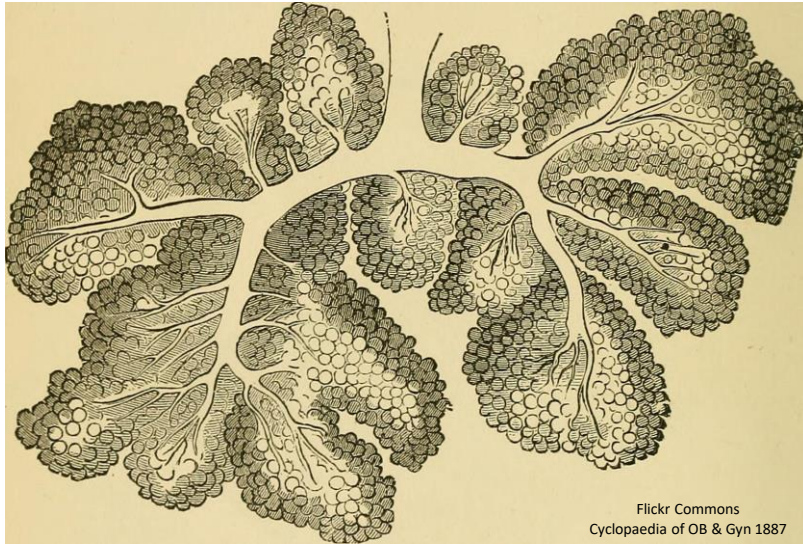
- A swollen area of the breast
- The milk in the swollen region cannot move through the ducts until the swelling resolves
- When the swelling resolves, clots of milk are sometimes expressed



57

### **What is a plugged duct?**

This is an area of the breast that is swollen. The alveolus became overly full, causing swelling around the alveolus. This swelling prevents the milk from moving, which is what we see with engorgement. It is essentially a localized area of engorgement.



The ducts are too tiny and innumerable  
for just 1 plugged duct to cause an area of swelling



## Symptoms of Plugged Ducts



- Tender localized area of fullness
- Pain radiates to/from the nipple during nursing
- No/minimal breast redness, no fever
- Drop in milk production because the breast does not completely empty



59

### Symptoms of Plugged Ducts

#### **Tender localized area of fullness.**

Lactating individuals will feel this in one area of the breast, sometimes in a pie-shaped area of the breast

#### **Pain radiates to/from the nipple during nursing**

#### **No breast redness or fever**

A plugged area will have redness with fever if there is an infection. If there is not an infection, the parent should not have redness or fever

#### **Drop in milk production because the breast does not fully drain**

These parents notice that the milk production has slowed. It is harder to express sufficient milk from the area that is not draining well



**What Do You Think Are Risk Factors for Plugged Ducts?**

**Just as a review of session 3,** the General principles include:

- Use heat before nursing to promote milk flow
- Cold compresses in between nursing to reduce edema
- Reverse Pressure Softening
- Breast massage before feeding/pumping
- Hand express some colostrum before latch.
- Prevent engorgement by nursing frequently.



### **Risk Factors for Plugged Ducts**

Plugged ducts are a common reason for breast and nipple pain. When one part of the breast is plugged and milk cannot flow from that area, the breast is tender. When the baby nurses, pain radiates from the plugged area to the nipple, because tugging on the plugged duct causes pain.

#### **Risk factors include:**

##### **High milk production**

Lactating individuals who have a high production don't fully empty their breasts as often, causing areas of the breast to not drain well at times. This can lead to plugs.

##### **Returning to work or maternal/infant separation**

Lactating parents who are separated from their babies don't drain their breasts as well using a pump as they do when the baby nurses. This lack of good breast drainage increases the risk of plugged ducts.

##### **Longer duration of sleeping over night**

This also creates a situation of insufficient breast drainage

##### **Irregular feeding pattern**

Some parents who feed on an irregular schedule might go long periods of time with too much fullness

##### **Restrictive clothing/underwire bra/seat belt/pump flange**

Any situation that prevents good thorough breast drainage increases the risk of plugs. Some underwire bras and restrictive clothing might make it hard to

achieve good breast emptying in some areas of the breasts

**Stress, fatigue**

There is an association between stress and fatigue and more plugs and mastitis. We don't know why this happens

**Mammary Dysbiosis**

Lactating individuals with chronic breast pain can have recurrent plugs. This might come from bacterial overgrowth in the ducts, leading to stickiness of the milk from bacterial DNA, which is sticky

## Treatment of Plugged Duct

- Remain with normal routine of nursing/pumping
- Heat or ice for comfort
- No aggressive massage, just light lymphatic massage
- Vary nursing positions
- If the lump does not resolve in 48 hours, needs a visit
- Lecithin 1200mg 2-4 a day for prevention may help (no evidence)



Source: US Breastfeeding Committee

### Treatment of Plugged Ducts

#### **Rest**

#### **Adequate nursing/pumping**

Use the best strategy to keep the breast drained, so that if nursing is more effective than pumping, best to nurse.

