

## How do I know if I have a plugged duct or mastitis?

<b>PLUGGED DUCT</b>	A plugged (or blocked) duct is an area of the breast where milk flow is obstructed. The nipple pore may be blocked or the obstruction may be further back in the ductal system. A plugged duct usually comes on gradually and affects only one breast.
<b>Local symptoms</b>	Mom will usually notice a hard lump or wedge-shaped area of engorgement in the vicinity of the plug that may feel tender, hot, swollen or look reddened. Occasionally mom will only notice localized tenderness or pain, without an obvious lump or area of engorgement. The location of the plug may shift. A plugged duct will typically feel more painful before a feeding and less tender afterward, and the plugged area will usually feel less lumpy or smaller after nursing. Nursing on the affected side may be painful, particularly at letdown.
<b>Systemic symptoms</b>	There are usually no systemic symptoms for a plugged duct, but a low fever (less than 101.3°F / 38.5°C) may be present.
<b>MASTITIS</b>	Per Maureen Minchin ( <i>Breastfeeding Matters</i> , Chapter 6), mastitis is an inflammation of the breast that can be caused by obstruction, infection and/or allergy. The incidence of postpartum mastitis in Western women is 20%; mastitis is not nearly so common in countries where breastfeeding is the norm and frequent breastfeeding is typical. Mastitis is most common in the first 2-3 weeks, but can occur at any stage of lactation. Mastitis may come on abruptly, and usually affects only one breast.
<b>Local symptoms</b>	Local symptoms are the same as for a plugged duct, but the pain/heat/swelling is usually more intense. There may be red streaks extending outward from the affected area.
<b>Systemic symptoms</b>	Typical mastitis symptoms include a fever of 101.3°F (38.5°C) or greater, chills, flu-like aching, malaise and systemic illness.

## Side effects of plugged ducts or mastitis

### Plugged duct

- ❖ Milk supply and pumping output from the affected breast may decrease temporarily. This is normal and extra nursing/pumping generally get things back to normal within a short time.
- ❖ Occasionally a mom may express “strings” or grains of thickened milk or fatty-looking milk.
- ❖ After a plugged duct or mastitis has resolved, it is common for the area to remain reddened or have a bruised feeling for a week or so afterwards.

### Mastitis: Side effects may be the same as for a plugged duct, plus:

- ❖ Expressed milk may look lumpy, clumpy, “gelatin-like” or stringy. This milk is fine for baby, but some moms prefer to strain the “lumps” out.
- ❖ Milk may take on a saltier taste due to increased sodium and chloride content – some babies may resist/refuse the breast due to this temporary change.
- ❖ Milk may occasionally contain mucus, pus or blood.

## What are the usual causes of plugged ducts or mastitis?

Plugged duct	Mastitis
<p><b>Milk stasis / restricted milk flow</b></p> <p>... may be due to:</p> <ul style="list-style-type: none"> <li>❖ <b>Engorgement or inadequate milk removal</b> (due to latching problems, ineffective suck, tongue-tie or other anatomical variations, nipple pain, sleepy or distracted baby, oversupply, hurried feedings, limiting baby's time at the breast, nipple shield use, twins or higher order multiples, blocked nipple pore, etc.).</li> <li>❖ <b>Infrequent/skipped feedings</b> (due to nipple pain, teething, pacifier overuse, busy mom, return to work, baby suddenly sleeping longer, scheduling, supplementing, abrupt weaning, etc.).</li> <li>❖ <b>Pressure on the duct</b> (from fingers, tight bra or clothing, prone sleeping, diaper bag, etc.).</li> <li>❖ <b>Inflammation</b> (from injury, bacterial/yeast infection, or allergy).</li> </ul> <p><b>Stress, fatigue, anemia, weakened immunity</b></p>	<p><b>Milk stasis (usually primary cause)</b></p> <ul style="list-style-type: none"> <li>❖ Same as for blocked duct.</li> <li>❖ Blocked duct is also a risk factor.</li> </ul> <p><b>Infection</b></p> <ul style="list-style-type: none"> <li>❖ Sore, cracked or bleeding nipples can offer a point of entry for infection.</li> <li>❖ Hospital stay increases mom's exposure to infectious organisms.</li> <li>❖ Obvious infection on the nipple (crack/fissure with pus, pain) is a risk factor.</li> <li>❖ Past history of mastitis is a risk factor.</li> </ul> <p><b>Stress, fatigue, anemia, weakened immunity</b></p>

**What is the usual treatment for plugged ducts and mastitis?** It's always best to treat a plug immediately and aggressively to avoid escalating into mastitis.

