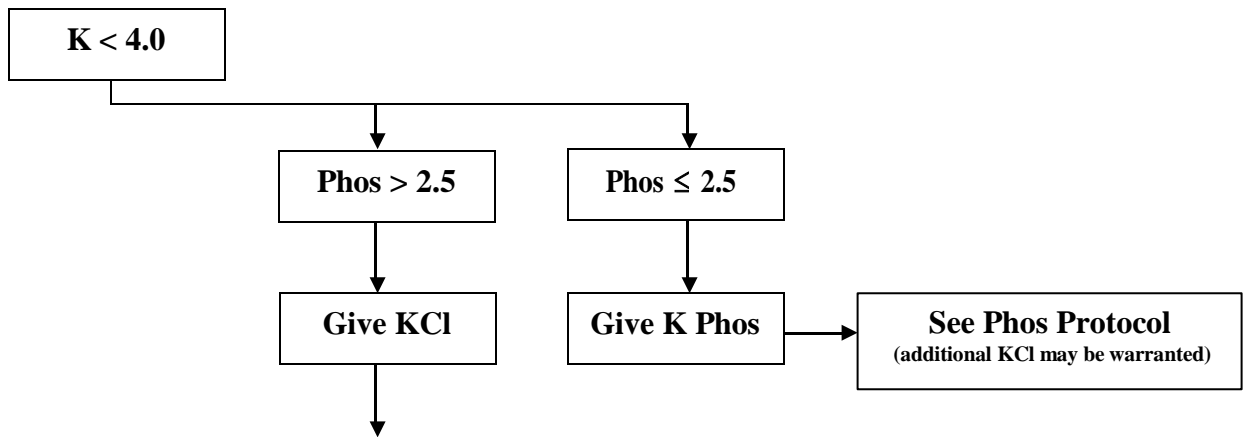


Potassium Replacement

SURGICAL CRITICAL CARE
Electrolyte Replacement Practice Management Guideline

EXCLUSIONS: Patients on hemodialysis/peritoneal dialysis, creatinine clearance <20, have active transfer orders out of the SICU, DKA, rhabdomyolysis

**** Always look at phosphorus level to determine appropriate potassium product ****



<u>Serum K+</u>	<u>Replace With</u>	<u>Recheck Level</u>
3.3-3.9 meq/L	40 meq KCl PO/PT/IV	immediately after replacement
3.0-3.2 meq/L	60 meq KCl PO/PT/IV	immediately and with next AM labs
2.6-2.9 meq/L	80 meq KCl IV and NHO	immediately and with next AM labs
< 2.6 meq/L	100 meq KCl IV and NHO	immediately and with next AM labs

***** Consider PO/PT replacement if GI tract available *****

- If central line present and continuous cardiac monitoring, infuse at **20 meq/hr** (max = 40 meq/hr).
- If peripheral access only, infuse at **10 meq/hr**.
- Serum potassium may be expected to increase by ~0.25 meq/L for each 20 meq IV KCl infused.

Approved: _____ Dr. Addison K. May, MD, FACS, FCCM
 December 2013

Magnesium Replacement

SURGICAL CRITICAL CARE Electrolyte Replacement Practice Management Guideline

EXCLUSIONS: Patients on hemodialysis/peritoneal dialysis, creatinine clearance <20, have active transfer orders out of the SICU

<u>Serum Magnesium</u>	<u>Replace With</u>
1.6 – 1.9 mg/dL	4 grams IV over 2h -or- Magnesium oxide 250mg PO BID
1.0 – 1.5 mg/dL	6 grams IV over 3h
< 1.0 mg/dL	8 grams IV over 4h

IV Administration:

- Magnesium replacement will now be one-time doses.
- All doses will be comprised of the appropriate number of 2g/50mL premixed piggybacks. Infuse at a rate of 2gm per hour.

Oral Administration:

- Applies to patients with magnesium level > 1.5 mg/dL who are asymptomatic and able to tolerate PO or PT meds.
- ** Elemental magnesium (supplied as magnesium oxide) or Milk of Magnesia may be initiated; however, diarrhea may be a limiting factor. Separate order must be entered into Wiz/HEO for oral replacement.

Approved: _____ Dr. Addison K. May, MD, FACS, FCCM
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Phosphorus Replacement

SURGICAL CRITICAL CARE
Electrolyte Replacement Practice Management Guideline

EXCLUSIONS: Patients on hemodialysis/peritoneal dialysis, creatinine clearance <20, have active transfer orders out of the SICU

**** always look at phosphorus level to determine appropriate potassium product ****

<u>Product</u>	<u>Phosphate</u>	<u>Potassium</u>	<u>Sodium</u>
K-Phos Neutral Tablet	250 mg (8 mmol)	1.1 meq	13 meq
K Phos Injection (per mL)	3 mmol	4.4 meq	
Na Phos Injection (per mL)	3 mmol		4 meq

<u>Serum Phos</u>	<u>Replace With</u>	<u>Repeat Level</u>	<u>meq K if K Phos</u>
2-2.5 mg/dL	20 mmol KPhos or NaPhos -or- K-Phos Neutral 2 tabs PO/PT q4h x 3	with next AM labs	~30 meq (~7 meq/hr based on 4h infusion)
1.6-1.9 mg/dL	30 mmol KPhos or NaPhos -or- K-Phos Neutral 2 tabs PO/PT q4h x 4	with next AM labs	~44 meq (~11 meq/hr based on 4h infusion)
<1.6 mg/dL	40 mmol KPhos or NaPhos	6h after replacement	~60 meq (~15 meq/hr based on 4h infusion)

- Pharmacy will no longer accept verbal phosphorus replacement orders. ALL orders must be entered into Wiz/HEO.
- Always look at potassium level to determine appropriate IV phosphorus product: use **K Phos if K < 4.0** and **Na Phos if K ≥ 4.0**.
- For IV replacement: Pharmacy will dilute in 250mL NS or D5W. Infuse over 4-6 hours.
- For PO/PT replacement: Neutra-Phos / Neutra-Phos K packets are no longer manufactured. K-Phos Neutral tablet is the formulary alternative.

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 December 2013

Calcium Replacement

SURGICAL CRITICAL CARE Electrolyte Replacement Practice Management Guideline

**EXCLUSIONS: Patients on hemodialysis/peritoneal dialysis,
creatinine clearance <20, have active transfer orders out of the SICU**

Calcium replacement based upon ICa^{++} levels		
Ionized Calcium	Replace With	Recheck Level
3.5-3.9 mg/dL	4g CaGluconate	With next AM Labs
3.0-3.4 mg/dL	6g CaGluconate	4 Hours After Replacement
2.5-2.9 mg/dL	8g CaGluconate	4 Hours After Replacement
< 2.5 mg/dL	10 g CaGluconate NHO	4 Hours After Replacement
Infuse 2gm per hour		

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December 2013

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