

Domperidone

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Drug: Domperidone

Mechanism of Action: Unique antagonist of the dopamine D₂ receptor site (dopamine causes a decrease in prolactin levels) that is used off-label to treat hypoprolactinemia (insufficient milk supply) that increases prolactin levels

Current Status: Orphan Drug Status Designation in the United States

Dose: Usually 1 to 2 tablets/capsules (10 mg each) 4 times a day = 40 mg to 80 mg per day

Or, 3 tablets/capsules (10 mg each) 3 times a day = 90 mg per day

Doses up to 240 mg a day rarely may be necessary (rarely greater than 120 mg per day)

Most breastfeeding mothers take the drug for 3 to 8 weeks or as long as needed to maintain supply

Withdrawal with Sufficient Milk Supply:

When ready to stop taking the drug, discontinue one 10 mg dose every 4 to 5 days

If milk supply continues to be sufficient, discontinue another dose of 10 mg

Continue above schedule until final dose is taken, as long as there has been no decrease in milk supply or a small decrease that does not affect breastfeeding and baby weight gain

Withdrawal with Insufficient Milk Supply:

Return to previous effective domperidone dose and remain on dose for several weeks

After several weeks, begin previous withdrawal schedule

If milk supply again decreases, repeat above

Continue recycling until (1) milk supply remains sufficient, (2) baby weans, or

(3) mother desires to stop process

Possible Adverse Effects:

Weight Gain: 11.7%

Headache: 9.8%

Cardiac Arrhythmias: 0.8% (vs. 0.9% with metoclopramide)

Note: This side effect resulted from the use of higher doses of the Intravenous (IV) form of domperidone with older women with preexisting conditions as opposed to young, healthy women taking lower oral doses; therefore, it is recommended not to prescribe domperidone to any mother with a history of known or suspected cardiac arrhythmias (tachyarrhythmia, QT prolongation); currently on an anti-arrhythmic medication; or having a chronic/debilitating illness, abnormal liver function, or serious gastric abnormality

Depression: 0.9% (vs. 12% with metoclopramide)

Note: Domperidone does not cross the blood-brain barrier

Note: Always discuss all possible side effects, drug interactions, and contraindications with patients

Transfer to Breast Milk:

Concentration in human milk is exceedingly low and subclinical (0.24 to 2.6 micrograms per Liter of milk)

The Relative Infant Dose (RID) ranges from 0.011% to 0.04%

Summary:

Volume of milk production per day increased in most, but not all women, following use; increases in milk volume occur rapidly, generally within 48 hours. Domperidone rapidly facilitates prolactin release from the pituitary within an hour and leads to sustained, increased plasma levels soon after; even in nonlactating women, levels rise almost 10-fold. Milk supply usually increases within 3 to 4 days but may take up to 2 to 4 weeks, or more. A trial of at least 4 weeks should be used

References: Available upon request: fjncat@hotmail.com

The author does not warrant the safety of this medication during breastfeeding but has only reviewed the current state of knowledge in this field. Ultimately, the use of this medication must be reviewed by the clinician in the field together with the mother to evaluate the relative safety of using this drug in breastfeeding mothers.