

Medications

MAGNESIUM SULFATE

Action:

Prevents or controls convulsions by blocking neuromuscular transmission. Magnesium has a CNS depressant effect.

Indication:

Seizure prevention and control in severe pre-eclampsia or eclampsia, and in convulsions associated with abnormal low levels of magnesium as a contributing factor.

Contraindications:

Heart block or myocardial damage. Since magnesium is excreted by kidneys, give very cautiously in the presence of renal impairment.

Adverse Reactions:

Magnesium intoxication is the usual cause of adverse effects which include; flushing, diaphoresis, hypotension, depressed reflexes, flaccid paralysis, hypothermia, circulatory collapse, cardiac and CNS depression proceeding to respiratory arrest.

ECG changes increased PR interval, increased QRS complex and prolonged QT; heart block and systole may occur.

Treatment of Magnesium Toxicity:

Artificial ventilations until a calcium salt can be given to antagonize the effects of magnesium. Dose 5-10 mcg calcium will usually reverse the respiratory depression and heart block.

Administration and Dosage:

IF 1-4 gm of 10-20% solution - not to exceed 1.5 ml/min of 10% solution.
Mix 1 gram of 10-20% solution with 100 cc's of IV fluid to reduce irritation of the vein.

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MAZICON PROTOCOL

(To be referred to whenever Mazicon/Narcan are indicated)

1. Indications: Mazicon is a specific benzodiazepine antagonist and is indicated for the partial or complete reversal of suspected or confirmed benzodiazepine overdose.
2. Contraindications:
 - A. Any patient with a history of chronic use or abuse of benzodiazepines.
 - B. Any patient with signs of serious cyclic antidepressant overdose (see warnings below).
 - C. Any patient with known hypersensitivity to the drug.
3. Warnings:
 - A. The rapid reversal of chronic benzodiazepine use may precipitate seizures.
 - B. Any patient with known or suspected mixed overdose with benzodiazepines who exhibit any of the following:
 1. Seizure or pre seizure (myoclonic jerks) activity.
 2. Anticholinergic signs (dilated pupils, flushed skin, dry mouth, urinary retention, etc.).
 3. Wide or widening QRS tachycardias.
 - C. The half-life of Mazicon is shorter than that of many of the benzodiazepines. Patients should be closely observed for re sedation.
 - D. Patients receiving Mazicon may awaken suddenly and be combative.
4. Dosage and Administration:
 - A. Mazicon is compatible with D5W, NS and LR
 - B. It should be given through a freely flowing IV in a large vein.
 - C. Initial dose in 2 ml (0.2 mg) over 30 seconds.
 1. If no response after 30 seconds, an additional 3 ml can be repeated over another 30 seconds.
 2. Further doses of 5 ml each (0.5 mg) can be given in 30 second to 1 minute intervals to a cumulative dose of 30 ml (3.0 mg).
 - D. In the event of re sedation, repeated doses 20 minutes after initial treatment may be needed.