Clinical Guideline

DRUG TREATMENT TO INCREASE MILK SUPPLY IN LACTATING MOTHERS

SETTING
Trust-wide, in particular Women and Children’s Division, to include Weston General Hospital (WAHT) and community midwifery settings

FOR STAFF
All staff, particularly midwives and obstetricians

PATIENTS
Lactating mothers

Guidance

1. Background

a. An apparently low milk supply is one of the most common reasons for discontinuing breastfeeding.

b. Actual poor milk supply can result from:
   - Inadequate stimulation of lactation, for example from
     - Less than perfect positioning and attachment of the baby at the breast (eg. due to poor support, compliance, or mechanical factors such as tongue tie) resulting in incomplete breast drainage
     - A disruption to responsive breastfeeding; infrequent, restricted, scheduled or limited feeds
     - An interruption of responsive breastfeeding via misguided use of artificial measures such as dummies (masking feeding cues), nipple shields (causing inadequate latch), or formula milk ‘top-up’ feeds without cautious clinical justification and guidance.
   - Breast abnormality, including
     - insufficient glandular tissue (IGT)
     - previous surgery, including, though not necessarily in all cases, breast augmentation and/or reduction.
   - Physiological factors in the mother, that limited evidence suggests may raise the risk of hormonal factors impacting upon milk supply, such as hypothyroidism or polycystic ovarian syndrome (PCOS).
   - Acute emotional and/or physical trauma for the mother, such as sudden bereavement or physical illness, accident, or shock, and, in particular, separation from, or anxiety concerning her baby, such as experiencing a baby requiring care in a neonatal intensive care unit (NICU).

c. Galactagogues are drugs that promote or increase the flow of mothers milk. They can be used to aid the initiation and maintenance of milk supply to a level which meets the needs of the baby / child.

d. Many mothers perceive their milk supply to be inadequate, whereas the clinical picture may provide evidence to confidently conclude otherwise. Medication should not be advocated as a solution to unfounded concerns, or where additional support and reassurance, as well as consistency of information are the prime need. Expert assessment of the latch and effectiveness of feeding are essential. Refer to the related documents section for further guidance on the appropriate support of breastfeeding, and how to access professionals trained in this support if you yourself are not. Mothers may
benefit from being signposted to an article linked here (also see references section), the author of which is the respected Association of Breastfeeding Mothers (ABM) chair, and is advocated by the UNICEF Baby Friendly Initiative, to which UH Bristol maternity services are fully accredited.

2. Licensing

a. Medicinal products which have been shown to increase milk supply produce their effect by dopamine antagonism, generally as a side effect, whilst having other therapeutic effects. Use of these medicines as galactagogues is outside of the license application and prescribers are required to take ultimate responsibility for their use.

b. Use the reference section of this guideline for further information, evidence and guidance on the use of the below drugs (or other alternatives) as galactagogues. Also note contact details for further support and guidance detailed in the Queries section of this guideline.

c. Individual prescribing decisions should be made bearing in mind the limited evidence of risk to the mother or baby of receiving the drug(s) outlined below, vs. the risk to mother and baby of not establishing full lactation.

3. Prescribing

a. Prescription of a galactagogue is not a 'magic wand' to increase the milk supply of a mother struggling to breastfeed, and it should not be used unless accompanied by regular and effective drainage of milk from the breast.

b. Regardless of the perceived, confirmed, or suspected cause for inadequate milk supply, a galactagogue should not be prescribed until other evidence based measures to adequately stimulate lactation have been fully implemented and assessed for effectiveness. These measures should continue if/when a galactagogue is prescribed, and include:
   o Assessment and guidance from a trained professional skilled in breastfeeding support
   o Expressing alongside breastfeeding, during or between feeds
   o Expressing a minimum of 8 times in 24 hours, including at least once at night, alongside breastfeeds
   o Expressing a minimum of 10 times in 24 hours, including at least once at night, if exclusively expressing
   o Optimising expressing technique by utilising both hand and pump expressing, double pumping (expressing from both breasts at the same time) with a hospital grade pump, and also considering the use of a soft silicone breast pump
   o Optimising expressing by checking correct pump usage, and fit of flange, and/or hand expressing technique, and by using breast compressions to encourage milk flow when expressing (or breast feeding)
   o ‘Power pumping’ sessions (see references for more information if required)
   o ‘Switch feeding’ and/or prolonged periods of skin to skin contact with the baby
   o Vital support for the mother emotionally, and enhancement of an environment which will promote any hormonal response conducive with successful lactation, specifically oxytocin and prolactin, alongside reduction of stressful cortisol-inducing scenarios

c. In addition to a confident diagnosis of inadequate milk supply (likely caused by a reason listed in section 1b), and alongside measures listed in section 3b above, use of medicinal galactagogues may be considered appropriate in a situation where there is a desire to
support a mother with re-lactation, or adoptive breastfeeding.

