MAGNESIUM ANTACIDS
magnesium hydroxide
(mag-nee-dium hye-dros-ide)
Dulcolax, Magnesia Tablets, Phillips Magnesia Tablets, Phillips Milk of Magnesia, MOM
magnesium oxide
(mag-nee-dium ox-ide)
Mag-3, 400, Im-3Mag
Classification
Therapeutic: mineral and electrolyte replacements/supplements, laxatives
Pharmacologic: emetics

Pregnancy Category B

Indications
Treatment/prevention of hypomagnesemia. As a: Laxative, Bowel evacuant in preparation for surgical/radiographic procedures. Milk of Magnesia has also been used as an antacid.

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>
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<tbody>
<tr>
<td>PO</td>
<td>3–5 hr</td>
<td>unknown</td>
<td>unknown</td>
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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
Antacid
PO (Adults): Magnesium oxide—140 mg 3–4 times/day or 400–840 mg/day; Magnesium hydroxide (Milk of Magnesia)—5–15 mL/dose up to 4 times/day as liquid or 2.5–7.5 mL/dose up to 4 times/day as liquid concentrate; 622–1244 mg/dose (2–4 tabs) up to 4 times/day.
PO (Children): Magnesium hydroxide (Milk of Magnesia) — 2.5–5 mL/dose up to 4 times/day as liquid or 311 mg (1 tab) up to 4 times/day.

NURSING IMPLICATIONS
Assessment
- Antacid: Assess for heartburn and indigestion as well as location, duration, character, and precipitating factors of gastric pain.

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 1⁄2 glass of water.
- Magnesium hydroxide: Shake solution well before administration.
- Antacid: Administer 1–3 hr after meals and at bedtime.

Patient/Family Teaching
- Advise patient not to take this medication within 2 hr of taking other medications, especially fluoroquinolones, nitrofurantoin, and tetracyclines.

Contraindications/Precautions
Contraindicated in: Hypomagnesemia, Hypocalcemia, Anemia, Heart block, Acute labor or within 2 hr of delivery (rarely used for preterm labor).
Use Cautiously in: Any degree of renal insufficiency.

Drug Classifications
- Therapeutic: mineral and electrolyte replacements/supplements, laxatives
- Pharmacologic: emetics
Antacids: Caution patient to consult health care professional before taking antacids for more than 2 wk if problem is recurring, if relief is not obtained, or if symptoms of gastric bleeding (black, tarry stools; coffee-ground emesis) occur.

Evaluation/Desired Outcomes
- Relief of gastric pain and irritation.

Why was this drug prescribed for your patient?