NHS Highland
Policy on treatment of breast thrush while breastfeeding

Public Health/Health Improvement

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Distribution

- Executive Directors
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- Nursery Nurses
- Paediatric Nurses
- All Paediatric Medical Staff
- All GPs
- All Hospital Medical Staff
- All ancillary staff within NHS Highland
- All support staff who have contact with mother and child
- Neonatal unit/SCBU

Method

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Data Protection Statement

NHS Highland is committed to ensuring all current data protection legislation is complied with when processing data that is classified within the legislation as personal data or special category personal data.

Good data protection practice is embedded in the culture of NHS Highland with all staff required to complete mandatory data protection training in order to understand their data protection responsibilities. All staff are expected to follow the NHS policies, processes and guidelines which have been designed to ensure the confidentiality, integrity and availability of data is assured whenever personal data is handled or processed.

The NHS Highland fair processing notice contains full detail of how and why we process personal data and can be found by clicking on the following link to the 'Your Rights' section of the NHS Highland internet site.
http://www.nhshighland.scot.nhs.uk/Pages/YourRights.aspx

CONTENTS

Equality and Diversity

NHS Highland ensures that the individual needs of mothers and their babies are given due consideration. In order to understand individual need, staff need to be aware of the impact of any barriers in how we provide services.

Staff are advised to:

- Check whether mothers require any kind of communication support including an interpreter to ensure that they understand any decisions being made.
- Ensure that they are aware of any concerns a mother may have about coping with breastfeeding and any decisions made.
- Ensure that any mother who has a disability that may require individualised planning re breastfeeding practice is appropriately supported.
- Ensure that gender-inclusive terms are used should parent(s) prefer this terminology. Suggested terms in breastfeeding and human lactation (Bartek et al, 2021) are useful and are suitable substitutes when gender-inclusive language is appropriate.

Traditional terms	Gender-inclusive terms
Mother, father, birth mother	Parent, gestational parent; combinations may be used for clarity, such as “mothers and gestational parents”
She, her, hers, he him, his	They/them (if gender not specified)
Breast	Mammary gland
Breastfeeding	Breastfeeding, chestfeeding, lactating, expressing, pumping, human milk feeding
Breastmilk	Milk, human milk, mother’s own milk, parent’s milk, father’s milk
Breastfeeding mother or nursing mother	Lactating parent, lactating person, combinations may be used for clarity, such as “breastfeeding mothers and lactating parents”
Born male/female (as applied to people who identify as anything but cisgender	Noted as male/female at birth or recorded as male/female at birth or assigned male/female at birth.

INTRODUCTION

What is Thrush? (Candida albicans)

Thrush is a fungal infection and can occur any time while the mother is breastfeeding. Candida albicans thrive in moist, warm, dark areas and the breasts are ideal to harbour this fungus. Candida infections most commonly occur where there has been a breakdown in the integrity of the skin or mucous membrane. The widespread use of antibiotics now in the ante and intra-partum period encourages the overgrowth of candida albicans.

Diagnosis of breast thrush

There is no real diagnostic test available, although the breastfeeding network (BFN) 2020 have suggested taking a black charcoal media swab from both mother's nipples and baby's mouth to confirm presence of either candida albicans or bacterial infection. Within NHS Highland a bacteriology swab can be taken and sent to microbiology requesting a culture for both bacterial and fungal growth.

It is vitally important that a clear and in-depth breastfeeding history is taken and a breastfeed is observed by a trained health professional. In doing so, other potential problems can be eliminated and a clear thrush diagnosis can be made. It is also important to consider that there will be cases where a mother will display symptoms and signs of thrush while the baby will be symptom free and vice versa. It is also very useful to remember that breast thrush is overly diagnosed in the breastfed dyad as a response to nipple/breast pain and a breastfeeding assessment is vital.