CAUTION: Do NOT decrease or stop nursing when you have a plugged duct or mastitis, as this increases risk of complications (including abscess).

### GENERAL SUPPORTIVE MEASURES

Plugged Duct	Mastitis
<ul style="list-style-type: none"> <li>❖ Rest</li> <li>❖ Adequate fluids</li> <li>❖ Nutritious foods will help to strengthen mom's immune system</li> </ul>	<ul style="list-style-type: none"> <li>❖ Bed rest (preferably with baby)</li> <li>❖ Increase fluids, adequate nutrition</li> <li>❖ Get help around the house</li> </ul>

### BREASTFEEDING MANAGEMENT

*- SAME for plugged duct or mastitis*  
*- important to start treatment promptly*

*"Heat, Massage, Rest, Empty Breast"*

<b>General</b>	<ul style="list-style-type: none"> <li>❖ <b>Nurse frequently &amp; empty the breasts thoroughly.</b> Aim for nursing at least every 2 hrs. Keep the affected breast as empty as possible, but don't neglect the other breast.</li> <li>❖ When unable to breastfeed, mom should express milk frequently and thoroughly (with a breast pump or by hand).</li> </ul>
<b>Before nursing</b>	<ul style="list-style-type: none"> <li>❖ Use <b>heat &amp; gentle massage</b> before nursing- <i>Warm compress</i>. Try using a disposable diaper: fill the diaper with hot water (try the temperature on your wrist first to avoid burns), squeeze the diaper out a bit, then put the inside of the diaper toward the breast. This will</li> </ul>

stay warm much longer than a wet cloth.- *Basin soak.* Fill sink or bowl with hot water and submerge breast in water while massaging the plugged area toward the nipple. Some report better results when epsom salts are added to the water — add a handful of epsom salts per 2 quarts (2 liters) of water. Rinse with fresh water before nursing, as baby may object to the taste.- *Hot Shower.* It can be helpful to massage in the shower with a large-toothed comb. The comb should be drawn through a bar of soap until it is very soapy and then used to gently massage over the affected area in the direction of the nipple.

- ❖ Loosen bra & any constrictive clothing to aid milk flow.

**While nursing**

- ❖ Nurse on the affected breast first; if it hurts too much to do this, switch to the affected breast directly after let-down.

- ❖ Ensure good positioning & latch. Use whatever positioning is most comfortable and/or allows the plugged area to be massaged. Note: Advice to point baby’s chin (or nose) toward the plugged area is not necessarily going to be helpful as it is based on the idea that the milk ducts take a nice, direct route to the nipple – recent research tells us that this is not true, and that a particular duct might begin in one area of the breast but can “wander” in many different directions before terminating in any area of the nipple.

- ❖ Use breast compressions.

- ❖ Massage gently but firmly from the plugged area toward the nipple.

- ❖ Try nursing while leaning over baby (sometimes called “dangle feeding”) so that gravity aids in dislodging the plug.

**After nursing**

- ❖ Pump or hand express after nursing to aid milk drainage and speed healing.

- ❖ Use cold compresses between feedings for pain & inflammation.

**MEDICATION \***

**Plugged duct**

**Mastitis**

**Analgesia**

**Analgesia**

- ❖ Pain reliever/anti-inflammatory(e.g., ibuprofen)
- ❖ Second choice – pain reliever alone(e.g., acetaminophen)

- ❖ Same as for plugged duct

**Antibiotic?**

- ❖ **No**

**Antibiotic?**

- ❖ **No:** If symptoms are mild and have been present for less than 24 hours.
- ❖ **Yes:** If symptoms are not improving in 12-24 hours, or if mom is acutely ill.
- ❖ Most common pathogen is penicillin-resistant *Staphylococcus aureus*.
- ❖ Typical antibiotics used for mastitis:- Dicloxacillin, flucloxacillin, cloxacillin, amoxicillin-clavulanic acid- Cephalexin, erythromycin, clindamycin, ciprofloxacin, nafcillin
- ❖ Most recommend 10-14 day treatment to prevent relapse. Do not discontinue treatment earlier than prescribed.
- ❖ Consider probiotic to reduce thrush risk.
- ❖ Some mothers also use natural treatments.