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REGLAN
(metoclopramide)

INDICATIONS: 1. Symptomatic gastroesophageal reflux
2. The prevention of postoperative nausea and vomiting

PHARMACOLOGY: Reglan stimulates motility of the upper gastrointestinal tract without stimulating gastric, biliary or pancreatic secretions. The mode of action is unclear except that it appears to sensitize the tissues to the action of acetylcholine. Reglan increases the tone and amplitude of gastric antral contractions, relaxes the pylorus and the duodenal bulb, and increases peristalsis of the duodenum and jejunum resulting in accelerated gastric emptying and intestinal transit. It also increases the resting tone of the lower esophageal sphincter.

The antiemetic effects of Reglan appear to be a result of its antagonism of central and peripheral dopamine receptors. Dopamine produces nausea and vomiting by stimulation of the medullary chemoreceptor trigger zone and reglan blocks stimulation of the chemoreceptor zone by agents such as l-dopa or apomorphine which are known to increase dopamine levels or to possess dopamine-like effects. Like the phenothiazines and other related drugs, which are also dopamine antagonists, reglan produces sedation and may produce extrapyramidal reactions, although these are comparatively rare.

The onset of action occurs 1-3 minutes after an IV dose, 10-15 minutes after an IM dose, and 30-60 minutes following an oral dose. The effects last 1-2 hours.

WARNINGS: 1. Mental depression - this has been known to occur in patients with and without a prior history of depression.

2. **Extrapyramidal symptoms**, manifested primarily as acute dystonic reactions, occur in approximately 1 in 500 patients treated with the usual adult dosage of 30-40 mg/day. These are usually seen in the first 24-48 hours of treatment, occur more frequently in pediatric and younger adult patients, and are even more frequent at the higher doses used for prevention of chemotherapeutic vomiting. The symptoms may include involuntary movements of the limbs or face, torticollis, oculogyric crisis, tongue protrusion, bulbar type of speech, trismus or tetanus. If these symptoms occur, 50 mg **Benadryl IM** will usually cause symptoms to subside. Cogentin 1-2 mg IM can also be used to reverse these reactions. Parkinsonian-like reactions have also occurred and usually within the first six months of usage.

3. Tardive dyskinesia, a syndrome consisting of potentially irreversible, involuntary, dyskinetic movements may develop in patients treated with reglan. The prevalence appears to be highest among the elderly, especially elderly women, it is impossible to predict which patients are likely to develop the syndrome. Both the risk of developing the syndrome and the likelihood that it will become irreversible are believed to increase with duration of treatment and the total cumulative dose. Less commonly, the syndrome can develop after relatively brief treatment periods and at low doses, but these are more likely to be reversible.

DRUG INTERACTIONS: The effects of reglan are antagonized by anticholinergic drugs and by narcotic analgesics. Additive sedation effects can be seen when given with alcohol, sedatives, hypnotics, narcotics, or tranquilizers.

DOSAGE: For the prevention of postoperative nausea and vomiting, reglan should be given IV or IM near or at the end of the surgery. The dose is 10-20 mg.