Initial Date: 07/19/2023
Revised Date:

Magnesium Sulfate

Pharmacological Category: Antiseizure Agent, Electrolyte Supplement

Indications:
1. Cardiac: Torsades de Pointes
2. VF/VT in hypomagnesemia
3. Pre-eclampsia
4. Eclamptic seizures
5. Refractory status asthmaticus

Precautions:
1. Magnesium Sulfate is diluted for applications in these protocols

Expected effects:
1. Seizure cessation
2. Decreased respiratory distress

Side effects:
1. Respiratory depression
2. Hypotension
3. Asystole
4. Burning in IV site for conscious patients

Best Practice for Administering Magnesium Sulfate
1. Magnesium Sulfate dose added to 100 to 250 mL of NS and infusing over approximately 10 minutes.

Notes:
1. Magnesium Sulfate for Preeclampsia/Eclampsia can be administered prior, during, or up to 6 weeks post childbirth.
2. The dosing for preeclampsia and eclampsia are both 4 gm (see treatment protocol for pre/post radio requirements).

Dosing: ADULT RESPIRATORY DISTRESS
Indication: Status asthmaticus
Adults administer:
1. Magnesium Sulfate 2 gm slow IV (preferably added to 100-200 mL NS bag over 10 minutes).

Dosing: ADULT SEIZURES
Indication: Eclamptic seizure
Adults administer:

1. Magnesium Sulfate 4 gm over 10 minutes IV/IO until seizure stops (preferably added to 100-200 mL NS bag over 10 minutes).

Dosing: CHILDBIRTH & RELATED OBSTETRICAL EMERGENCIES
Indication: Preeclampsia or Eclamptic Seizure
Adults administer:

1. Magnesium Sulfate 4 gm over 10 minutes IV/IO until seizure stops (preferably added to 100-200 mL NS bag over 10 minutes).

Dosing: ADULT CARDIAC ARREST
Indications: Suspected torsades de pointes
Adults administer:

1. Magnesium Sulfate 2 gm IV/IO

Used in the Following Protocols:
Respiratory Distress (Section 3 Adult Treatment)
Seizures (Section 3 Adult Treatment)
Childbirth and Obstetrical Emergencies (Section 4 Obstetrics and Pediatrics)
General Cardiac Arrest (Section 5 Adult Cardiac)