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## Raynaud's Phenomenon in Breastfeeding Mothers

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Reynaud's phenomenon affects up to 10% of otherwise healthy women aged 21-50 years of age. It is 9 times more common in women than men. It was first described by Maurice Raynor 1862 who referred to "local asphyxia of the extremities" and "episodic digital ischaemia provoked by cold and emotion. Originally it was described as affecting mainly fingers and toes but it can affect ear lobes, nose and lips as well as parts of the body.



Fig. 1 Raynaud's Phenomenon in the fingers

The first published study of the impact of Reynaud's phenomenon on breastfeeding was published by Coates (1992)



White nipple  
Pallor (vasoconstriction)

Purple nipple  
Cyanosis (deoxygenation of blood)

Red nipple  
Rubor (vasodilatation)

Fig 2 Tri colour changes in the nipple affected by Reynaud's disease (reproduced from Holmen 2009)

**To speak to a Breastfeeding Supporter 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

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The mother took the photographs above on a camera phone. The mother was 25 years old and described pain in both breasts lasting 5-15 minutes after feeds. Symptoms began in the second week after her child's birth. She had no medical history of poor circulation but suffered migraines. She did not smoke and had never undergone breast surgery. Nipple pain began in pregnancy but resolved immediately after delivery at 38 weeks gestation. The baby weighed 2.8kg. Breastfeeding technique was checked at 2 weeks post partum when the unbearable pain began. Prescription of Nifedipine produced resolution of the pain totally within a week but it re-occurred when the drug stopped. The mother took nifedipine 30milligrammes daily for 12 months and breastfed for a total of 18 months Lawlor-Smith and Lawlor-Smith (1997) studied 5 patients with severe, debilitating nipple pain. Three had had symptoms during other lactations: one gave up breastfeeding at 6 weeks, another breastfed for 14 months, and the third breastfed for 7 months despite the pain. In all women the cold precipitated pain. All five exhibited blanching during, after, and between feeds. None of them smoked and 2 had history of Reynaud's, 2 others had parents with Reynaud's.

There are other case reports where women have been diagnosed with thrush and treated with oral or topical antifungal medication (Barrett). Among the 22 patients with Raynaud phenomenon of the nipple studied, 20 (91%) had previously been treated for Candida with oral or topical antifungals without effect. Of the 12 patients who tolerated a trial of nifedipine, 10 (83%) reported decreased or resolved nipple pain. All patients experienced marked improvement of symptoms with appropriate therapy involving treatment of Raynaud phenomenon. They reported that Nifedipine appeared to be an effective medication for the treatment of Raynaud phenomenon of the nipple and associated improvement of nipple pain.

One study suggested that a mother's stress increased the severity of symptoms.

#### **Diagnostic features of Reynaud's phenomenon affecting breastfeeding**

- Pain which worsens in the cold e.g. passing fridges in the supermarket or even exposure of the nipple to feed
- Bi or tri-phasic colour changes immediately after feeds
- History of circulation problems or close family history of circulation problems
- History of migraines
- Early delivery of baby or small baby - due to vasoconstriction of placental blood vessels
- Optimisation of attachment should be undertaken before considering medical treatment.

#### **Self-help measures**

- stop smoking Even 2 cigarettes a day are enough to increase constriction of blood vessels by 100% and reduce blood flow by 40%.
- limit caffeine intake (both nicotine and caffeine constrict blood vessels). Caffeine is not just in tea and coffee but also in soft and energy drinks as well as some painkillers
- avoid getting cold, and try moderate aerobic exercise (Cardelli 1989).
- rub the nipples gently with warm oil immediately after feeds or cover the breast immediately with a warm heat- retaining compress eg wheat bag.
- avoid decongestants (in cold remedies), the contraceptive pill and fluconazole which can make symptoms worse

#### **Supplements**

- High doses of vitamin B6 (Newman 2012), magnesium (Smith 1960, Turlapaty Leppert1994), calcium (DiGiacomo 1989), fatty acids (Belch 1985) and fish oil supplementation (DiGiacomo 1989) have also been suggested but take a minimum of 6 weeks to be effective.

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- Ginger 2000mg-4000mg daily. Capsules usually contain 500mg. It may also be beneficial to add ginger to your diet, to drink ginger tea, or to put a spoonful of ground ginger in your bathing water (Royal Free hospital [http://www.royalfree.nhs.uk/pip\\_admin/docs/Raynaudsnatural\\_186.pdf](http://www.royalfree.nhs.uk/pip_admin/docs/Raynaudsnatural_186.pdf))

### Medication

Symptoms can be successfully managed by the use of nifedipine 30milligrammes daily (10milligrammes capsules three times a day or long acting tablet 30milligrammes daily) for two weeks. Some women need ongoing medication but many find symptoms resolve by this stage. However the drug produces flushing particularly of the face and headaches which some women find intolerable.

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