Thrush and Breastfeeding

The information provided is taken from various reference sources. It is provided as a guideline. No responsibility can be taken by the author or the Breastfeeding Network for the way in which the information is used. Clinical decisions remain the responsibility of medical and breastfeeding practitioners. The data presented here is intended to provide some immediate information but cannot replace input from professionals.

Optimal treatment choice
- Swab mother’s nipples and baby’s mouth to confirm thrush
- Ensure breastfeeding and particularly latch are pain free

If swabs positive:
- Topical treatment
  - Miconazole oral gel applied gently a small amount of time to baby’s mouth four times a day
  - Miconazole cream applied sparingly to mother’s nipples after every feed
  - If symptoms persist
  - Ongoing topical treatment plus
  - Oral fluconazole tablets 150-400mg as a start dose and 100-200mg daily

“I had been breastfeeding without problem for 5 months then suddenly developed terrible pains after every breastfeed. I hadn’t changed anything and I was very confused. I noticed my baby’s tongue was white. The doctor took swabs of my nipples and my daughter’s mouth which confirmed we had thrush. It cleared up with treatment within a week”

“I was told I had thrush when my baby was 4 weeks old but I could feel her clamping onto my nipple to slow my really fast flow. I went to see someone else who helped me to sort out my baby’s attachment at the breast and the pain went without any medicines.”

“Who’d have thought such pain could stem from just an incorrect latch on. He fed for longer and it definitely didn’t hurt as much afterwards. I’ll keep on working to improve the attachment.”

Information for mothers

Signs of thrush in you
Thrush (Candida albicans) infection can affect a mother’s breast while she is breastfeeding but it is being over-diagnosed at the moment. Symptoms of thrush are a sudden start of breast and/or nipple pain in BOTH breasts after some weeks of pain free breastfeeding – pain is severe and can last for an hour after EVERY breastfeed. It should be confirmed by a swab of your nipples.

Thrush should not be diagnosed if;
- There is pain in only one breast/nipple
- You have never had pain free breastfeeding

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• If your nipples are shaped oddly after breastfeeds
• If your nipple is white at the tip after breastfeeds
• If the pain is different at different times of the day
• If your baby has a tongue tie which you are waiting to have snipped.

**Signs of thrush in your baby**
• Creamy white patches in your baby’s mouth, on the tongue and may be far back or in the cheeks. Patches do not rub off.
• Baby’s tongue/lips may have a white gloss

It should be confirmed by a swab of the baby’s mouth.

**If you think you have thrush**
Before treating either you or your baby you should ask the person supporting you with breastfeeding to watch a full breastfeed from the moment the baby goes to the breast to the moment he/she comes away from the breast at the end of the feed. They need to look at your nipples at the end of the feed to look for change in colour and shape.

If your baby has a white tongue but you are not experiencing pain, be aware of the risk of thrush but do not treat either of you immediately. Some babies have white tongues in the first few weeks after birth or this may be associated with tongue tie where the milk is not thrown to the back of the mouth.

Diagnosis should be confirmed by nipple swabs cultured for fungal and bacterial infection

**BREASTFEEDING SHOULD BE PAIN-FREE from the point of attachment (the moment the baby goes to the breast) onwards.** (Pain from thrush begins after a feed). There should be no change in the shape or colour of the nipple after a feed. Even good attachment can often be improved and help to relieve symptoms of pain.

**Other causes of nipple pain:**
• attachment of the baby to the breast may need fine-tuning
• eczema including reactions to breast pads or creams
• tongue-tie in the baby
• Reynaud’s syndrome (associated with history of poor circulation and pain made worse when cold)
• white spot which produces pin-point pain
• bacterial infection which appears as a yellowy, thick discharge
• vasospasm which is associated with less than perfect attachment of the baby at the breast and produces white nipples (particularly at the tip) after breastfeeds

**Self-help measures**
• Thrush can be passed between you and your baby – and also between you, your partner and other children
• Anecdotally some mothers find acidophilus capsules can help to restore bacteria which can keep thrush under control (available from health food stores or chemists)
• It is necessary to be very careful with hygiene in order to get rid of thrush completely – be sure to wash your hands well after each nappy change
• Use a separate towel for each person in the family
• Anecdotally some mothers find reducing the level of sugar and yeast in their diet helps
IMPORTANT – To make sure that you get rid of thrush infection, both you and your baby need treatment. Usually once treatment begins the pain and other symptoms will begin to improve within 2 or 3 days. It may take longer for full recovery.

