



Mastitis: How to diagnose and treat

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Mastitis is a condition estimated to affect between 3% and 33% of breastfeeding women (World Health Organization [WHO], 2000), while a recent Australian study found an incidence of 17% (Amir, Forster, Lumley & McLachlan, 2007).



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It is a condition which can have a significant negative impact on women's experiences of breastfeeding

(Amir & Lumley, 2006) and is often associated with early breastfeeding cessation (Crepinsek, Crow, Michener & Smart, 2010; Lewallen et al., 2006; Scott, Robertson, Fitzpatrick, Knight & Mullholland, 2008).

To minimise the pain and distress encountered by women with mastitis,

it is important for health professionals working with breastfeeding women to have a thorough understanding of this condition and the associated treatment options.

Definition and predisposing factors

The literal meaning of mastitis is inflammation of the breast which may or may not be associated with infection of the breast tissue (Jahanfar, Ng & Teng, 2009). If not treated early, mastitis seems to follow a continuum from engorgement to inflammation to infection and finally to abscess (Crepinsek, et al., 2010; Academy of Breastfeeding Medicine [ABM], 2008).

Staphylococcus aureus, is the most common cause of infective mastitis (Kvist, Larsson, Hall-Lord, Steen & Shalén, 2008). The majority of predisposing factors for mastitis such as infrequent feedings, incorrect attachment, rapid weaning and a blocked duct, relate to milk stasis. Other factors include damaged nipples, maternal illness and *Candida* infection (ABM, 2008).

Symptoms and diagnosis

The clinical symptoms of mastitis can mimic other conditions such as flu-like illnesses. Confirmation of mastitis can normally be made through associated breast symptoms which often occur in a wedge shape (ABM, 2008). The most common symptoms are:

- breast erythema
- breast tension
- fever ($>38.5^{\circ}\text{C}$)
- breast pain
- breast lumps
- muscular aches (ABM, 2008)

Due to the ease of identifying the above symptoms, it is uncommon for laboratory investigations, such as breastmilk culture, to be carried out. Kvist et al. (2008) found that bacterial counts in breastmilk cultures were of little value in determining appropriate treatments. Diagnosis should specify whether an infection or abscess is thought to be present as this will effect treatment requirements.

Treatment

Treatment for mastitis can be divided into three categories: supportive, breast care and pharmacological. Supportive measures include general measures to improve the mother's wellbeing such as adequate rest, fluids and nutrition (Jahanfar et al., 2009).

Regular breast emptying through continued breastfeeding or expressing

aims to reduce milk stasis and according to WHO (2000) is the mainstay of mastitis treatment. Sudden weaning during an acute bout of mastitis is likely to exacerbate symptoms and increase the risk of abscess formation (ABM, 2008). It is important for health professionals to inform the woman that continued breastfeeding is not only safe but will assist in her recovery from mastitis.

Heat packs to the breast are recommended prior to feeds to assist in milk flow and cold packs are recommended after feeds for the reduction of pain and oedema (ABM, 2008; Crepinsek et al., 2010). Support should be provided to women who have nipple damage, nipple pain or are having difficulties latching their baby to the breast (Jahanfar, et al., 2010). Compromised nipple integrity can allow an easy entry point for infection, thus correct attachment will minimise the risk for further episodes of mastitis.

Pharmacological treatment includes pain relief and antibiotic therapy. The Academy of Breastfeeding Medicine (ABM, 2008) recommends an anti-inflammatory drug such as ibuprofen as it is more likely to target the many symptoms related to inflammation than other simple analgesics such as paracetamol. Ibuprofen, given at recommended dosages, is not detectable in breastmilk and is thus compatible with breastfeeding (ABM, 2008).

Antibiotics are regularly prescribed for women presenting with infective mastitis or mastitis associated with a fever. Kvist et al. (2008) suggests that studies show between 77% and 97% of women are treated for mastitis with antibiotics. The preferred antibiotics are those that are effective against *Staphylococcus aureus*. Such antibiotics are penicillinase-resistant penicillins and Cephalexin or Clindamycin may be used for women with penicillin allergy (ABM, 2008). It is important to note that a 2009 Cochrane review (Jahanfar

et al., 2009) suggested that the effectiveness of antibiotic therapy for the treatment of mastitis in breastfeeding women was still in question with further research recommended.

Mastitis will effect up to a third of all breastfeeding women so it is important for health care professionals to be familiar with the symptoms and evidence-based treatments for this condition. Providing supportive and pharmacological care and encouraging and assisting women with breast care will hopefully ensure women continue to breastfeed successfully beyond their recovery. ■

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