



Magnesium Sulfate (MgSO₄) Care Map

(used in conjunction with Labour Record, HDP and/or Postpartum Care Maps)

Prior to initiation: BP _____ P _____ R _____ Reflexes R/L _____/_____ Urine output normal Yes No
 Magnesium Sulfate Bolus: _____ gms (usual 4gm/hr) over 20-30 minutes Date _____ Time Started _____ Time completed _____
 Side Effects Experienced: Flushing Nausea/vomiting Hypotension Other _____
Prior to maintenance dose: BP _____ (no significant drop) R _____ (greater than 12) Reflexes R/L _____/_____ (not decreased)
 Magnesium Sulfate Maintenance dose _____ gms/hr (usual 1gm/hr) Date _____ Time Started _____

<u>Hourly Assessments</u>	Date						
	Time						
Pump rate (mL/hr) MgSO ₄ / Maintenance Fluid restriction of _____ mLs/hr total							
Intravenous is patent							
Blood Pressure							
Heart Rate							
Respiratory rate (less than 12 may indicate toxicity)							
Oxygen Saturation							
Oxygen rate (l/min or RA)							
Deep tendon reflexes- R/L (Decreasing reflexes may indicate toxicity)							
Clonus – Right/Left (If present, watch for seizure activity)							
Hourly urine output* (monitor for toxicity if decreased)							
Urine dip (protein) (neg, 1+ - 3+)							
Level of consciousness (if decreased may indicate toxicity)							
Slurred speech (if present may indicate toxicity)							
Muscle weakness (if present may indicate toxicity)							
Side rails up & padded							
Calcium Gluconate at bedside							
Magnesium serum level							
Initials							

Signs of Magnesium Toxicity	
Loss of reflexes	Altered Level of consciousness
Muscle weakness	Slurred speech
Decreased urine output *(less than 30mL/hr)	Decreased Respirations (less than 12/min)
Muscle weakness	Cardiac Arrest
Antidote	
Calcium Gluconate – 10 mLs of 10% solution given IVP slowly over 2-3 minutes <i>May need to provide CPR until effective</i>	

Reflexes	Level of consciousness
∅ – no reflexes (notify PCP)	1 - <u>Alert/Orientated</u>
1+ - decreased/present with hammer	2 - <u>Occasionally drowsy</u> (poor concentration)
2+ - Normal/present with hand	3 - <u>Very drowsy</u> (difficult to arouse)
3+ - Brisk with hand	4 - <u>Stupor</u> (responds only to painful stimuli)
4+ - hyperactive with clonus (Notify PCP)	
Clonus	
Quickly dorsiflex the foot and release. Count the number of oscillations (beats) between flexion and extension	

Abbreviations	Serum Levels
CPR – Cardiopulmonary resuscitation	Therapeutic: 5-7 mEq/l
HDP – Hypertensive disorders of pregnancy	Loss of reflexes: 10 mEq/l
IVP – Intravenous push	Respiratory Failure: 12-15 mEq/l
RA – Room air	Cardiac Arrest: 25 mEq/l or above
R/L – Right/Left	