If there is no improvement at all after 7 days, consult your breastfeeding helper again as the cause of the pain may not be thrush.

Information for health professionals

Presenting symptoms which suggest the presence of candida infection of the breast
- previous pain free breastfeeding
- positive swabs for candida from maternal nipples and infant mouth
- bilateral pain
- pain which begins after a breastfeed has finished and continues for up to an hour afterwards
- absence of red area on the breast
- absence of pyrexia

If a mother reports sore nipples during breastfeeding the first action should ALWAYS be to re-examine and improve attachment. This needs to be carried out by a skilled practitioner.

It is unethical to treat a mother and baby with medication inappropriately or unnecessarily, particularly if such use is outside of product licence.

The diagnosis of candidial infections on the breast is difficult. Swabs of the mother’s nipples and the baby’s mouth are useful to confirm the presence/absence of fungal or bacterial infection (commonly Staph. aureus).

Treatment of the surface of the nipple, the baby’s mouth, and oral treatment for the mother (when necessary to treat deep breast pain), should be undertaken simultaneously to achieve relief from symptoms of confirmed candidial infection.

Treatment of the baby
There is evidence that the use of miconazole oral gel is preferable to nystatin suspension with greater efficacy within a shorter period (Hoppe).

Fluconazole oral suspension may be used to treat oral symptoms in the baby (Brent) but use is recommended for infections which do not respond to topical therapy (BNF).

Treatment of the mother
Miconazole 2% cream applied SPARINGLY to the nipple & areola area after each feed. There is some anecdotally reported evidence that using 1% clotrimazole cream as an alternative is associated with allergic reactions.

Miconazole gel and nystatin suspension have been reportedly applied to treat nipple candidiasis – they are not pharmacologically designed to penetrate the skin of the nipple and application is unlikely to be effective.

For nipples which are very red and inflamed a mild steroid cream can be used to facilitate healing (Weiner). Miconazole 2% plus hydrocortisone cream 1% may be useful (Daktafort®)

S. aureus is significantly associated with nipple fissures and a topical antibiotic may be used concurrently with anti-fungal creams if swabs confirm both infections (Weiner).
If symptoms of pain do not improve or deep breast pain develops, oral treatment with fluconazole may be necessary in addition to topical treatment of mother and baby.

**Treatment of thrush**

**Swabs**
A swab should be taken using a sterile charcoal media swab and sent to the microbiology lab in a black swan tube requesting a culture for bacterial and fungal growth. The cost is under £5 (personal communication)

Ongoing care with attachment to the breast is vital if mothers and babies are to be treated effectively. Thrush is very frequently diagnosed when poor attachment is the cause of pain, resulting in inappropriate exposure to unlicensed drugs and delay in achieving pain free breastfeeding. Thrush can co-exist with poor attachment and it seems much harder to clear thrush when the nipple is continuing to be damaged at each feed. Attention to improving attachment will help thrush to clear.

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**Oral treatment for the mother if the pain is severe or deep within the breast after topical treatment**

Fluconazole is not licensed to be given to lactating women. Practitioners are required to take full liability for use. The amount that gets through in breastmilk is 0.6mg/kg/day. The amount which could be given to the baby within the license is 6mg/kg/day (Hale). Studies on the use in premature babies weighing under 1000g have demonstrated successful outcomes (Kaufman).

The dose of fluconazole is 150-400mg as a loading dose followed by 100-200mg daily for at least ten days (Hale, Amir). The World Health Organisation recognises fluconazole as compatible with breastfeeding (WHO) but see below.

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**Fluconazole**

- The amount of fluconazole passing into breastmilk is less than that given to treat babies with Candida. However in babies under 6 weeks the half-life is 88 hours. Daily treatment of the mother could theoretically lead to accumulation in the baby. (Babies under 6 weeks are not treated with fluconazole daily for this reason).
- The experience of the BfN Drugs in Breastmilk Helpline is that many mothers with young babies are treated for thrush without having problems with attachment addressed first.
- This is unethical and potentially dangerous to the health of the baby and cannot be supported by BfN or the pharmacist responsible for compiling this information.

