BfN The Breastfeeding Network

information

for health professionals

Re-examination of attachment of the baby to the breast should be undertaken by a breastfeeding specialist before a decision is taken to treat. Other conditions causing breast pain should be ruled out first.

- 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 (poor circulation)
- white spot: produces pin-point pain
- bacterial infection (may be present at the same time as thrush): appears as a sloughy discharge

Treatment of thrush

The diagnosis of candidal infections on the breast is difficult as it relies on subjective signs and symptoms. Although there is little research evidence, there is growing anecdotal experience that treatment is effective and mothers are enabled to continue pain-free breastfeeding. Without treatment very few women are able to deal with the severity of pain from thrush and are forced to cease breastfeeding prematurely.

Early recognition and treatment of candida of the nipple and/or breast is essential to protect exclusive breastfeeding for 6 months.

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.

Oral treatment for the mother if the pain is severe or deep within the breast.

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 150-300mg as a loading dose followed by 50-100mg twice daily for at least ten days (Hale, Amir). The World Health Organisation recognises fluconazole as compatible with breastfeeding (WHO).

The manufacturers of fluconazole are unlikely to apply for a license due to the prohibitive costs of the research necessary together with the availability of a generic product (personal communication, Pfizer). Research funding has proved difficult to source for this problem so it is unlikely that evidence based, double blind clinical trials will become available. In the absence of such data, anecdotal reports and small studies are all that is available to guide treatment.

Fluconazole is less likely to be effective if used alone and topical treatment of mother and baby should be continued.

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). The baby's oral mucosa needs to be coated with the preparation and not just the tongue. The manufacturers have recently altered the Summary of Product Characteristics (2008) and recommended that it is not used in babies under 4 months of age. **This appears to be due to the risk of choking on the viscous formulation rather than any inherent concerns with the drug itself.** Treatment needs to be at least four times a day to achieve resolution of symptoms. [This is greater frequency than the Patient Information Leaflet]. The gel should be applied gently, in small amounts, with a clean finger until all mucosal surfaces have been coated. Use of large quantities at any one time or via the spoon should be discouraged (Anderson).

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

The cream most commonly used is **miconazole 2%** with a smear applied to the nipple & areola area after each feed. Any cream which can be seen should be gently wiped off before the next feed. There is no need to wash the residue off. 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 (Daktacort®)

S. aureus is significantly associated with nipple fissures and a topical antibiotic may be used concurrently with anti-fungal creams (Weiner).

If symptoms of pain do not improve or deep breast pain develops, oral treatment may be necessary in addition to topical treatment of mother and baby.

Sometimes mothers report a residual pain after treatment. If the pain is severe, they may need to have a longer course or higher dose of fluconazole, particularly if symptoms have been present for some time.

The mother may additionally need analgesia until symptoms improve to enable her to cope with the severe pain caused by thrush.

To prevent re-infection, both mother and baby need to be treated *simultaneously* even if only one shows symptoms of thrush.

Ongoing care with attachment to the breast is vital if mothers and babies are to be treated effectively. Thrush is very frequently misdiagnosed when poor attachment is the cause of pain, resulting in inappropriate exposure to unlicensed drugs.

Medical treatments

Thrush on the surface of the nipple can be treated by applying a smear of miconazole cream to the nipple after each feed. Any cream which can be seen should be gently wiped off before the next feed [it probably indicates you are using too much]. Washing may further damage your nipples.

The baby should be treated with small amounts of miconazole oral gel which should be applied very GENTLY to cover all surfaces of the baby's mouth, with a clean finger, four times a day. Keep applying a little at a time rather than a large amount to avoid any risk of choking. (Your other children may need treatment if they are also currently being breastfed or putting your baby's toys in their mouth).

The manufacturers of the gel have recommended that it is not used in babies under the age of 4 months. This appears to be due to the risk of choking rather than any concern associated with the drug itself.

You may be given nystatin suspension (drops) as an alternative. Nystatin may take longer to clear symptoms. It should be applied in the same way as the gel rather than using the dropper, which may mean the baby swallows it too quickly for it to work and may also cause choking.

If your symptoms have not begun to ease at all after a week, you should go back to the person supporting you with breastfeeding e.g. BfN Registered Breastfeeding Supporter (or similarly qualified volunteer), health visitor or midwife to make sure that no other problems have been missed. Thrush may be confused with other things which can cause breast and nipple pain.

