Emergency Management of Hyperkalaemia in Adults

Hyperkalaemia (K⁺ ≥ 5.5 mmol/L)
Consider initiating treatment if Hyperkalaemia suspected and K⁺ unknown

Airway Breathing Circulation Disability Exposure (ABCDE) Approach
Seek expert help if airway, breathing or circulation compromised

Perform 12-lead ECG

MILD
K⁺ 5.5 - 5.9 mmol/L
Consider cause and if treatment indicated

Moderate
K⁺ 6.0 - 6.4 mmol/L
Treatment guided by clinical scenario, ECG and rate of rise

Severe
K⁺ ≥ 6.5 mmol/L
Emergency treatment indicated

Monitor ECG in high dependency area
Sick patient; K⁺ ≥ 6.5 mmol/L; Acute ECG changes present

Acute ECG changes present (tick if present)?
- Peaked T waves
- Absent or flattened P waves
- Broad QRS
- Sine wave
- Bradycardia
- VT

Calcium Chloride OR Calcium Gluconate IV
Repeat ECG and consider further dose after 5 min if ECG changes persists

Insulin–Glucose IV Infusion
Give in severe hyperkalaemia
Consider in moderate hyperkalaemia (assess ECG and rate of rise)

Salbutamol 10-20 mg Nebulised
Give in severe hyperkalaemia
Consider in moderate hyperkalaemia (assess ECG and rate of rise)

Consider Calcium Resonium
15 g x4/day oral or 30 g x2/day PR

Consider Dialysis
Seek advice from Renal or ICU team; patient transfer may be required

Monitor serum K⁺ and blood glucose
Consider cause of hyperkalaemia, prevent further rise and recurrence

K⁺: potassium; Na⁺: sodium; Creat: creatinine; IV: intravenous; min: minutes; PR: per rectum; EWS: early warning score; IHD: Ischaemic Heart Disease; NSAIDS: non-steroidal anti-inflammatory drugs

First 15-30 min

Date: __/__/___ Time: ___:___

Na⁺: _____ O₂ Sat: ____ %
K⁺: _____ RR: ______
Urea: ____ BP: _____/
Creat: _____ Pulse: ____
Time: ____ EWS: ______

Check K⁺
Send lithium-heparin sample to lab
Use blood gas analyser if available
Exclude pseudo-hyperkalaemia

Dialysis patient: Contact Renal Unit
Cardiac monitoring: YES/ NO
Call for senior help: YES/ NO
Renal or ICU referral: YES/ NO

IV Calcium (6.8 mmol)
10 ml 10% Calcium Chloride IV OR
30 ml 10% Calcium Gluconate IV
Use large vein
Give over 5-10 min

Next 30-60 min

Glucose (25 g) over 15 min
50 ml 50% Glucose OR
125 ml 20% Glucose,
WITH Soluble Insulin – 10 units
Salbutamol
Give 10 mg if history of IHD
Avoid if tachyarrhythmia present

Blood Monitoring:
Baseline Glucose ___ K⁺ ___
15 min Glucose ___
30 min Glucose ___
60 min Glucose ___ K⁺ ___

After 1st hour

Blood Monitoring:
90 min Glucose ___ K⁺ ___
120 min Glucose ___ K⁺ ___
180 min Glucose ___
240 min Glucose ___ K⁺ ___
360 min Glucose ___ K⁺ ___
24 hours K⁺ ___

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