A 2004 paper by Francis-Morrill on the Diagnostic Value of Signs and Symptoms of Mammary Candidiasis (J. Hum Lact. 2004;20:288-95) recommended use of a swab moistened in sterile saline, wiped over the area after cleaning the breast with sterile saline. This is not current UK practice (personal communication)

Currently the CASTLE study (Amir 2011) is investigating the micro-organisms involved in the development of mastitis and “breast thrush” among breastfeeding women. This study is the first longitudinal study of the role of both staphylococcal and candidial colonisation in breast infections and will help to resolve the current controversy about which is the primary organism in the condition
known as breast thrush. This study will also document transmission dynamics of S. aureus and Candida species between mother and infant. In addition, CASTLE will investigate the impact of common maternal physical health symptoms and the effect of breastfeeding problems on maternal psychological well-being.

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Differential Diagnosis of Breast Pain

1. When is the pain at its worst?

Before a feed or during the night – breast not being emptied properly – ducts become over distended. This may also be a symptom of unresolved engorgement. To address this improve attachment and feed frequently to drain both breasts effectively.

During a feed – if the pain lasts for more than 5 seconds it is likely that positioning and attachment are not as good as they could be. Have someone observe full feed, regardless of what appears to be a good latch; pain indicates that something is wrong.

After every feed, lasting for up to an hour – possibly thrush

2. How severe is the pain?

Thrush tends to be extremely painful after every feed, not just uncomfortable after some feeds.

3. Is the pain in both breasts?

Thrush soon transfers from one breast to the other; pain is generally felt on both breasts except in the very early stages. If the pain affects only one breast and is experienced during the feed positioning and attachment on that breast should be optimised.

4. How old is the baby?

Thrush in the first few weeks of feeding should be rare unless the mother had vaginal thrush at delivery or had deep breast thrush at the end of a previous lactation. Less than perfect positioning and attachment with consequent damage are more likely to cause the pain at this stage.

5. What does the nipple look like when a feed finishes?

If there is any flattening of the nipple from top to bottom or side to side positioning and attachment should be considered first. If even skilled help does not improve the nipple shape tongue-tie should be considered.

6. Is there any change in colour of the nipple or areola?

Thrush can cause a reddening of the nipple and loss of colour in the areola. Temporary loss of colour which returns to normal within a couple of seconds does not suggest thrush but maybe due to incorrect positioning or Reynaud’s syndrome. Some mothers are aware that they always have cold extremities, reinforcing the likelihood of this as a cause of pain.

7. Can the mother point to a specific area from which the pain radiates?

There may be a white spot visible on the nipple, at the point which indicates a blockage in that duct and build up of pressure behind it. This causes “pin-point” pain which can be very severe. Removal of the blockage with a sterile needle or gentle rubbing may resolve the pain for a period but it is likely to re-occur. The pain can be very severe.

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8. What other symptoms does the mother have?
Thrush does not produce a fever, a red area on the breast or a yellowish discharge from the nipple. Skin may be sore but should not be excessively dry. If the baby has plaques in his/her mouth the mother may exhibit no symptoms but should be treated topically with the cream to prevent re-infection of the baby.

Thrush should be a diagnosis of exclusion, particularly after position and attachment have been optimised by an experienced breastfeeding worker.

Exposing mother and baby to topical or oral treatments unnecessarily is unethical and unfair for two reasons:

- It may delay resolution of the true cause of the nipple pain
- It necessitates the healthcare professional who prescribes or sells the medication outside of its license application to take responsibility for the use of the product.

We would strongly discourage use of medication until positioning and attachment have been thoroughly explored by someone skilled in breastfeeding attachment difficulties.

We also suggest that treatment is not commenced whilst waiting for difficulties such as tongue tie to be addressed.

The use of these medications during breastfeeding, whilst safe if used effectively, should not be used in a way which is likely to encourage resistance to anti-fungals to develop. Mothers and babies should not be exposed inappropriately.

NB. If any healthcare professional or volunteer recommends the use of fluconazole and miconazole to a mother, or diagnoses thrush of the lactating breast, they do so under their own levels of responsibility/ code of conduct. We would like to make it clear that neither BfN or Wendy Jones (pharmacist who compiled the medical information) can be held responsible for use nor for any adverse effects which may be suffered by the mother or baby.

Please read If Breastfeeding Hurts for more detailed information: http://www.breastfeedingnetwork.org.uk/if-breastfeeding-hurts/