SYMPTOMS

For the Breastfeeding Mother

- Nipple pain that begins after a period of pain free feeding.
- Pain is not improved by effective attachment.
- Cracked nipples which are difficult and slow to heal.
- Pain is often described as severe in nature – burning and stabbing.
- Pain commences after the feed has ended, sometimes for as long as an hour.
- Loss of colour to the nipple or areola.
- Sensitive nipples and areola.
- History of recent antibiotic therapy.
- History of recent episode of vaginal thrush.
- Pain will always occur in **both** breasts due to the baby transferring the infection form one to the other breast.
- Absence of a pyrexia.
- Absence of red area on the breast

For the Baby When Breastfeeding

- Inability to sustain a latch due to oral pain.
- Frustration at breast – going on and off.
- Crying.
- Nappy rash which doesn't improve with simple treatment.
- Can have oral plaques in mouth which do not rub off.
- Whitish sheen to saliva and inside the lips and gums (Mohrbacher and Stock 2003).
- Breast refusal.

<u>Note – infants may have no symptoms</u>

If pain is isolated to one breast then this is not symptomatic of thrush and assessment of a full breastfeed is vital. A bacteriology swab is recommended for a unilateral breast pain where alteration of positioning and attachment has not helped to rule out a staph aureus infection which may need treatment with antibiotics

It is vital for a health professional trained in breastfeeding management to observe a full breastfeed prior to diagnosing thrush and/or commencing thrush treatment. This will usually be done by either the local midwife/ health visitor or infant feeding support worker. The reasoning behind this is to rule out any other causes for the mother's symptoms. When referring a mother to the G.P, the health professional is encouraged to have observed a full breastfeed prior to referring to G.P.

Effective positioning and attachment is crucial to ensure adequate milk production, milk transfer and breast health. This should be the primary concern when assessing any breastfeeding problem. Once effective positioning and attachment is confirmed then other causes of nipple pain can be considered.

Other causes of Nipple Pain

- Eczema
- Tongue tie in the baby
- Reynaud's syndrome
- Milk bleb or white spot
- Bacterial infection which will may appear as a yellow, thick discharge
- Vasospasm which is associated with ineffective attachment and where white nipples are prominent after feeds

Self help to treat thrush

- Pain killers are encouraged to relieve the pain experienced from thrush – over the counter analgesics such as paracetamol and ibuprofen are ideal.
- Continue to breastfeed as thrush will not harm your baby.
- Personal hygiene is important to stop cross –infection. Good hand washing from all the family is required.
- If a dummy, nipple shield, teat, bottle or plastic toys are used by the baby ensure that these are carefully washed and sterilised while the infection lasts – if the mother has other children make sure that their toys that come in to contact with the baby are carefully washed too to save cross contamination.
- Any milk which has been expressed and stored in the freezer during the time when you have had thrush should be discarded.
- Some mothers find reducing the amount of sugar and yeast in their diet helps but this has not been researched.
- Anecdotally some mothers have reported that acidophilus capsules have helped to restore bacteria and have kept thrush under control

PRESCRIBING FOR THRUSH IN LACTATING WOMEN

BOTH MUM AND BABY MUST BE TREATED TOGETHER

Surface thrush

- Miconazole 2% Cream for surface thrush. Best practice is to apply a small amount sparingly to the nipple and areola after every feed rather than the licensed twice daily treatment. Any cream which can be seen should be wiped off gently prior to the next feed to reduce further nipple damage. If no cream is visible then no need to wipe off[1,2] Use for 10 days after the symptoms have subsided or more specialist help is obtained. The baby should also be treated as per below.

Ductal thrush

- In addition to miconazole 2% cream; Fluconazole orally 150mg as a loading dose then 100mg daily for at least 10 days[2,].
- If pain has not improved in 2 to 3 days, increase dose to 200mg daily.
- If symptoms are very severe or prolonged, give doses up to 400mg as a loading dose followed by 200mg daily for at least 10 days[2].

Prescribing for oral thrush in babies

- **First line treatment**: Neonates and children – Nystatin 100,000 units/ml oral suspension, 1ml four times daily after feeds or food, and continue for 48 hours after lesions have resolved.[3]. Nystatin suspension does not adhere so well as Miconazole oral gel[1,2].
- **Second line treatment**: - Miconazole oral gel smeared around the inside of the mouth. Neonate 1 ml two to four times a day after feeds,; 1 month to 23 months – 1.25ml four times a day after feeds or food; from 2 years – 2.5ml four times a day. **Unlicensed under 4 months**'. Apply to all areas of the mouth, cheeks, roof of mouth and the tongue with a clean fingertip. Ensure that the gel does not obstruct the mouth. DO NOT apply the gel to the back of the throat, and the full dose may need to be divided into smaller portions. The gel should not be swallowed immediately, but kept in the mouth as long as possible. Continue for at least 7 days after lesions have healed or symptoms have cleared[4].
- Nurse prescribers can prescribe these treatments.

