

# Thrush and Breastfeeding

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## 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 and not washed off**
- **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.

To talk to a mum who knows about breastfeeding call the National Breastfeeding Helpline 0300 100 0212

Calls to 0300 numbers cost no more than calls to UK numbers starting 01 and 02 and will be part of any inclusive minutes that apply to your provider and call package.

Thrush should not be diagnosed if:

- There is pain in only one breast/nipple
- You have never had pain free breastfeeding
- 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.

[www.breastfeedingnetwork.org.uk/differential-diagnosis-of-breast-pain](http://www.breastfeedingnetwork.org.uk/differential-diagnosis-of-breast-pain)

### 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

<https://www.breastfeedingnetwork.org.uk/if-breastfeeding-hurts-05-may-2015/>

### 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).

In a study the cure rates of nystatin suspension and miconazole gel were shown as:

	miconazole	nystatin
day 5	84.7	21.2
day 8	96.9	37.6
day 12	99	54.1

The risk of using miconazole gel in babies under 4 months relates to the method application rather than the product [www.breastfeedingnetwork.org.uk/miconazole](http://www.breastfeedingnetwork.org.uk/miconazole)

Use of miconazole gel in babies < 4 months is outside of licence application but is preferable due to the greater efficacy. <https://pubmed.ncbi.nlm.nih.gov/9076817>

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 and is less effective.

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. Neither miconazole gel nor nystatin should be applied to the mother's nipples [www.breastfeedingnetwork.org.uk/miconazole](http://www.breastfeedingnetwork.org.uk/miconazole)

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 (Daktacort®)

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.

### **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.**

## 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 author has had reports of young babies

vomiting or suffering extreme stomach cramps after maternal use of fluconazole, it has also anecdotally led to weight loss due to vomiting.

- 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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