**H31. Magnesium Sulfate (none)**

**Class and Action:** Electrolyte, anticonvulsant; reduces striated muscle contractions and blocks peripheral neuromuscular transmission by reducing acetylcholine release at the myoneural junction

**Indications:** Seizures from eclampsia, Torsades de Pointes, hypomagnesaemia, refractory Vfib, management of preterm labor, status asthmaticus unresponsive to βeta receptor drugs.

**Contraindications:** AV heart block, myocardial damage

**Side Effects:** Diaphoresis, facial flushing, hypotension, depressed reflexes, hypothermia, reduced heart rate, circulatory collapse, respiratory depression, diarrhea.

**Drug Interactions:** CNS depression maybe potentiated if taken with other CNS depressants. Cardiac changes may occur when taken with cardiac glycosides.

**Onset, Duration, and Routes:** Onset is immediate for IV and 1 hour for IM with a duration of 30 minutes and 3-4 hours respectively. Routes of administration include IV *IO IM*

**Adult Dose:**
- Torsades w/ a pulse 2 grams over 2 minutes
- Torsades w/ no pulse 2 grams IVP
- Preeclampsia 4 grams over 20 minutes
- Eclampsia w/ Seizures 4 grams over 10 minutes
- Infusion 1 gram/hour - Continuation only
- Asthma 2-4 grams over 5 minutes

**Pediatric Dose:**
- Contact medical control if needed

**WDM EMS Protocols:**
- B6. Medical - Cardiac Arrest
- B9. Tachycardia
- D2. Eclampsia/Pre-Eclampsia
- E5. Respiratory Distress

**Special Considerations:**

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Protocol: H31. Magnesium Sulfate
Date of Most Recent Update: 6/2020