

DOMPERIDONE

Domperidone (Motilium) is a drug that has, as a side effect, the increased production of the hormone prolactin. 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. One of the actions of dopamine is that it increases 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 it has recently been replaced for this reason by a newer drug called cisapride (Prepulsid). Cisapride does not have the effect on milk production which domperidone has. Domperidone's ability to increase milk production has been recognized since it first became available. Another, related, but older medication, metoclopramide (Mexeran), 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).

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. These include:

1. Correcting 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. Using breast compression to increase the intake of milk
3. Using milk expression after feedings to increase the supply.
4. Correcting sucking problems, stopping the use of artificial nipples and other stratagems.

Using domperidone for increasing milk production

- It has frequently been noted that a mother who is pumping milk for sick or premature baby in hospital has a decrease in the amount she pumps around 4 or 5 weeks after the baby is born. The reason 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 estrogen containing birth control pills while breastfeeding), or on occasion, for no obvious reason when the baby is 3 or 4 months old, domperidone will often bring the supply back to normal.

Domperidone still works, but often less dramatically when:

- The mother is pumping for a sick or premature baby but has 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 effects 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 the blood 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

The amount that gets into the milk is so tiny that the 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 tumors 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 start domperidone at 20 mg (two 10 mg tablets) four times a day. If taking domperidone 4 times a day is inconvenient, but that is because of its use for digestive intolerance. You can take the domperidone about every 6 hours, when it is convenient (there is no need to wake up to keep to a 6 hour schedule - it does make any difference). Most mothers take the domperidone for 3 to 8 weeks. Mothers who are nursing adopted babies may have to take the drug much longer.

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.

After you have used domperidone for two weeks, we ask you to call (416) 813-5757 (option 3) and ask for a return call. Based on your information, a decision will be made what to do next. If you have unexplained symptoms at any time call the same number immediately.