

MAGNESIUM SULFATE

ACTION: Electrolyte/Antiarrhythmic

- Magnesium provides electrical stability in the myocardium.
- Affects impulse formation and conduction time in myocardium reducing incidence of dysrhythmias associated with hypomagnesemia or prolonged QT interval.
- Magnesium is also effective in the prevention and management of seizures associated with eclampsia in pregnant women.

INDICATIONS:

- Drug of choice for treatment of Torsades de Pointes (polymorphic V-Tach).
- V-Fib/V-Tach cardiac arrest patients with poor dietary intake or chronic diseases (i.e. alcoholism, renal failure and use of diuretics).
- Refractory V-Fib/V-Tach after use of cardioversion and Amiodarone.
- Suspected ischemic chest pain patients presenting with significant ventricular ectopy AND who have poor dietary intake and habits or chronic diseases such as alcoholism and renal failure.
- Seizures secondary to eclampsia in pregnant women.

CONTRAINDICATIONS:

- In renal patients, use caution if giving additional doses of Magnesium sulfate.

POTENTIAL SIDE EFFECTS:

- Flushing and sweating.
- Mild hypotension.
- Mild bradycardia.
- Respiratory and CNS depression.

ADULT DOSE/ROUTE:

⇒ **Arrest due to Torsades de Pointes / Eclampsia:** 2 grams in 100 ml D5W slowly IV/IO. Run with target goal of infusing 100 ml over 10 minutes.

PEDIATRIC DOSE/ROUTE:

⇒ Not indicated

NOTES:

- In Torsades de Pointes (polymorphic V-Tach), give Magnesium Sulfate as the first-line antiarrhythmic. Doses higher than 2 G may be required in Torsades. Contact Base Hospital Physician for additional orders.