

# Emergency Management of Hyperkalaemia in Adults

- Assess using ABCDE approach
- 12-lead ECG and monitor cardiac rhythm if serum potassium (K+) ≥ 6.0 mmol/l
- Exclude pseudohyperkalaemia
- Give empirical treatment for arrhythmia if hyperkalaemia suspected

**MILD**  
K<sup>+</sup> 5.5 - 5.9 mmol/L  
Consider cause and need for treatment

**MODERATE**  
K<sup>+</sup> 6.0 - 6.4 mmol/L  
Treatment guided by clinical condition, ECG and rate of rise

**SEVERE** ⚠️  
K<sup>+</sup> ≥ 6.5 mmol/L  
Emergency treatment indicated

**ECG Changes?**  
Peaked T waves      Broad QRS      Bradycardia  
Flat/ absent P waves      Sine wave      VT

NO

Seek expert help

**YES**  
Calcium Chloride OR  
Calcium Gluconate IV  
(6.8 mmol)

Protect the Heart

Shift K<sup>+</sup> into cells

**Insulin–Glucose IV Infusion**  
Give 10 units soluble insulin in 25 g glucose over 15-30 min  
(see Glucose regimen table)

**REDUCE THE RISK OF HYPOGLYCAEMIA**  
If pre-treatment blood glucose < 7.0mmol/l,  
follow with glucose infusion:  
10% glucose @ 50ml/hr for 5 hrs (25g)

Consider ↓  
**Salbutamol 10 – 20 mg Nebulised**

Remove K<sup>+</sup> from body

Consider ↓  
**Calcium resonium**  
15g tds orally OR  
30g bd per rectum

Life-threatening hyperkalaemia ↓  
**Sodium zirconium cyclosilicate**  
10g tds for 72 hrs  
OR  
Patiromer 8.4g once daily

**Consider Dialysis**  
Seek expert help ⚠️

Monitor K<sup>+</sup> and Glucose

**Monitor serum K<sup>+</sup> and blood glucose**

Prevention

**Consider cause and prevent further rise or recurrence**

K<sup>+</sup> ≥ 6.5 mmol/l despite medical therapy

Date: \_\_\_/\_\_\_/\_\_\_ Time \_\_\_:\_\_\_

**First 15-30 minutes**

Na <sup>+</sup> : _____	pH: _____
K <sup>+</sup> : _____	pCO <sub>2</sub> : _____
Urea: _____	pO <sub>2</sub> : _____
Creat: _____	Bicarb: _____

Use ABG machine to monitor K<sup>+</sup>

**IV Calcium (6.8 mmol)**  
10 ml 10% Calcium Chloride IV OR  
30 ml 10% Calcium Gluconate IV  
Use large IV access and give over 5 min  
Repeat ECG  
Consider further dose after 5 min if ECG changes

**Next 30-60 minutes**

**GLUCOSE REGIMEN (25g glucose)**  
= 50ml 50% glucose  
= 125ml 20% glucose  
= 250ml 10% glucose

**Blood Monitoring:**

	Glucose	K <sup>+</sup>
<b>Baseline</b>	_____	_____
30 min	_____	_____
60 min	_____	_____
90 min	_____	_____
120 min	_____	_____
180 min	_____	_____
240 min	_____	_____
300 min	_____	_____
360 min	_____	_____
480 min	_____	_____
720 min	_____	_____

K<sup>+</sup>: potassium; Na<sup>+</sup>: sodium; Creat: creatinine; Bicarb: bicarbonate; max - maximum