

Table 2: Protocol for Administration of Magnesium Sulfate  
A. Magnesium Sulfate Loading and Maintenance Dosage

	<b>Loading (gm)</b>	<b>Infusion Rate (min)</b>	<b>Maintenance</b>
Preeclampsia and Eclampsia	4-6	15-20	Infuse at 1-2 grams per hour via infusion pump
Recurrent Eclampsia	2	5	

B. Side Effects and Toxicity and Nursing Intervention

<b>Side Effect/Toxicity</b>	<b>Nursing Intervention</b>
Cutaneous flushing, sweating, malaise, weakness, drowsiness	Keep room and patient cool (provide fan), educate patient about potential side effects; monitor patient movement and assist with getting out of bed
Transient decreased amplitude and frequency of contractions at the time of loading dose	Continuous external fetal and uterine monitoring
Soreness at IV site	Warm soaks or ice to site PRN
Decreased rate and depth of respiration, shortness of breath (SOB)	Discontinue treatment if SOB not relieved with oxygen
Diuresis	Strict Input & Output; document output per orders; magnesium sulfate is excreted exclusively in urine and an output of < 30 ml/hr may lead to magnesium toxicity
Disappearance of deep tendon reflexes	Notify physician if absent or significant change in baseline assessment
Heart block (decreased PR interval, increased QRS), chest pain	Avoid use in patients with cardiac conduction abnormalities
Pulmonary edema	Strict input and output, fluid restrict as ordered (usually 60-100 ml/hour)

Nursing care and assessment: (refer to Ante, Intra, Postpartum Nursing Management and Assessment of Preeclampsia: Maternal/Fetal Assessment and Monitoring Recommendations chapter, pg. 35)

***Increase frequency of assessments as indicated by patient condition.***

If magnesium sulfate is unavailable, alternative anti-seizure medications such as a benzodiazepine (e.g., midazolam, lorazepam, or diazepam) or phenytoin should be used in the setting of eclampsia. Consultation with neurology is suggested to discuss continued medical prophylaxis for seizures if magnesium sulfate is unavailable. If a patient has preeclampsia without severe features (mild) and there is no magnesium sulfate available, we suggest observation alone.