



# Treatment of thrush of the nipple in breastfeeding mothers

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# Woman reports painful breastfeeding

## OBSERVE A COMPLETE BREASTFEED

Check positioning and attachment

One breast

Both breasts

<b>Is the pain in one or both breasts?</b>	<b>Positioning</b>	<b>Positioning/thrush</b>
<b>Are there any signs of damage on the nipple?</b>	<b>Bacterial infection</b>	<b>Bacterial infection</b>
<b>Is there any visible sign on the breast?</b>	<b>Mastitis</b>	<b>Engorgement</b>
<b>When does the pain occur?</b>	<b>During a feed</b>	<b>After a feed</b>
<b>Where does the pain occur?</b>	<b>Pin point pain</b>	<b>Deep in breast</b>



# Possible causes for nipple soreness

- › Poor latch
- › Poor maternal position
- › Poor break of suction
- › Unrelieved negative pressure
- › Flat/inverted nipples
- › Use of bottle/dummy
- › Sucking problems
- › Nipple blisters or blebs
- › Improper/excessive use of breast pump
- › Improper use of nipple shield
- › Sensitivity to nipple creams
- › Prolonged contact with moisture
- › Teething
- › Cleft lip/palate
- › Short frenulum
- › Pregnancy
- › Eczema, impetigo, allergy
- › Herpes simplex
- › Staph aureus infection
- › Hypersensitive nipples
- › Reynaud's phenomenon
- › Neurological problem in infant
- › Post traumatic stress in mother
- › Thrush infection
- › Delayed initiation of breastfeeding



# Candida and lactation

Does it exist?

How to recognise it

Medical treatments





## Does it exist?

- › It can be identified by swabs of the nipples and baby's mouth
- › Symptoms do resolve with treatment
- › Without treatment mums do give up
- › BUT..... it is massively over diagnosed and incorrectly treated in my opinion

# Symptoms of the mother

- Description of pain
  - In the past I would have talked about shark teeth, intense pain, worse than any other but also applies to other conditions. Sometimes mums use words they read to convince others of diagnosis and to get relief
- Timing of pain
  - Pain free feeds with pain after feeds for an hour
  - No change in shape of nipple and no colour change in nipple, particularly tip of nipple after feeds
  - The same on both sides after every feed and the same when pumping



# How to differentiate thrush from other breast conditions?

- › Watch a complete breastfeed if possible
- › Listen carefully to a full breastfeeding history if not possible to observe
- › Don't make assumptions that anyone else has watched a feed and optimised positioning and attachment
- › Note the timing of the pain – after every feed and the same both sides
- › Consider less than perfect positioning and attachment, vasospasm, Raynaud's phenomenon, White Spot (bleb)





## Over diagnosis of thrush?

- › Baby < 6weeks
- › Mum has never achieved pain free breastfeeding
- › Nipple is shaped/flattened after feeds
- › Nipple colour changes after feeds
- › Baby spaghetti slurps onto the nipple rather than clean attachment
- › Still nipple damage?
- › Tongue tie?



## Only definitive diagnosis

- › Swabs of baby's mouth
- › Swabs of mum's nipples
- › Culture for bacterial and fungal infection
- › 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)



# Symptoms of the baby

- Oral symptoms – white plaques on tongue and inside mouth that don't wipe off, glistening sheen inside bottom lip
- Tongue tie not present or resolved
- NB Tiny babies with white tongue can be totally normal
- White tongue is common in babies with tongue tie and breastfeeding can be very painful then
- Thrush is quite rare in first 6 weeks and highly unlikely if mum has never had pain free feeding
- If treating mum then baby and any other nurslings need to be treated

**Think about the basics before a medical diagnosis**





## Hale's study

- › Mums identified by Lactation Consultant with history suggesting thrush
- › Took milk samples (didn't swab nipples)
- › Couldn't grow candida
- › But could grow candida in milk and in presence of lactoferrin and iron
- › Conclusion – thrush doesn't exist and isn't responsible for symptoms
- › But in private conversation with Dr Hale was told all mums would have been treated with fluconazole and all purpose nipple ointment as if they had thrush

Hale T et al. The absence of *Candida albicans* in milk samples of women with clinical symptoms of ductal candidiasis. *Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine* 2009, 4(2): 57-61



# Medical treatments for candida

- Topical treatment for the mother (miconazole cream applied **sparingly** to nipples after every feed)
- Oral treatment for the baby (miconazole oral gel applied **gently** 4 times a day with a clean finger)
- Oral treatment for the mother (fluconazole 200-400mg to start then 150-300mg daily for 7-10 days)