NOTE: the Summary of Product Characteristics (SPC) for Miconazole (Daktarin) oral gel does not recommend the use of oral gel in any patient less than four months old (and cautions the use in four to six months, and any pre-term infant less than 6 months old)[5]. This could be because of a case report in 2004 when a 17 day old child in the Netherlands, born at 36 weeks, choked on some of the viscous gel and gel was then removed form the back of the throat. There were another 9 cases reported in the Netherlands, 7 of which occurred in babies less than 2 months old.

Use of Miconazole and Fluconazole in breastfeeding

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- Topical preparations, such as miconazole, for fungal infections are considered to pose a negligible risk to a breastfeeding infant as long as precautions are taken to minimise contact of the breastfeeding infant with treated areas. There is no published evidence on the safe use of these topical preparations in breastfeeding[6]. Miconazole has poor absorption from the skin and has poor oral bioavailability, so is unlikely to adversely affect the breastfed infant, including after topical application to the nipples[7].
  It is advisable to remove all topical products from the breast before feeding[6].
  When applied to the breast, the use of creams are preferred to ointments due to ease of removal before breastfeeding[6].. Fluconazole is acceptable in nursing mothers because amounts excreted into breastmilk are less than the therapeutic fluconazole doses used in neonates[7,8]. . A pharmacokinetic study in ten lactating women, who had temporarily or permanently stopped breast-feeding their infants, evaluated fluconazole concentrations in plasma and breast milk for 48 hours following a single 150 mg dose of Diflucan. Fluconazole was detected in breast milk at an average concentration of approximately 98% of those in maternal plasma. The mean peak breast milk concentration was 2.61 mg/L at 5.2 hours post-dose. The estimated daily infant dose of fluconazole from breast milk (assuming mean milk consumption of 150 ml/kg/day) based on the mean peak milk concentration is 0.39 mg/kg/day, which is approximately 40% of the recommended neonatal dose (<2 weeks of age) or 13%

of the recommended infant dose for mucosal candidiasis[9]. This is well below therapeutic doses of e.g. 3 mg/kg every 72 hours, 48 hours, or daily, depending on the age of the child[11].

- The World Health Organisation recognises fluconazole as compatible with breastfeeding, although with daily treatment of the mother, this could lead to accumulation in a neonate < 6 weeks[2]. However, preterm neonates weighing less than 1000g have received fluconazole prophylactically and have demonstrated successful outcomes[12].
- It is licensed to be used in breastfeeding after a single use of a single dose of 150mg or less. It is not recommended in breastfeeding after repeated use or after high doses[9]
- The fluconazole dose should be taken after the last breast feed if possible.

REFERENCES

1. http://intranet.nhsh.scot.nhs.uk/Org/CorpServ/PublicHealth/InfantFeeding/Documents/Breast%20Feeding%20Problems%201105%20no%202.ppt
2. https://www.breastfeedingnetwork.org.uk/wp-content/dibm/2019-09/Thrush%20Detailed%20information%20and%20Breastfeeding.pdf
3. https://www.medicinescomplete.com/#/content/bnfc/_990923147
4. https://www.medicinescomplete.com/#/content/bnfc/_627181877
5. https://www.medicines.org.uk/emc/product/14746
6. https://www.sps.nhs.uk/articles/safety-in-lactation-antifungal-skin-preparations/#:~:text=miconazole
7. https://www.sps.nhs.uk/medicines/fluconazole/#:~:text=fluconazole
8. https://www.ncbi.nlm.nih.gov/books/NBK501223/
9. https://www.medicines.org.uk/emc/product/1065/smpc
10. Drugs and Lactation Database (Lactmed) https://www.ncbi.nlm.nih.gov/books/NBK501234/
11. https://www.medicinescomplete.com/#/content/bnfc/_870309169?hspl=fluconazole
12. Fluconazole prophylaxis against fungal colonisation and infection in preterm infants. Kaufman D. et al. N Eng J Med 2001;345(23): 1660-6.