#### **Heat and avoid massaging the area**

Heat helps to promote milk drainage. Massage can make this worse. It creates more inflammation around the plug and causes swelling, mastitis

#### **Ultrasound therapy**

In some places, physical therapists are providing ultrasound therapy for plugged ducts

#### **Vary nursing positions**

Babies can remove a plug much better than a pump can. Varying the infant's position seems to help eliminate plugs.

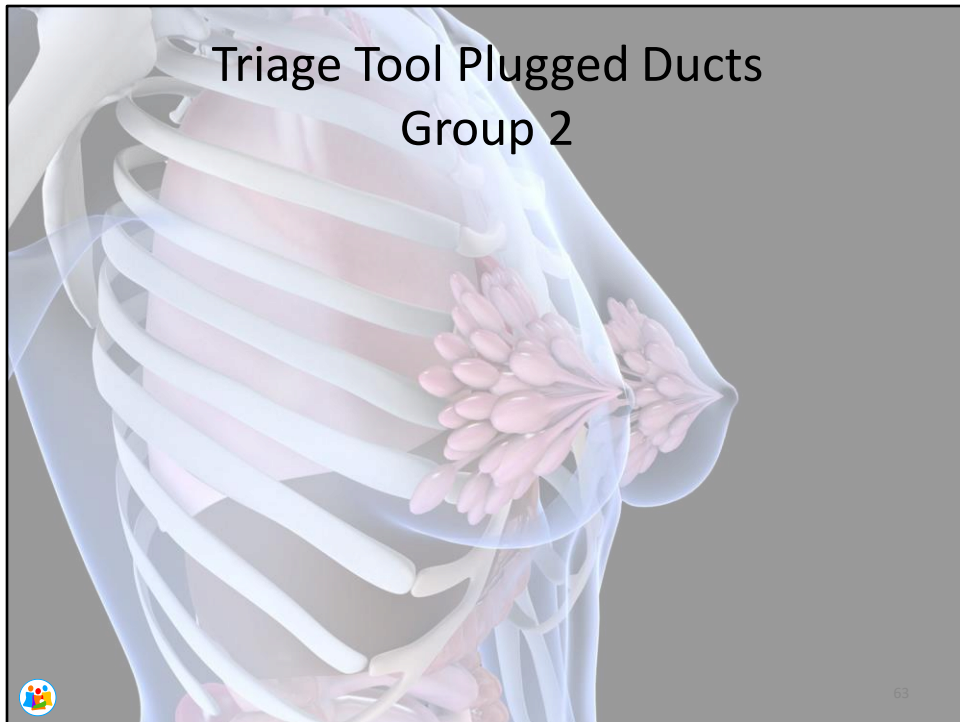
#### **If the lump does not resolve in 48 hours, the parent needs to be seen, to r/o an abscess, galactocele or other mass.**

After 48 hours, the lump should not be considered a plug. An exam is needed at that point, and possibly an ultrasound

#### **Lecithin 1200mg capsules twice a day for recurrent plugs**

Lecithin can help to prevent plugs in the future, for people prone to plugs.





Group 2 will take out the script for Triage Tool Plugged Duct

This is your first baby

Your baby is 3 months, and you returned to work 3 weeks ago

You notice a hard spot in your L breast, and that area feels full and won't drain, for about a day

No fever, swelling, redness



- This is your first baby
- Your baby is 3 months, and you returned to work 3 weeks ago
- You notice a hard spot in your L breast, and that area feels full and won't drain, for about a day
- No fever, swelling, redness



## Discussion Plugged Duct Case

- What are reasons why this person might have developed a plugged duct?
- What advice did you give person to help her?
- When should she be seen for further evaluation?



65

What are reasons why this mother might have developed a plugged duct?

- Infrequent nursing/pumping, inadequate pump fit/use, stress, decrease in fluid intake

What advice did you give mom to help her?

- Frequent feeding/pumping
- Massage, heat
- Rotate breastfeeding positions
- Use pain meds

When should she be seen for further evaluation?

