





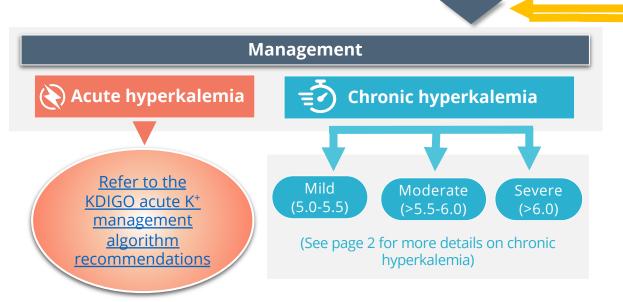




# To define whether patient is in:

Acute hyperkalemia^ Chronic hyperkalemia\* Pseudo-hyperkalemia<sup>+</sup>

eGFR and bicarbonate should also be closely monitored in all hyperkalemia situations





## Pseudo-hyperkalemia

- Pseudo-hyperkalemia is typically defined as a difference of >0.3-0.4 mmol/L between serum and plasma K+.
- Serum K<sup>+</sup> measurement should be immediately repeated.
  Ensure blood is sampled appropriately/or eventually taken
  - as arterial sample.
- In case of hemolysis, to consider whether this occurred In the sample or in the body.
- ^**Acute hyperkalemia** is defined where a potassium concentration above the upper limit of normal, is not known to be explained by a chronic cause.
- \*Chronic hyperkalemia is defined where a potassium concentration above the upper limit of normal, is likely to be explained by a chronic cause (e.g. chronic kidney disease, heart failure, induced by regular medication/supplements), and K+ > 5.0mmol/L from repetitive measurements over a 3 month period.
- **+Pseudo-hyperkalemia** is defined where there is a falsely elevated serum potassium concentration, which can occur due to mechanical trauma, prolonged tourniquet use (>1 minute) or fist clenching during the process of blood drawing, and through blood clotting, centrifugation, elevated white blood cell count, or thrombocytosis.

Mild (5.0-5.5)

**Moderate (>5.5-6.0)** 

**Severe (>6.0)** 

### Important measures to manage hyperkalemia

- Review K<sup>+</sup> inducing medications and eliminate K<sup>+</sup> supplements.
- See information on <u>dietary</u> <u>approaches to hyperkalemia in</u> <u>this tool.</u>
- Review K+ inducing medications and eliminate K+ supplements.
- See more information on <u>dietary approaches to hyperkalemia in this tool</u>.
- Consider loop diuretics if not prescribed for patients with volume overload, increase loop diuretic dose if already previously prescribed
- Correct acidosis if present.

#### **RAASi-specific management**

- If on RAASi, aim to maintain RAASi dose and monitor K<sup>+</sup> levels.
- Do not start RAASi if not already prescribed when serum K<sup>+</sup>
  >5.0mmol/L.
- If indication is for heart failure, consider switch to ARNi from RAASi if available.

- Consider K<sup>+</sup> binder initiation if available to avoid dose reduction.
- If on RAASi, and K<sup>+</sup> binder not available, reduce RAASi dose and monitor K<sup>+</sup> levels.
- Need to reduce K+ to <5.0.
- Withhold RAASi and evaluate eGFR, bicarbonate and K<sup>+</sup> to determine whether RAASi could be restarted.
- Consider K<sup>+</sup> binder initiation if available to facilitate RAASi reinitiation.

#### Additional management in a specific case-to-case basis

• To consider the prescription of SGLT2 inhibitors for patients with eGFR > 25 mL/min/1.73m<sup>2</sup>

**ARNi:** Angiotensin receptor II blocker-neprilysin inhibitor; **ECG:** Electrocardiogram; **eGFR:** Estimated Glomerular Filtration Rate; **K\*:** Potassium; **KDIGO:** Kidney Disease Improving Global Outcomes; **MRA:** Mineralocorticoid Receptor Antagonists; **RAASi:** Renin-angiotensin-aldosterone system inhibitors; **SGLT2:** Sodium-glucose Cotransporter-2