

## R. Magnesium Sulfate

- I. Classification
  - Electrolyte
- II. Actions
  - Depresses the central nervous system and relaxes smooth muscle, skeletal muscle and cardiac muscle
- III. Indications
  - Torsade De Pointes
  - Obstetrical Emergencies - Eclampsia
  - Asthma
- IV. Contraindications
  - Heart Block
  - Myocardial damage
- V. Adverse effects
  - A. Cardiovascular
    - Flushing
    - Hypotension*
  - B. Respiratory
    - Depression**
    - Failure
- VI. Administration
  - A. Adult
    - Asthma : 2 Gm (in 50 ml NS or D5W) IV/IO gtt over 10 minutes (10 gtt set)
    - Eclampsia: 4 Gm (in 50 ml NS or D5W) IV/IO gtt over 10 minutes (10 gtt set)
    - Torsades de Pointes: 2 Gm slow IVP. In 10 cc syringe, combine 2 Gm (4 cc) with 6 cc Normal saline for proper dilution of magnesium.
  - B. Pediatric
    - Asthma : 40 mg/kg (in 50 ml NS or D5W) IV gtt over 10 minutes (10 gtt set)
- VII. Onset
  - Immediate
- VIII. Duration
  - Variable
- IX. Precautions
  - Patients that may require high doses of magnesium, can develop signs/symptoms of toxicity. These signs/symptoms include lethargy, decreased respiratory effort, and decreased reflexes.