Guidelines for the management of Thrush in the breastfeeding mother and her baby

1.1 Candida Albicans, more commonly known as ‘thrush’, is one of the most painful breastfeeding conditions. This fungal infection usually starts after a period of pain-free breastfeeding or after a course of antibiotics. Other causes of breast pain should be excluded before diagnosing thrush. These are:

- Poor positioning and attachment
- Uncoordinated suckling in the baby
- Tongue-tie
- Raynaud’s syndrome
- Eczema
- Unresolved engorgement
- White spot or galactoceles
- Bacterial infection

Thrush is a diagnosis of exclusion, after position and attachment have been optimised by an experienced breastfeeding worker. Exposing a mother and baby to topical or oral treatments for thrush unnecessarily can delay resolution of the true cause of nipple pain, and encourage resistance to anti-fungal treatments to develop. The healthcare professional who prescribes the medication outside of its licence application takes responsibility for its use.

1.2 Causes of nipple pain

1. **When is the pain at its worst?** Pain due to a thrush infection occurs after every feed and lasts for up to an hour.

   Pain before a feed or during the night. This is caused by the breast not being emptied properly as the ducts become over distended. It could be a symptom of unresolved engorgement. To address this, attachment should be improved. The mother should feed frequently, draining both breasts effectively at each feed.

   Pain during a feed. If the pain lasts for more than 5 seconds it is likely that positioning and attachment could be improved. The healthcare professional should observe a full feed as pain indicates that something is wrong, even if there appears to be a good latch.

2. **How severe is the pain?** Thrush tends to be extremely painful, not just uncomfortable.

3. **Is the pain in both breasts?** As 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 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 may be due to incorrect positioning or Raynaud’s syndrome. Some mothers are aware that they always have cold extremities, reinforcing the likelihood of Raynaud’s syndrome as a cause of pain.

7. **Can the mother point to a specific area from which the pain radiates?** A white spot may be visible on the nipple, at the point which indicates a blockage in a duct. Pressure behind the blockage 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 and similar to that caused by thrush.

8. **What other symptoms does the mother have?** Thrush does not produce a fever, a red area on the breast or a discharge from the nipple. Skin may be sore but should not be excessively dry.

Ibuprofen and paracetamol can be used safely for relief of pain, whilst breastfeeding.

1.3 **Possible signs and symptoms in the mother**

- Itching or burning of the skin over the nipple and areola
- Severe pain when the baby initially latches onto the breast
- Pain becomes progressively worse with each re-latching
- Pain often subsides during the feed, but returns and can last up to an hour after the feed
- Shooting or stabbing pains within the breasts
- Nipples look shiny, bright pink/red or moist/soggy
- Nipples have pin head lumps or white plaques
- Nipple and areola become bright pink or red immediately after feeds
- Nipples are sensitive to cold
- Cracked nipples do not heal even with good positioning and attachment
- Nipples may blanche during feeds
- Taking a shower is unbearably painful for the nipples

Culturing of mother’s milk or taking swabs the nipple or areola is not recommended, as even when thrush is present results are often negative.
1.4 Treatment for mother
It is imperative that both mother and baby are treated simultaneously, even when there are no signs in the baby’s mouth. Otherwise the baby will re-infect the mother at each feed. Babies frequently show no signs of oral thrush, even though their mothers have the symptoms.

Topical treatment for mother
Daktarin Cream (Miconazole) 2% is the first choice of anti-fungal cream. A peasized amount is applied to the nipple and areola after each feed. There is no need to wash this off, as any cream that has not been absorbed will be left on the breast-pad. Nyastatin cream is not as effective for treatment of nipple thrush; some mothers have reported allergic reactions to 1% clotrimazole cream.

- It is important that the treatment is continued for one complete week after being symptom free, otherwise thrush may return
- Repeat prescriptions may be required from the GP, as it can take four weeks or longer to get rid of the infection
- Daktarin gel should not be prescribed for the mother’s nipples. It is not pharmacologically designed to penetrate the skin of the nipple, and is unlikely to be effective
- If pain continues systemic treatment is required

Systemic treatment for mother
Fluclonazole is not licensed in this country for lactating women. There is growing evidence that it is a safe and effective form of treatment and using it enables women to continue breastfeeding. Without the treatment very few women are able to deal with the severity of the pain from thrush and forced to cease breastfeeding earlier than they wished. Fluclonazole is recognised to be compatible with breastfeeding by the World Health Organisation.

