

Plugged Ducts and Mastitis

The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding or breastmilk only for the first 6 months of life. The AAP also recommends that breastfeeding be continued up to and beyond the first year of life or as long and mother and child desire. With the benefits of breastfeeding and breastmilk going far beyond basic nutrition, efforts to promote, support and encourage breastfeeding is one of the primary goals of infant care.

A majority of women desire to exclusively breastfeed for 6 months and plan to breastfeed for one year or more. Breast pain is the most frequently stated reason for early weaning. The longer breast pain is experienced, the more likely weaning is to occur. Immediate intervention and treatment of breast pain is crucial to preserving the breastfeeding relationship and prevent early weaning.

Plugged ducts and mastitis are common conditions in breastfeeding affecting up to 20% of women. Both conditions cause pain and discomfort of the breast which affects long-term breastmilk feeding goals. A plugged duct is an obstruction of milk flow in a portion of the breast, either at the nipple or further back in the ductal system. Mastitis is inflammation and infection of the breast. These conditions happen most often in the first 6-8 weeks postpartum but can occur at any time during breastfeeding.

Risk factors/Causes

Plugged Ducts	Mastitis
Engorgement	All the same risk factors and causes as plugged
	ducts plus
Inadequate breast emptying due to poor latch,	Sore cracked or bleeding nipples as an entry
nipple pain, sleepy baby, tongue tie and uncoordinated suck/swallow	point for infection
Missed feedings, longer intervals between breast	Longer hospital stays increase exposure to
emptying (sleeping through the night), abrupt	infectious agents. Recent antibiotic use.
weaning, pacifier overuse	
Pressure on the breast from fingers during feedings, tight clothing around or on the breast, underwire bras, purse, diaper bag, seatbelt and baby carrier straps	History of mastitis
Limited time at the breast (hurried feedings,	Having a plugged duct
twins or multiples feeding, return to work)	Having a plugged duct

[~] Stress, fatigue, anemia and weakened immunity are risk factors for both plugged ducts and mastitis

Prevention of Plugged Ducts and Mastitis

- 1. Frequent feeding and emptying of the breast (8-12 feedings in 24 hours)
- 2. Establish a good latch at every feeding for better emptying and prevent nipple damage
- 3. Breastfeed in different positions to allow for more thorough emptying of the breast
- 4. Well-fitting nursing bra, avoid underwires or tight straps from clothing, bags, purses or infant carriers
- Use a high-quality lanolin (like Lansinoh) for sore, cracked or bleeding nipples. There is
 no research that shows better relief or healing with nipple creams other than plain, high
 quality lanolin.
- 6. Women who have frequent plugged ducts may see improvement by taking the supplement lecithin. Lecithin can reduce the "stickiness" of the milk and prevent plugged ducts from occurring. Recommended dosing is 3,600mg to 4,800mg per day, (1) 1,200mg tablet 3-4 times a day (up to 5,600mg/day is a safe amount). If no occurrence of plugged ducts for 2 weeks, dosing can be reduced by one tablet every 2 weeks.

<u>Probiotics</u>: new research shows that taking probiotics can prevent and decrease the incidence of mastitis and is safe during breastfeeding. Take a probiotic containing *Lactobacillus Fermentum* (*L. fermentum*) and *Lactobacillus Salivarius* (*L. salivarius*), both of these are commonly found in many different brands of probiotics.

Signs and Symptoms

Plugged ducts ~obstruction of breastmilk emptying	Mastitis ~inflammation and infection of the breast
Hard lump felt in breast	Flu-like symptoms, body aches, chills, fever of 101.3 or higher, fatigue
Warm, red, painful section or localized area of breast	Warm, red, painful section or localized area of breast, more intense than a plugged duct
Gradual onset	Abrupt onset
Pain or discomfort in the breast only	An overall feeling of being sick or not well
wedge-shaped area of engorgement	Red streaking on the breast

Side Effects

Plugged ducts	Mastitis
Milk may appear to be stringy or grainy and discolored, milk can be strained if desired but not necessary	Milk may have thickened, fatty, clumpy parts or strings, milk can be strained if desired but not necessary
There may be decreased milk production from affected breast, this is temporary	Milk may temporarily have a saltier taste and some babies resist this breast
Breast discomfort may last for a week or so after plugged duct has resolved	There could be mucus or blood found in the breastmilk
It is always safe and recommended to continue infant feeding from affected breast	It is always safe and recommended to continue infant feeding from affected breast

Supportive Care and Treatment

It is imperative to treat a plugged duct immediately and aggressively to prevent further progression to mastitis

Plugged Duct	Mastitis
Rest, warmth prior to gentle massage, fluids, nutrition. Deep tissue massage can make matters worse.	Rest, warmth prior to gentle massage, fluids, nutrition. Deep tissue massage can make the make matters worse.
Therapeutic breast massage* and heat before feedings to better empty the breast. Ice after feeding.	Therapeutic breast massage* and heat before feedings to better empty the breast. Ice after feeding.
Feed on demand at the breast, there is no benefit to "emptying the breast" or excessive pumping	Feed on demand at the breast, there is no benefit to "emptying the breast" or excessive pumping
Ibuprofen 800mg every 6-8 hours. Acetaminophen (Tylenol) 1000mg every 6 hours. Expectant management with supportive care	Ibuprofen 800mg every 6-8 hours. Acetaminophen (Tylenol) 1000mg every 6 hours. Expectant management if it's been less than 24 hours, symptoms are mild, or symptoms are
No antibiotics necessary	improving with supportive care Antibiotics if woman is acutely ill, symptoms persist or worsen after 12-24 hours of supportive care

^{*}As taught by a certified lactation consultant or shown on https://player.vimeo.com/video/65196007 massage should done for a minimum of 60 minutes per day.

Applying warmth can be easy as filling a disposable diaper with warm water, squeeze out the excess water, then place it on the breast. Ice packs after feedings to reduce inflammation

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