# Treating the baby

## Nystatin

- › Can be prescribed by nurse prescribers – even outside of license <6weeks
- › Effectiveness evidence poor
- › Disrupts cell membranes of fungi
- › Fungistatic
- › Application method can still cause choking
- › Why is it often recommended first line – custom & practice not evidence

## Miconazole oral gel

- › Manufacturer recommends not used in babies <4 months (or <6m if respiratory problems)
- › Risk of choking = apply gently a little at a time
- › Evidence of effectiveness greater from studies
- › Safe application
- › Fungicidal
- › Evidence of risk low





## Treatments prescribed but not recommended as most effective

**Clotrimazole cream** is prescribed to be applied to nipples but lacks evidence. It appears less effective anecdotally and is implicated in allergic reactions on the nipple (personal communication C Fisher Oxford Breastfeeding Clinic)

**Nystatin suspension** is prescribed to treat the baby's mouth because miconazole gel is only licensed for babies > 4 months. However, it is only fungistatic rather than fungicidal. It is less effective than miconazole which cures 98% of cases in 3 days. The licence application for miconazole gel was changed on limited evidence by the manufacturer

[www.breastfeedingnetwork.org.uk/miconazole/](http://www.breastfeedingnetwork.org.uk/miconazole/)

Hoppe JE, Hahn H. Randomized comparison of two nystatin oral gels with miconazole oral gel for treatment of oral thrush in infants. *Antimicrobics Study Group. Infection.* 1996;24(2): 136-9.

Hoppe JE. Treatment of oropharyngeal candidiasis in immunocompetent infants: a randomised multicenter study of miconazole gel vs. nystatin suspension. *The Antifungals Study Group. Pediatr Infect Dis J.* 1997; 16(3): 288-93.

Ainsworth S and Jones W. It sticks in our throats too. *BMJ* 2009;337:3178



## Unlicensed use of medication

- › Manufacturers are not required to conduct safety trials of drugs in lactation
- › When they submit the drug for licensing they can state “insufficient evidence, do not use in lactating women”
- › Prescribers (GPs or Pharmacists) have to take ultimate responsibility for use based on professional knowledge and experience

[www.breastfeedingnetwork.org.uk/dibm-pil/](http://www.breastfeedingnetwork.org.uk/dibm-pil/)



## Key Points

- › Thrush should be a diagnosis of exclusion
- › Swabs of nipples and baby's mouth are effective particularly to differentiate with bacterial infection
- › Rule out all other conditions such as poor positioning and attachment, tongue tie, Reynaud's phenomena etc first
- › Treat topically first
- › If oral treatment needed, use sufficient dose for 10-14 days and continue topical treatment for mum and baby
- › Keep checking positioning and attachment throughout treatment





## Facebook live on thrush

<https://breastfeeding-and-medication.co.uk/fact-sheet/breastfeeding-and-thrush>

<https://www.facebook.com/breastfeedingandmedication/videos/2342551639103500/?t=2>

# Additional resources

- › Andrews JI et al, The yeast connection: Is candida linked to breastfeeding associated pain? Am.J.Obstet Gynec. 2007 197:424.e-1
- › Brent N., Thrush in the Breastfeeding Dyad: Results of a survey on diagnosis and treatment, Clin Paed. 2001; 40:503-506.
- › CKS Library Breastfeeding problems – Management. Scenario: Nipple soreness/pain – management. [www.cks.nhs.uk/breastfeeding\\_problems/management/scenario\\_nipple\\_soreness\\_management](http://www.cks.nhs.uk/breastfeeding_problems/management/scenario_nipple_soreness_management)
- › Francis-Morrell J, Heinig MJ et al, Diagnostic value of signs and symptoms of mammary candidosis among lactating women. JHL 2004; 20:288-95
- › Fraser DM, Cullen L., Post-natal management and breastfeeding, Current Obstet & Gynecol 2003; 13:127-133.
- › Jones W Breastfeeding and Medication. 2018 Routledge
- › Kaufman D, et al., Fluconazole prophylaxis against fungal colonisation and infection in preterm infants, N Eng J Med 2001; 345(23):1660-6.
- › Morrill JF et al. Risk factors for mammary candidosis among lactating women. J.Obstet.Gynecol. Neon.Nurse. 2005;34:37-45
- › Weiner S., Diagnosis and Management of Candida of the Nipple and Breast. J.Midwif. Women Health2006; 51:125-128
- › [www.breastfeedingnetwork.org.uk/thrush-detailed/](http://www.breastfeedingnetwork.org.uk/thrush-detailed/)

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