- Fluclonazole is given as a stat dose of 150-400mg depending on severity and how quickly treatment has been initiated. This is followed by 50-100mg daily for at least 10-14 days
- The dose that is transferred to the baby in the mother’s milk is 0.6mg/kg/day. This is not enough to treat the baby, as the licensed dose in babies is 6mg/kg/day. Therefore the baby must still be treated separately.
- Previous use of Nystatin 500,000 units to treat the mother orally has been documented but found to be ineffective as it is poorly absorbed by the adults gut lining. This results in a delay in achieving resolution of symptoms and re-occurrences.
- Once treatment starts, pain will normally ease within 2 to 3 days
- There can be a re-bound effect around day 7-10 and then the pain eases considerably
1.4 Possible signs and symptoms in the baby

- White patches in the baby’s mouth, which cannot be wiped off
- Baby’s mouth may be sore which may lead to short, frequent feeds
- Baby is fidgety during feeds, pulls away and seems uncomfortable
- Baby may have a nappy rash which consists of small red spots or possible peeling of the skin
- Mother may notice her baby is windier than usual, fretful and difficult to settle

1.5 Treatment for Baby

If the baby has plaques of thrush in his/her mouth both the mother and the baby should be treated topically for thrush. Even if the mother has no symptoms she should be treated to prevent re-infection of the baby.

Daktarin

Daktarin oral gel (Miconazole) is preferable to Nystatin suspension, with greater efficacy within a shorter period. A light coating of the gel is applied to the baby’s oral mucosa at least four times a day (1.25ml) or a thicker coating applied twice daily (2.5ml) (Children’s BNF, 2005).

In 2008 Janssen-Cilag, the manufacturers of Daktarin Oral gel®, altered the licensed application with respect to the age from which it is recommended (see appendix 1). They now suggest that this product is unsuitable for use in babies under 4 months and should be used with care 4-6 months.

Practitioners prescribing Miconazole oral gel below 4 months should ensure that the mother/carer is aware that the gel is applied in small amounts, using a clean finger. Neither the finger nor the gel should touch the back of the baby’s throat. The responsibility for use of the oral gel in a baby under 4 months of age remains with the prescriber.

Alternative licensed anti fungal agents, which are licensed for use below 4 months, are Nystatin suspension and oral Fluconazole suspension.

Nystatin

Nystatin suspension (0.5m) is given after each feed. If using a dropper be careful not to replace the contaminated dropper back into the bottle.

1.6 Advice for mothers

- Short frequent feeds are less painful than long infrequent feeds
- Steam, sterilise or boil all feeding equipment for 20 minutes. Boiling or heat sterilisation is more effective against thrush than cold sterilisation
- Discard and replace any teats or dummies
• Do not freeze breast milk whilst thrush is present, as it can re-infect mother and baby
• Be diligent in using treatment
• Change breast-pads regularly
• Hot wash clothing that comes into contact with the breast.
• Don’t use perfumed products in the bath.
• Expose the breasts to air
• Reduce sugar and yeast products in the diet and eat a well balanced diet.
• If breastfeeding is discontinued, thrush treatment should continue until all symptoms have resolved.

Appendix 1
Despite extensive consultations with the manufacturer and breastfeeding experts in the UK, USA, Canada and Australia, it has proved difficult to discover the reason behind the change at this time. It appears to originate from concerns regarding the administration of the gel and the risk of an infant choking due to the viscosity of the gel, rather than the medication itself. There is one published report of a 17 day old baby (born at 36 weeks) in Holland who choked on gel applied to the mother's nipple. The baby recovered without further problems and needed no medical intervention. The paper mentions nine other babies (aged between two and twenty weeks) all of who suffered some form of difficulty in breathing temporarily, but with no long term ill effects. Only one of the ten babies was admitted to hospital. The authors of the paper suggest that it is important to consider the potential for airway obstruction and resultant asphyxiation in young babies with impaired swallowing. Instructions should therefore be provided regarding the correct application of the oral gel. The licence application does not necessarily imply a risk, but should be considered professionally on an individual basis.

References: