

Hyperkalemia [1248]

The urgency of treatment of hyperkalemia varies with the presence or absence of the symptoms and signs associated with hyperkalemia, the severity of the potassium elevation, and the cause of hyperkalemia.

Order set suggested for use in patients

- With potassium level GREATER than or EQUAL to 6 mEq/L and/or
- Cardiac conduction abnormalities or arrhythmias

General

Nursing

IV

Cardiology

EKG

<input checked="" type="checkbox"/> ECG 12 lead	STAT, Once Clinical Indications: Other: Other: For Hyperkalemia Interpreting Physician:
<input checked="" type="checkbox"/> ECG 12 lead	Routine, Once For 1 Occurrences Clinical Indications: Other: Other: For Hyperkalemia Interpreting Physician: Repeat in one hour after initial STAT EKG
<input checked="" type="checkbox"/> Telemetry	"And" Linked Panel
<input checked="" type="checkbox"/> Telemetry monitoring	Routine, Continuous Order: Place in Centralized Telemetry Monitor: EKG Monitoring Only (Telemetry Box) Reason for telemetry: Electrolyte abnormality Can be off of Telemetry for tests and baths? Yes
<input checked="" type="checkbox"/> Telemetry Additional Setup Information	Routine, Continuous High Heart Rate (BPM): 120 Low Heart Rate(BPM): 50 High PVC's (per minute): 10 High SBP(mmHg): 175 Low SBP(mmHg): 100 High DBP(mmHg): 95 Low DBP(mmHg): 40 Low Mean BP: 60 High Mean BP: 120 Low SPO2(%): 94

EKG

<input checked="" type="checkbox"/> ECG 12 lead	STAT, Once Clinical Indications: Other: Other: For Hyperkalemia Interpreting Physician:
<input checked="" type="checkbox"/> ECG 12 lead	Routine, Once For 1 Occurrences Clinical Indications: Other: Other: For Hyperkalemia Interpreting Physician: Repeat in one hour after initial STAT EKG
<input checked="" type="checkbox"/> ED bedside monitoring	STAT, Continuous For Until specified

Medications

furosemide (LASIX) injection

<input type="checkbox"/> furosemide (LASIX) injection	intravenous, once, For 1 Doses
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If EKG changes are present, give intravenous calcium gluconate or calcium chloride (Single Response)

() Peripheral, Midline or Central Line (Single Response)

- | | |
|--|---|
| <input type="checkbox"/> IVPB - calcium gluconate - ONCE STAT Administer over 30 minutes | 1 g, intravenous, for 30 Minutes, once, For 1 Doses
May repeat x 1 dose after 5 minutes if ECG changes persists.
If a repeat dose is required a new order is needed. |
| <input type="checkbox"/> calcium gluconate injection - IV Push over 2-3 minutes | 1 g, intravenous, once, For 1 Doses
Administer IV Push over 2-3 minutes. May repeat x 1 dose after 5 minutes if ECG changes persists. '
If a repeat dose is required a new order is needed. |

() Central Line ONLY (Single Response)

- | | |
|---|--|
| <input type="checkbox"/> IVPB - calcium chloride 10 % - ONCE STAT Administer over 30-60 minutes | 1 g, intravenous, for 60 Minutes, once, For 1 Doses
Administer IVPB over 30-60 minutes ONCE STAT. May repeat X 1 dose after 5 minutes if ECG changes persists.
If a repeat dose is required a new order is needed. |
| <input type="checkbox"/> IV Push - calcium chloride 100 mg/mL (10 %) injection -ONCE STAT Administer over 2-3 minutes | 1 g, intravenous, once, For 1 Doses
Administer IV Push over 2-3 minutes ONCE STAT. May repeat X 1 dose after 5 minutes if ECG changes persists.
If a repeat dose is required a new order is needed. |

If acidosis is present,

- | | |
|---|--|
| <input type="checkbox"/> sodium bicarbonate 50 mEq/ 50 mL IV syringe | 50 mEq, intravenous, for 5 Minutes, once, For 1 Doses |
| <input type="checkbox"/> sodium bicarbonate 50 mEq/ 50 mL IVPB | 50 mEq, intravenous, for 15 Minutes, once, For 1 Doses |
| <input type="checkbox"/> sodium bicarbonate 75 mEq in 1/2NS 1000 mL | 100 mL/hr, intravenous, continuous |
| <input type="checkbox"/> sodium bicarbonate 150 mEq in sterile water 1,000 mL | 100 mL/hr, intravenous, continuous |

Dextrose and Regular Insulin (Single Response)

() If eGFR/CrCl GREATER than 20 mL/min:

- | | |
|--|---|
| <input type="checkbox"/> POC Glucose STAT (Single Response) | |
| <input type="checkbox"/> Bedside glucose | STAT, Once |
| <input type="checkbox"/> If eGFR/CrCl GREATER than 20 mL/min - Dextrose 50% (D50) Followed By Insulin regular (HUMULIN) for Hyperkalemia Treatment (HMH HMSL ONLY) | "Followed by" Linked Panel |
| <input type="checkbox"/> dextrose 50% solution | 0-25 g, intravenous, once, For 1 Doses
For HYPERKALEMIA treatment: Give PRIOR to administration of insulin:

POC Glucose LESS than 70 mg/dL: DO NOT give insulin. Implement the Adult HYPOglycemia Standing Orders, STAT and notify provider.
POC Glucose BETWEEN 71 - 300 mg/dL: Give Dextrose 50% 25 g. Document on MAR a discrete dose of 25 g was administered.
POC Glucose GREATER than 300 mg/dL: OMIT Dextrose 50%. Document on MAR that 0 g was administered. |
| <input type="checkbox"/> insulin regular (HumuLIN-R, NovoLIN-R) injection | 5-10 Units, intravenous, once, For 1 Doses
For HYPERKALEMIA treatment: Give 5 OR 10 units AFTER dextrose 50% is administered, based on POC Glucose value..

POC Glucose LESS than 70 mg/dL: DO NOT give insulin. Implement the Adult HYPOglycemia Standing Orders, STAT and notify provider.

For Non-ESRD Patients:
POC Glucose BETWEEN 70-140 mg/dL: Give 5 units insulin regular. Document on MAR a discrete dose of 5 units was administered.
POC Glucose GREATER than 141 mg/dL: Give 10 units insulin regular. Document on MAR a discrete dose of 10 units was administered. |
| <input type="checkbox"/> If eGFR/CrCl GREATER than 20 mL/min - Dextrose 50% (D50) Followed By Insulin regular (HUMULIN) for Hyperkalemia Treatment (NOT HMH HMSL) | "Followed by" Linked Panel |

<input type="checkbox"/> dextrose 50% solution	<p>0-25 g, intravenous, once, For 1 Doses For HYPERKALEMIA treatment: Give PRIOR to administration of insulin:</p> <p>POC Glucose LESS than 70 mg/dL: DO NOT give insulin. Implement the Adult HYPOglycemia Standing Orders, STAT and notify provider. POC Glucose BETWEEN 71 - 300 mg/dL: Give Dextrose 50% 25 g. Document on MAR a discrete dose of 25 g was administered. POC Glucose GREATER than 300 mg/dL: OMIT Dextrose 50%. Document on MAR that 0 g was administered.</p>
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<input type="checkbox"/> POC Glucose Post Insulin Administration (Single Response)	
<input type="checkbox"/> Bedside glucose	<p>Routine, Once Point of Care (POC) glucose every 20 minutes after insulin given x 3. Or If patient is diabetic or NPO, POC glucose every 20 minutes x 3, then hourly x 3</p>
<input type="checkbox"/> Adult Hypoglycemia Standing Orders (Selection Required)	

[] HYPOglycemia management - Monitor patient for signs and symptoms of HYPOglycemia and follow standing orders

Routine, Per unit protocol
HYPOglycemia is defined as glucose LESS than 70 mg/dL

If INITIAL bedside glucose is LESS than or equal to 40 mg/dL:
Send serum glucose level STAT.
Initiate treatment immediately after lab draw. DO NOT delay treatment waiting for lab result.
If patient has IV access, give 50% Dextrose, 25gm, (50 mL) intravenous push, ONCE.
If patient does not have IV access, give Glucagon 1mg intramuscularly ONCE.
Notify provider of hypoglycemia and treatment given. DO NOT give further insulin or any oral HYPOglycemia agent until ordered by a prescriber.
Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg/dL.

If INITIAL bedside glucose is between 41-69 mg/dL:
Give 4oz (120mL) of juice, if patient is able to swallow and is NOT NPO.
If patient is NPO or unable to swallow, DO NOT give juice.
If patient has IV access give 50% Dextrose, 12.5gm, (25 ml) IV push, ONCE.
If patient NPO or unable to safely swallow and without IV access, give Glucagon 1mg intramuscularly ONCE.
Notify provider of hypoglycemia and treatment given.
DO NOT give further insulin or any oral HYPOglycemic agent until ordered by a prescriber.
Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg/dL

If SECOND bedside glucose is LESS than 70 mg/dL:
Send serum glucose level STAT.
Initiate treatment immediately after lab draw. DO NOT delay treatment waiting for lab result.
If patient has IV access, give 50% Dextrose, 25gm, (50 mL) intravenous push, ONCE.
If patient does NOT have IV access, give Glucagon 1mg intramuscularly ONCE.
Notify provider of hypoglycemia and treatment given.
Recheck bedside glucose every 20 minutes after treatment is given until glucose is GREATER than 100 mg/dL.

If SECOND bedside glucose is between 70-100 mg/dL:
Notify provider of hypoglycemia.
Recheck bedside glucose every 20 minutes until glucose is GREATER than 100 mg/dL.