If you continue to feel pain deep within your breast for long periods after feeds (and have not been helped by checking attachment of your baby to the breast), the thrush may have entered the milk ducts. The treatment which is most often used is fluconazole. You will need to take a high dose initially and a lower dose for at least ten days. You also need to continue to apply the cream and to treat your baby's mouth.

The manufacturers of fluconazole have not recommended its use during breastfeeding but it can be given directly to babies in higher doses than will reach your baby through your breastmilk. Your baby will not be treated by your dose and you will need to continue to treat the baby's mouth and your nipples whilst you take fluconazole. There are very few scientific studies, but fluconazole has been used widely in the UK and USA. Pain generally begins to ease in three days.

The leaflet is designed so that you can cut off the last page to give to your health professional for reference.

PLEASE DO NOT PHOTOCOPY this leaflet as this not only breaches copyright but also decreases the professional appearance which we have striven to provide. It may also mean that out of date information continues to be disseminated after a review. Copies can be downloaded from the website free of charge **for individual use** and are sold at a low price to cover the costs of production.

Further information

You can obtain more information on identifying and treating thrush, as well as further references, from The Breastfeeding Network.

There is some information at our website, along with an order form, or you can contact our PO Box (details below).

This leaflet was compiled by:
Wendy Jones, Pharmacist and Registered BfN Breastfeeding Supporter and
Magda Sachs, BfN Registered Breastfeeding Supporter

The Breastfeeding Network is an independent voluntary organisation offering support and information to breastfeeding women and those involved in their care.

The Breastfeeding Network is a Company Limited by Guarantee

Registered in Scotland Company No. 330639

The Breastfeeding Network is a Registered Scottish Charity No SC027007

PO Box 11126 Paisley PA2 8YB

Supporterline 0300 100 0210

National Breastfeeding Helpline 0300 100 0212

(NBH calls connect you to your nearest BfN or ABM volunteer)

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.

www.breastfeedingnetwork.org.uk

Revised February 2009 © The Breastfeeding Network

DESIGNED BY mortonward 0131 555 3553

The Breastfeeding Network

Thrush

and Breastfeeding

Revised February 2009 © The Breastfeeding Network

Thrush (Candida albicans) infection can affect a mother's breast while she is breastfeeding. It often occurs if the mother or baby takes antibiotics and if there has been damage to the nipple.

BfN The Breastfeeding Network

Thrush (Candida albicans) infection can affect a mother's breast while she is breastfeeding.

It often occurs if the mother or baby takes antibiotics and if there has been damage to the nipple.

the signs

Signs of thrush in the mother

- sudden start of breast and/or nipple pain after some days or weeks of pain-free breastfeeding – the nipple may also be itchy or be super-sensitive to any touch – even by loose clothes
- shooting pains in the breast (may be deep in the breast) after feeding – pain can be severe and can last for up to an hour after the feed
- cracked nipples which don't heal despite optimising attachment (may be accompanied by bacterial infection)
- permanent (not transient) loss of colour in the nipple or areola
- pain occurs in both breasts (except in the very early stages) because the baby transfers the infection from one nipple to the other during feeding

Note: There may be no obvious signs of infection on the breast – this does not mean you don't need to be treated. Even if you experience no pain on feeding you should be aware of the risk of infection but need not be treated immediately.

Signs of thrush in the baby

- creamy white patches in baby's mouth or on the tongue (may be far back or in the cheeks) which do not rub off. White sheen on baby's tongue/lips
- baby keeps pulling off or away from the breast while feeding. This may be because his/her mouth is sore or may be a sign that attachment needs to be checked and improved before treatment for thrush is considered
- the baby may be windy, fretful and find it hard to settle down: may also be a sign of poor attachment

Note: Baby may show no obvious signs of infection. If your baby has a white tongue but you are experiencing no pain, be aware of the risk of thrush but you do not have to treat either yourself or your baby immediately.

If you think you have thrush

It can be difficult to be sure that the problems you are having are due to thrush. It is possible to confuse some of the symptoms of thrush with the difficulties resulting from poor attachment of the baby to the breast. Before deciding that thrush is the cause of your painful breastfeeding, you should ask your midwife, health visitor or volunteer breastfeeding supporter to sit with you and observe a full breastfeed to exclude this possibility before considering medical treatments. **BREASTFEEDING SHOULD BE PAIN-FREE.** (Pain from thrush begins after a feed). There should be no change in the shape of the nipple after a feed. Even good attachment can often be improved and help to relieve symptoms.

If the slightest doubt exists, seek someone experienced to help you improve attachment.

