To define whether patient is in:
Acute hyperkalemia^
Chronic hyperkalemia*
Pseudo-hyperkalemia+

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

Management

Acute hyperkalemia

Refer to the KDIGO acute K+ management algorithm recommendations

Chronic hyperkalemia

- Mild (5.0-5.5)
- Moderate (>5.5-6.0)
- Severe (>6.0)

(See page 2 for more details on chronic hyperkalemia)

Pseudo-hyperkalemia

- Pseudo-hyperkalemia is typically defined as a difference of >0.3-0.4 mmol/L between serum and plasma K+.
- Serum K+ 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.

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Chronic hyperkalemia Management

Mild (5.0-5.5)

Important measures to manage hyperkalemia

- Review K^+ inducing medications and eliminate K^+ supplements.
- See information on dietary approaches to hyperkalemia in this tool.

RAASi-specific management

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

Moderate (>5.5-6.0)

Important measures to manage hyperkalemia

- Review K^+ inducing medications and eliminate K^+ supplements.
- See more information on dietary approaches to hyperkalemia in this tool.
- 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

- Consider K^+ binder initiation if available to avoid dose reduction.
- If on RAASi, and K^+ binder not available, reduce RAASi dose and monitor K^+ levels.

Severe (>6.0)

RAASi-specific management

- Need to reduce K^+ to <5.0.
- Withhold RAASi and evaluate eGFR, bicarbonate and K^+ to determine whether RAASi could be restarted.
- Consider K^+ 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^2

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

For funding and support information, see: https://www.theisn.org/initiatives/toolkits/raasi-toolkit/#Support