If THIRD bedside glucose is LESS than 70 mg/dL:
Initiate IV therapy to run 10% dextrose infusion (500ml) at 40 ml/hr.
Notify Provider. Consider transferring patient to ICU.
Check bedside glucose every 1 hour while on 10% dextrose infusion.
Titrate infusion by 10 ml/hr to keep glucose between 100 and 140 mg/dL.
Notify provider when ANY / ALL of the following occur:
o 10% dextrose infusion is started
o If glucose is LESS than 70 mg/dL while on 10% dextrose infusion
o When 10% dextrose infusion rate is increased to GREATER than 100 ml/hr

If THIRD bedside glucose is between 70-100 mg/dL:
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Recheck bedside glucose every 20 minutes until glucose is GREATER than 100 mg/dL.

[] dextrose 50% intravenous syringe	12.5 g, intravenous, every 20 min PRN, low blood sugar, If blood glucose is between 41-69 mg/dL, For 2 Doses Give ½ cup juice if patient is able or 50% dextrose 12.5 g (25 mL) IV push ONCE. Contact the provider and recheck blood glucose in 20 minutes. DO NOT give further insulin until ordered by a provider
[] dextrose 50% intravenous syringe	25 g, intravenous, every 20 min PRN, low blood sugar, If blood glucose is 40 mg/dL or LESS, For 2 Doses Give 50% dextrose 25 g (50 mL) IV push ONCE, contact the provider and recheck in 20 minutes. DO NOT give further insulin until ordered by a provider
[] glucagon injection	1 mg, intramuscular, every 15 min PRN, low blood sugar, if patient NPO, unable to swallow safely with no IV access. If glucose remains LESS than 70 mg/dL, after 2 doses of D50 or Glucagon, send serum glucose level STAT. Initiate treatment immediately after lab drawn. Do NOT delay treatment waiting for lab result. Recheck blood sugar every 20 min until greater than 100 mg/dL. Notify Provider.
[] dextrose 10 % infusion	40 mL/hr, intravenous, continuous PRN, other, For bedside glucose LESS than 70 mg/dL Notify Provider, consider transfer to ICU. Check Glucose every hour while on D10 infusion. Titrate infusion by 10 mL per hour to keep glucose between 100 and 140 mg/dL. Notify provider when ANY/ALL of the following occur: -Dextrose 10% infusion is started -If glucose is less than 70 mg/dL while on dextrose 10% infusion -When dextrose 10% infusion rate is increased to greater than 100 mL/hr

() If ESRD or on Dialysis or eGFR/CrCl LESS than 20 mL/min:

[] POC Glucose STAT (Single Response)	
() Bedside glucose	STAT, Once
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[] insulin regular (HumuLIN-R, NovoLIN-R) injection	5 Units, intravenous, once, For 1 Doses For HYPERKALEMIA treatment: Give AFTER dextrose 50% is administered. POC Glucose LESS than 70 mg/dL: DO NOT give insulin. Implement the Adult HYPOglycemia Standing Orders, STAT and notify provider. For ESRD Patients: POC Glucose GREATER than 70 mg/dL: Give 5 units insulin regular
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[] POC Glucose Post Insulin Administration (Single Response)	<p>Routine, Once Point of Care (POC) glucose every 20 minutes after insulin given x 3. Or If patient is diabetic or NPO, POC glucose every 20 minutes x 3, then hourly x 3</p>
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Other Medications

<input type="checkbox"/> albuterol sulfate (PROVENTIL) nebulizer solution	10 mg, nebulization, once, For 1 Doses Administer over 10 minutes. Consider other options if patient heart rate is GREATER than 120 beats per minute or if patient has history of coronary artery disease (CAD) or myocardial infarction (MI).
<input type="checkbox"/> sodium polystyrene sulfonate (KAYEXALATE) suspension	30 g, oral, once, For 1 Doses DO NOT GIVE for acute abdominal pain or abdominal issues. DO NOT GIVE if patient is going to dialysis in the next 2 hours.
<input type="checkbox"/> sodium zirconium cyclosilicate (LOKELMA) packet	10 g, oral, once, For 1 Doses

VTE

Labs

Labs

Recheck one hour after intervention

<input type="checkbox"/> Basic metabolic panel	STAT For 1 Occurrences Draw lab one hour after administration of ordered medications for treatment of HYPERkalemia.
<input type="checkbox"/> Potassium	STAT For 1 Occurrences Draw lab one hour after administration of ordered medications for treatment of HYPERkalemia.

Notify

Notify Physician for Potassium Level

<input checked="" type="checkbox"/> Notify Physician for Potassium Level	Routine, Until discontinued, Starting S, Notify physician at phone number: *** for potassium level GREATER than ***
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Diagnostic Imaging

Other Diagnostic Studies

Respiratory

Rehab

Consults