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 (poor circulation)
- white spot: produces pin-point pain
- bacterial infection (may be present at the same time as thrush): appears as a sloughy discharge

Factors which predispose mothers to nipple thrush:

- vaginal candida at delivery
- nipple damage
- maternal antibiotic around time of delivery
- use of dummies, bottles and breast pumps in the first 2 weeks after delivery
- pregnancy duration more than 40 weeks

Supporterline: 0300 100 0210

National Breastfeeding Helpline: 0300 100 0212

Self-help measures

- Thrush can be passed between you and your baby – and also between you, your partner and other children.
- Probiotics can help to restore bacteria e.g. Acidophilus capsules and can help to keep thrush under control (available from health food stores or chemists)
- You may find you need painkillers to help you cope with the pain of thrush. See the following link: http://www.breastfeedingnetwork.org.uk/pdfs/Analgesics-(painkillers)-and-breastfeeding.pdf
- Carry on breastfeeding. It is possible to achieve pain-free feeding again, although thrush can be very disheartening to deal with. Continuing to feed whilst you have thrush will not harm your baby.
- 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.
- If your baby is also sucking on a dummy, bottle teat, nipple shield or plastic toys, make sure these are carefully washed and sterilised (boiling for 20 minutes while the infection lasts may be best). Steam or microwave sterilisation is also effective but cold water solutions appear less so.
- If you have expressed your milk and saved it in the freezer during the time you or your baby had thrush, it may be better not to use it as it could cause another bout of thrush. If you keep it, make sure it is suitably labelled.
- 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 at the same time. 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.

References

Amir L, Hoover K. (2002) Candidiasis and Breastfeeding (Unit 6). Schaumburg, IL.

Ainsworth S, Jones W. It sticks in our throats too. *BMJ* 2009;337:a3178.

Andrews JI, Fleener DK, Messer SA 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. My baby has oral thrush - can it affect me if I'm breastfeeding? (WWW document). URL http://www.cks.library.nhs.uk/information_for_patients/common_health_question/ (accessed January 2009).

Francis-Morrell J, Heinig MJ. 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.

GP Notebook. nipple candidiasis (WWW document). URL http://www.gpnotebook.co.uk/simplepage.cfm?ID=818937936 (accessed Jan 2009).

Hale T, Bateman T, Finkelman M et al. (2007) Presence of Candida Albicans in symptomatic Breastfeeding Mothers. Academy of Breastfeeding Medicine.

Hale T. Medications and Mothers' Milk (13th Edition, 2008). Hale Publishing, Amarillo, TX.

Hoppe JE, Burr R, Ebeling H et al. Treatment of oropharyngeal candidiasis in immunocompetent infants: a randomised multicentre study of miconazole gel vs nystatin suspension. *Paed Infec Dis* 1997;16:288-93.

Kaufman D, Boyle R, Hazen KC et al. Fluconazole prophylaxis against fungal colonisation and infection in preterm infants. *N Eng J Med* 2001;345:1660-6.

Morrill JF, Heinig MJ, Pappagianis D et al. Risk factors for mammary candidosis among lactating women. *J Obstet Gynecol Neon Nurse* 2005;34:37-45.

Kay Hoover. The Link Between Infants' Oral Thrush and Nipple and Breast Pain in Lactating Women (5th Edition, 2002). (WWW document) URL http://www.hooverfam.net/kay/yeast.htm (accessed January 2009).

Weiner S. Diagnosis and Management of Candida of the Nipple and Breast. *J Midwif Women Health* 2006;51:125-128 .

WHO. Breastfeeding and Maternal Medication. World Health Organisation, Geneva (2002). (WWW document) URL http://www.who.int/child_adolescent_health/documents/55732/en/ (accessed January 2009).

BfN The Breastfeeding Network

PO Box 11126 Paisley PA2 8YB

Supporterline 0300 100 0210

National Breastfeeding Helpline 0300 100 0212

(Calls are diverted to nearest BfN or ABM volunteer)

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.

www.breastfeedingnetwork.org.uk

The Breastfeeding Network

Thrush

and Breastfeeding

Information for health professionals

Presenting symptoms which suggest the presence of candidial infection:

- bilateral pain
- pain which increases after a breastfeed has finished and continues for up to an hour afterwards
- increased nipple sensitivity
- nipples may become red or lose colour permanently
- absence of red area on the breast
- history of recent use of antibiotics
- history of nipple trauma which has been resolved by optimal attachment
- absence of pyrexia
- baby with oral symptoms of thrush
- maternal symptoms of vaginal thrush at delivery
- nappy rash which does not clear with simple treatment