


Section: Drug Reference
Subject: MAGNESIUM SULFATE
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Magnesium Sulfate

1. CLASSIFICATION
 - a. Electrolyte
2. ACTIONS / DESCRIPTIONS
 - a. Blocks peripheral neuromuscular transmission by reducing sensitivity of motor end plate to acetylcholine thus:
 - i. Decreases striated muscle contractions.
 - ii. Relaxes smooth muscle
 - iii. Bronchial dilation
 - iv. Uterine dilation
 - v. CNS depressant
3. INDICATIONS
 - a. Asthma
 - b. Seizures of eclampsia (toxemia of pregnancy)
 - c. Torsades de points (form of ventricular multifocal tachycardia) or Vfib resistant to all other treatments.
4. CONTRAINDICATIONS
 - a. Heart block
5. PRECAUTIONS
 - a. Patients with impaired renal function
6. ADVERSE REACTIONS
 - a. Feeling of warmth
 - b. Red flushed skin
 - c. Facial flushing
 - d. AV block
 - e. Bradycardia
 - f. Respiratory depression
 - g. Diaphoresis
 - h. Hypotension
 - i. Depressed reflexes
7. DRUG ACTION TIME
 - a. Onset: 1 – 2 minutes
 - b. Duration: 30 minutes
8. INFORMATIONAL/DISCUSSION POINTS
 - a. Severe side effects rarely happen with pre-hospital doses.
 - b. Heart block contraindications
 - c. When to use with the asthma patient
 - d. Why magnesium sulfate is used in eclamptic seizures over valium