d. Note that whilst extensive historical anecdata may support their use, there is an absence of any formal or scientific evidence to promote the use of other popular natural remedies to stimulate lactation, such as fenugreek, oats, or fennel. Reported adverse events are unusual, however Fenugreek in particular, has anticoagulant effects, can interact with insulin, can stimulate the uterus, and may have other associated interactions and/or side effects.

e. **Domperidone**
   - Domperidone is a drug prescribed for nausea and vomiting. It also speeds emptying of the gut (prokinetic). It is prescribed ‘off-label’ as a galactagogue by utilising its effect of increasing prolactin and therefore milk volume in mothers who are producing insufficient milk.
   - Domperidone is considered the *agent of choice* as a galactagogue because of its superior side effect profile, efficacy, and minimal passage in to breastmilk.
   - The standard (and maximum) dose of domperidone as a galactagogue is 10mg TDS. The prescription should be reviewed at 7 days and further prescriptions should be considered at a reducing dose.
   - The Medicines and Healthcare Products Regulatory Agency (MHRA) advise that domperidone is associated with a small increased risk of serious cardiac side effects. However, these have been reported predominantly in over 60s who had cardiac problems, were taking other drugs which also cause arrhythmia, or were taking a dose of domperidone >10mg TDS.
   - As a precaution, in view of the above MHRA advice, the prescription of domperidone should be avoided in the following situations:
     - where either mother or baby has any evidence of cardiac abnormalities, and specifically, arrhythmia
     - where either is receiving other medications known to prolong QT interval or potent CYP3A4 inhibitors (e.g. ketoconazole, macrolide antibiotics, SSRI antidepressants, tricyclic antidepressants, salbutamol)
     - where severe hepatic impairment has been identified in mother or baby
     - where either mother or baby has high or low levels of potassium, or low levels of magnesium
   - To balance the above concerns however, it should be noted that:
     - There is no current evidence that domperidone causes risks to otherwise healthy young women who are breastfeeding.
     - Data on the levels of domperidone entering breastmilk confidently indicate that these levels are very low.
   - Individual prescribing decisions should be made bearing in mind the above MHRA recommendations, and also the risks to mother and baby of not establishing full lactation.
   - Mothers should be counselled as to the possible, but rare, adverse effects of domperidone – abdominal cramping, dry mouth, depressed mood and headache, and advised to report any changes in their baby’s behaviour immediately.

f. **Metoclopramide** is used as an antiemetic and ‘off-label’ as a galactagogue. Clinical studies have shown that it increases prolactin levels and consequently milk supply at a dose of 10mg TDS. However it can produce extra-pyramidal side effects including tremor
and slow, shuffling movements, as well as precipitating depression.

g. Chlorpromazine, and Sulpiride have been noted to have galactagogue properties, with limited focused data to support use of the latter, but consensus is that undesirable side effects limit their effectiveness for this application.

REFERENCES


NICE (2017) Breastfeeding problems [online]

Specialist Pharmacy Service (2019) Safety in lactation: drugs used in nausea and vertigo [online]


UK Drugs in Lactation Advisory Service (UKDILAS) (2014) Evidence Summary: Domperidone. West Midlands Medicines Information Service

RELATED DOCUMENTS AND PAGES

UH Bristol Trust Infant Feeding Policy

UH Bristol Trust Prescribing Policy

AUTHORISING BODY

Post Natal Working Party

SAFETY

No unusual or unexpected safety concerns anticipated

QUERIES AND CONTACT

Infant Feeding Specialist Midwives at St Michaels Hospital: Ext 25164 or email InfantFeedingMidwives@UHBristol.nhs.uk

Maternity Pharmacist at St Michaels Hospital: Ext 25357 or bleep 1037

The UH Bristol Trust Medicines Information Team at the BRI: Ext 23409, bleep 2597, or email PharmacyMI@UHBristol.nhs.uk