- Fever, redness
- Plug is not gone by 48 hours

## Nipple Blebs

- A milk-colored lesion on the nipple
- May or may not be painful
- Sometimes associated with blocked milk ducts



This is a photo of an pretty advanced bleb.

It is a milk colored lesion at the tip of the nipple

It may or may not be bothersome.

Sometimes these are associated with tugging and pulling on the nipple. For others, it is associated with a deep plug



- Treatment
  - IF no pain and no underlying plugged duct, no need for treatment
  - If painful, keep area well-moisturized
    - Olive oil on a cotton ball in bra
    - Lanolin
  - Steroid oint may help
  - Surgical unroofing does not help

Photo- Kathy Leeper MD

67

### Treatment of a Bleb

If it does not bother the parent, they can leave it alone.

If it is painful, keep it well moisturized with something like olive oil, coconut oil, or lanolin

Sometimes providers will unroof them and then apply a steroid ointment several times a day to help resolve them, but there is no evidence that this helps, and might increase risk of infection or scarring of the nipple

# Infant Biting

- Most often during teething
- Other causes:
  - Bite reflex
  - Rapid or heavy milk flow



68

## Infant Biting

Infant biting is a common problem

**Most often teething-** Usually infant biting is a problem that occurs when babies start to teeth, earliest around 3 months, but usually after 4 months. For the most part, they will be dealing with biting due to teething.

**Other Causes-** Occasionally there are other causes of biting

**Newborn bite reflex-** This is also known as the 'tonic bite reflex' It occurs in babies under 2 months, only when the tongue is inside the mouth. It is a simple reflex that usually goes away by 2 months, but can be worse if the baby is tongue tied. If the infant is under 2 months of age and is biting the baby should be referred to a lactation consultant.

**Milk flow-** Babies might bite down early in the first several weeks if the milk flow is fast or heavy, such that the baby has trouble controlling the flow. Biting down on the nipple can help to slow the flow, but also obviously hurts the parent.



## Infant Biting During Teething

- Occurs with teething
- During non-nutritive sucking
- Treatment
  - Keep the baby close
  - Avoid non-nutritive sucking
  - Alternative for infant teething

### **Infant Biting**

#### **Occurs with teething**

Most biting will occur when the baby is teething, which is 3 months at the earliest, so let's just focus on teething as a cause of biting.

#### **During non-nutritive sucking**

Biting due to teething is most likely to occur at the end of a feeding, when the baby is no longer swallowing. When the baby swallows, the tongue stays over the lower gum line. When swallowing is over and the milk is not flowing, the baby will retract the tongue, allowing the baby to bite down.

#### **Treatment**

##### **Keep the baby close**

This means keeping the nose and chin close to the breast, so that the baby cannot pull back and bite down on the nipple. By keeping the baby close to the breast, the baby's mouth will stay wider open.

##### **Avoid non-nutritive sucking**

If the baby seems to be done swallowing and is non-nutritively sucking, the baby is more likely to bite. When the baby seems to be in a biting mood or stage, it is best to take the baby off of the breast when he is done swallowing to prevent biting.

##### **Alternative for infant teething**

When the baby begins to bite, take the baby off and offer a cool moist cloth to bite on, or a chilled teething toy

## Conclusions for Session 4

- The most common causes of sore nipples are positioning and latch issues
- Breast engorgement during the first week increases the risk of nipple trauma
- People with sore nipples who are not improved by changes in positioning and latch should be referred to a knowledgeable provider



70

These are the topics covered in this session

You are seeing mom & her term healthy infant at 14 days postpartum. She complains that her nipples are sore when the baby latches on and the pain continues throughout feeding. When the baby comes off the breast, the nipple looks pinched and pale. You advise:

- A. You have vasospasm of your nipples. Use heat on your breasts after nursing.
- B. You likely have a yeast infection of your nipples. You will need to contact your provider for treatment.
- C. You need to have the latch checked. Either I can do this, or lets have an LC see you.



71


The correct answer is C

A is not correct because the problem is nipple trauma, not pure vasospasm. The nipple trauma needs to be corrected.

B is not correct. Pale pinched nipples do not represent yeast.



A lactating individual who is 6 weeks postpartum reports stinging burning nipple pain for 1 week. Prior to this, they had no lactation problems. They would like to know what could possibly be wrong. **You advise:**

- A. Your baby may not be latching properly.
- B. You might have over-production, causing fullness and breast discomfort.
- C. Your let-down is too fast, causing the baby to pinch the nipple.
- D. You might have vasospasm.
- E. You might have a nipple infection.
-  F. All of the above are possible.



