**MAGNESIUM LAXATIVES**

**magnesium citrate** (mag'-nee-zum si'trate)

Citrate of Magnesia, Citroma, Citromag

**magnesium hydroxide** (mag'-nee-zum hye'roks-aide)

Dulcolax Magnesia Tablets, Phillips Magnesia Tablets, Phillips Milk of Magnesia, 30X

**Classification**

Therapeutic: Laxatives

Pregnancy Category: B

**Indications**

As a: Laxative, Bowel evacuant in preparation for surgical/radiographic procedures.

**Action**

Essential for the activity of many enzymes. Play an important role in neurotransmission and muscular excitability. Are osmotically active in GI tract, drawing water into the lumen and causing peristalsis. Therapeutic Effects: Replacement in deficiency states. Evacuation of the colon.

**Pharmacokinetics**

Absorption: Up to 30% may be absorbed orally.

Distribution: Widely distributed. Cross the placenta and are present in breast milk.

Metabolism and Excretion: Excreted primarily by the kidneys.

Half-life: Unknown.

**TIME/ACTION PROFILE (laxative effect)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>3–6 hr</td>
<td>unknown</td>
<td>unknown</td>
</tr>
</tbody>
</table>

- C: Canadian drug name  
- G: Generic Implication  
- OPTIX indicate life-threatening; underline indicates most frequent  
- Discontinued

**Contraindications/Precautions**

Contraindicated in: Hypermagnesemia, Hypocalcemia, Anuria, Heart block, Active labor or within 2 hr of delivery (contraindicated for preterm labor).

Use Cautiously in: Any degree of renal insufficiency.

**Adverse Reactions/Side Effects**

GI: diarrhea.

Derm: flushing, sweating.

**Interactions**

Drug-Drug: Potentiates neuromuscular blocking agents. May decrease absorption of fluoroquinolones, nitrofurantoin, and tetracyclines and penicillins.

**Route/Dosage**

**PO** (Adults): Magnesium citrate—240 mL; magnesium hydroxide (Milk of Magnesia)—30–60 mL single or divided dose or 10–20 mL as concentrate.

**PO** (Children 6–12 yr): Magnesium citrate—100 mL; magnesium hydroxide (Milk of Magnesia)—15–30 mL single or divided dose.

**PO** (Children 2–5 yr): magnesium hydroxide (Milk of Magnesia)—5–15 mL single or divided dose.

**NURSING IMPLICATIONS**

**Assessment**

- Laxative: Assess patient for abdominal distention, presence of bowel sounds, and usual pattern of bowel function.

- Assess color, consistency, and amount of stool produced.

**Potential Nursing Diagnoses**

Constipation (Indications)

**Implementation**

- PO: To prevent tablets entering small intestine in undissolved form, they must be chewed thoroughly before swallowing. Follow with 1 glass of water.

- Magnesium citrate: Refrigerate solutions to ensure they retain potency and palatability. May be served over ice. Magnesium citrate in an open container will lose carbonation upon standing; this will not affect potency but reduce palatability.

- Magnesium hydroxide: Shake solution well before administration.

- Administer as empty stomach for more rapid results. Follow oral laxative dose with a full glass of liquid to prevent dehydration and for faster effect. Do not administer as bedtime or late in the day.
Patient/Family Teaching

- Advise patient not to take this medication within 2 hr of taking other medications, especially fluoroquinolones, minocycline, and tetracyclines.
- Advise patient that laxatives should be used only for short-term therapy. Long-term therapy may cause electrolyte imbalance and dependence.
- Encourage patient to use other forms of bowel regulation, such as increasing bulk in the diet, fluid intake, and mobility. Normal bowel habits are individual; frequency of bowel movement may vary from 2 times/day to 2 times/week.
- Advise patient to notify health care professional if unrelieved constipation, rectal bleeding, or symptoms of electrolyte imbalance (muscle cramps or pain, weakness, dizziness) occur.

Evaluation/Desired Outcomes

- Passage of a soft, formed bowel movement, usually within 3–6 hr.

Why was this drug prescribed for your patient?