

Domperidone-1

Introduction:

Domperidone (Motilium™) is a drug that has, as a side effect, the increasing of milk production, probably by increasing prolactin production by the pituitary gland. Prolactin is the hormone that stimulates the cells in the mother's breast to produce milk. Domperidone increases prolactin secretion indirectly, by interfering with the action of dopamine, whose action is to decrease the secretion of prolactin by the pituitary gland. Domperidone is generally used for disorders of the gastrointestinal tract (gut) and has not been released in Canada for use as a stimulant for milk production. This does not mean that it cannot be prescribed for this reason, but rather that the manufacturer does not back its use for increasing milk production. However, there are several studies that show that it works to increase milk production and that it is safe. It has been used, for several years, in small infants who spit up and lose weight, but was replaced until a few years ago by cisapride (Prepulsid™) (cisapride has since been taken off the market because it can cause serious cardiac problems). **Domperidone is *not* in the same family of medication as cisapride.** Another, related, but older medication, metoclopramide (Maxeran™), is also known to increase milk production, but it has frequent side effects which have made its use for many nursing mothers unacceptable (fatigue, irritability, depression). Domperidone has many fewer side effects because it does not enter the brain tissue in significant amounts (does not pass the blood-brain barrier).

In June of 2004, the Federal Drug Administration (FDA) in the US put out a warning against using domperidone because of possible cardiac side effects. This unfortunate step was taken without considering the fact that the cardiac side effects occurred only when the drug was taken intravenously by otherwise very sick patients. In all the years I have used domperidone in so many mothers, I have not yet heard of any significant cardiac side effects that could be attributed to domperidone. Incidentally, the Federal Drug Administration has no authority outside the US, and even in the US, compounding pharmacies, who are not regulated by the FDA, are continuing to provide patients with domperidone.

When is it appropriate to use domperidone?

Domperidone must **never** be used as the first approach to correcting breastfeeding difficulties. Domperidone is *not* a cure for all things. It must **not be used** unless *all other factors* that may result in insufficient milk supply have been dealt with first. (See handout: *Protocol to increase breastmilk intake by the baby*). What can be done?

1. Correct the baby's latch so that the baby can obtain as efficiently as possible the milk which the mother has available. Correcting the latch may be all that is necessary to change a situation of "not enough milk" to one of "plenty of milk".
2. Use breast compression to increase the intake of milk (handout #15, *Breast Compression*).
3. Use milk expression after feedings to increase the supply.
4. Correct sucking problems, stopping the use of artificial nipples (handout #5, *Using a Lactation Aid*, and #8, *Finger Feeding*) and other stratagems.

Using domperidone for increasing milk production:

Domperidone works particularly well to increase milk production under the following circumstances:

- It has frequently been noted that a mother who is pumping milk for a sick or premature baby in hospital has a decrease in the amount she pumps around four or five weeks after the baby is born. The reasons for this decrease are likely many, but domperidone generally brings the amount of milk pumped back to where it was or even to higher levels.
- When a mother has a decrease in milk supply, often associated with the use of birth control pills (avoid oestrogen containing birth control pills while breastfeeding), or on occasion, for no obvious reason when the baby is three or four months old, domperidone will often bring the supply back to normal. See the handout #25, *Slow Weight Gain After the First Few Months* for reasons milk supply might decrease and fix what can be fixed.

Domperidone still works, but often less dramatically when:

- The mother is pumping for a sick or premature baby but has not managed to develop a full milk supply.
- The mother is trying to develop a full milk supply while nursing an adopted baby.
- The mother is trying to wean the baby from supplements.

Side effects of domperidone:

As with all medications, side effects are possible, and many have been reported with domperidone (textbooks often list any side effect ever reported, but symptoms reported are not necessarily due to the drug a person is taking). **There is no such thing as a 100% safe drug.** However, our clinical experience has been that side effects in the mother are extremely uncommon, except for increasing milk supply. Some side effects which mothers we have treated have reported (very uncommonly, incidentally):

- headache which disappeared when the dose was reduced (probably the most common side effect)
- abdominal cramps
- dry mouth
- alteration of menstrual periods

The amount that gets into the milk is so tiny that side effects in the baby should not be expected. Mothers have not reported any to us, in many years of use. Certainly the amount the baby gets through the milk is a *tiny percentage* of what babies would get if being treated for spitting up.

Are there long term concerns about the use of domperidone?

The manufacturer states in its literature that *chronic* treatment with domperidone in rodents has resulted in increased numbers of breast tumours in the rodents. The literature goes on to state that this has never been documented in humans. Note that toxicity studies of medication usually require treatment with huge doses over periods of time involving most or all of the animal's lifetime. Note also that *not* breastfeeding increases the risk of breast cancer, and breast cancer risk decreases the *longer* you breastfeed.

Using domperidone:

Generally, we now start domperidone at 30 mg (three 10 mg tablets) 3 times a day. In some situations we go as high as 40 mg 4 times a day. Printouts from the pharmacy often suggest taking domperidone 30 minutes before eating, but that is because of its use for digestive intolerance. You can take the domperidone about every 8 hours, when it is convenient (there is no need to wake up to keep to an 8 hour schedule—it does not make any difference). Most mothers take the domperidone for 3 to 8 weeks, but sometimes it is needed longer than that, and sometimes it is impossible for mothers to maintain their milk supply without staying on domperidone. Mothers who are nursing adopted babies may have to take the drug much longer. People taking domperidone for stomach disorders are often taking it for many years.

After starting domperidone, it may take three or four days before you notice any effect, though sometimes mothers notice an effect within 24 hours. It appears to take two to three weeks to get a maximum effect, but some mothers have noted effects only after 4 or more weeks. It is reasonable to give domperidone a trial of at least four, and better, six weeks before saying it doesn't work.

For more information on how to wean off the domperidone see the handout: Domperidone 2.

See also the website www.mamadearest.ca/en/info/articles_dr_newman.htm for **videos** on how to latch a baby on, how to know the baby is getting milk, how to use compression, how to use a lactation aid, as well as information sheets on breastfeeding.

Questions? (416) 813-5757 (option 3) or drjacknewman@sympatico.ca or my book **Dr. Jack Newman's Guide to Breastfeeding** (called **The Ultimate Breastfeeding Book of Answers** in the USA)

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