72

The correct answer is F.

All of these problems are possible.

This is why sore nipples cannot be managed over the phone

A mother who is 20 days postpartum reports that her nipples are still cracked, sore, and the sores stick to her breast pad. She denies deep breast pain, fever or breast redness. Breastfeeding hurts with latch and improves during feeding. **You advise:**



A. You need to see a lactation specialist.

In the meantime, apply breastmilk, coconut oil, or lanolin and a nonstick pad over the wounds after each nursing.

B. Your nipples won't heal until you stop nursing. Just pump and bottle feed for now.

C. Use a nipple shield to reduce pain and allow the sores to heal.



73


The correct answer is A

She has had sore nipples for almost 3 weeks, so she needs an evaluation to rule out problems such as prolonged nonnutritive sucking, pump trauma, or a skin problem like eczema.

B is incorrect. IF the sucking is not traumatic, then she should continue to nurse. In this case, she just has pain with latch, and not during feeding, which means that the baby is probably doing a fine job sucking. These are probably not healing because she is allowing her nipples to stick to the breast pad. Usually these sores heal if they no longer are allowed to stick.

C is incorrect. Nipple shields can cause a drop in milk production, reduce milk transfer, and can cause more nipple pain and trauma because the baby often ends up sucking on the nipple and not the breast, causing the nipple shield to press down on the nipple sores. Also, the baby might start to refuse to nurse without the nipple shield.

A lactating individual who is 3 months postpartum reports nipple redness with burning, stinging pain for 2 weeks. People on their Facebook support group suggested that they may have thrush. They wonder what you think. **You advise:**

-  A. You should be seen by a lactation consultant or breastfeeding medicine specialist to evaluate your pain.
- B. Yes, it sounds like yeast. Call your physician for medication.
- C. It sounds like vasospasm. Use heat on your nipples after nursing.
- D. You should throw out your stored breastmilk in case it has yeast in it.



74

The correct answer is A


B is incorrect. Nipple pain cannot be evaluated on the phone. The latch needs to be checked, and a breast exam is necessary for signs of yeast or other changes such as vasospasm

C is incorrect, for the same reasons as outlined above.

D. Is incorrect, women do not need to throw out their milk if yeast is suspected.

There is no evidence for this. Many of these women don't even have a yeast infection

Mom calls 4 months postpartum reporting recurrent plugged ducts. She finds that they usually resolve in about 24 hours, but this one has been present for 4 days. She has no fever, chills or redness of the breast, but the area is tender. **You advise:**

-  A. Come in to be seen to have that area checked.
- B. Try to nurse frequently, pump after nursing, use heat and massage as much as possible. IF it still is not gone in 3 days, call back. Watch for sx of infection.
- C. You probably have too much milk, you should stop pumping so much extra milk.



75

The correct answer is A

B is incorrect. She has had the problem for 4 days ,so needs to be seen. Excessive breast stimulation will make it worse

C is incorrect. It is possible that she has too much milk, but this advice will not help solve her current problem.

A parent calls 7 mo postpartum with a recent diagnosis of shingles by their physician. They describe painful red skin lesions along the upper back and onto the R breast, involving the nipple. The physician advised weaning and the parent wants your opinion. **You advise:**

- A. The baby is now old enough to be safely exposed to these shingles lesions, so no worries, keep nursing.
- B. It is best to not nurse from that breast. Express and dump the milk until the lesions on the nipple and sores are dried up. Keep the area covered.
- C. Don't nurse from the R breast, but you can give the baby milk pumped from that breast.



76

The correct answer is B

A is incorrect. We don't want the baby exposed to shingles, since the baby could contract chickenpox

C is incorrect. The expressed milk can have chickenpox in it, so it needs to be dumped

A mother with her 4mo old reports that her infant is teething and wonders how to prevent biting. She was told that babies need to wean when teeth come in. **You advise:**

- A. Yes, sometimes babies bite. Good luck.
- B. Pump and bottle feed when teething seems the worst.
- C. Babies bite most often at the end of feeding. Keep the baby deeply latched to prevent biting. Take her off when she is biting and no longer seriously drinking.
- D. Make sure to respond loudly and clearly, in order to scare the baby into never doing that again.



77

The correct answer is C

A is incorrect, since there are strategies to deal with this

B is incorrect. Pumping and bottle feeding is not sustainable for most moms. She has a higher likelihood of weaning early if she has to do this

D is incorrect. Scaring the baby might frighten the baby into a nursing strike.