

Oral/Enteral Electrolyte Replacement

Critical Care Electrolyte Replacement Practice Management Guidelines

Exclusions:

Renal insufficiency (SCr >2 and/or CrCl < 20 mg/dL), Rhabdomyolysis, DKA, Weight < 50 kg

*** Consider oral/enteral replacement if GI tract available ***

*** Oral/enteral replacement is preferred in asymptomatic patients ***

*** If symptomatic, consider IV replacement ***

Potassium

Product	Serum Potassium	Replace with	Monitoring
Potassium Chloride (KCl) (Tablet, liquid, powder)	3.7-3.9 mEq/L	20 mEq x 1 dose	No additional action
	3.5-3.6 mEq/L	20 mEq Q2H x 2 doses	No additional action
	3.3-3.4 mEq/L	20 mEq Q2H x 3 doses	Recheck K+ level 4 hours after last dose
	3.1-3.2 mEq/L	20 mEq Q2H x 4 doses	Recheck K+ level 4 hours after last dose
	< 3.1 mEq/L	Call Physician AND 40 mEq Q2H x 2 doses	Recheck K+ level 4 hours after last dose

** If serum Potassium < 3.0 mEq/L, call physician and consider IV replacement

Phosphorus

Product	Serum Phosphorus	Replace with	Monitoring
K-Phos Neutral Tablet Phosphate 250mg (8mmol) Potassium 1.1 meq Sodium 13 meq	2.0-2.5 mg/dL	K-Phos Neutral 2 tabs Q4H x 3 doses	Repeat Phos level with next AM labs
	1.6-1.9 mg/dL	K-Phos Neutral 2 tabs Q4H x 4 doses	Repeat Phos level with next AM labs
	<1.6 mg/dL	Must replace with IV	

Magnesium

Corrected serum Mg^{2+} = measured serum Mg^{2+} x 0.42 + 0.05(4)

Product	Serum Magnesium	Replace with	Monitoring
Magnesium Oxide 400 mg (240 mg elemental Mg^{2+})	1.5-1.9 mg/dL	400 mg Q12H x 2 doses	No additional action
	1.2-1.4 mg/dL	800 mg Q12H x 2 doses	Recheck Mg^{2+} level with AM labs
	0.8-1.1 mg/dL	800 mg Q8H x 3 doses	Recheck Mg^{2+} level daily; also check serum K+ level

**** If serum Magnesium < 1.2 mg/dL, IV replacement strongly recommended**

Calcium

Exclusions: As previously mentioned + digoxin therapy

Product	Serum Ionized Calcium	Replace with Calcium	Monitoring
Calcium Carbonate 1250 mg (500 mg elemental Ca ²⁺)	1.0 -1.11 mmol/L	1250 mg Q12H x 1 dose	Recheck Ca ²⁺ level with AM labs
	0.97-0.99 mmol/L	1250 mg Q12H x 2 doses	Recheck Ca ²⁺ level with AM labs
	0.85-0.96 mmol/L	1250 mg Q6H x 4 doses	Recheck ionized Ca ²⁺ level 4 hours after last dose

**** If serum ionized calcium < 1.0 mmol/L, IV replacement strongly recommended**

References:

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