

## Hyperkalaemia

1. Respiratory acidosis =  $\text{PCO}_2 \uparrow$  and sometime  $[\text{HCO}_3^-]$  is high. Could be also due to **Chronic Lung Disease** or **Neuromuscular Defect**.
2. Rule out errors (**Pre-analytical**). E.g. delayed separation,  $\uparrow$  WBC,  $\uparrow$  Plts and  $\uparrow$  RBC.
3.  $\uparrow$   $\text{K}^+$  load or intake e.g. eating bananas (**Orally**).
4. Hypoaldosteronism (**Addison's disease**) and blockage of aldosterone.
5.  $\downarrow$  Renal  $\text{K}^+$  excretion e.g.  $\downarrow$  **GFR or type IV RTA**.
6. Cell lysis or **ACE**.
7.  $\downarrow$  Cortisol (have some mineralocorticoid effect).
8. *In-vivo* haemolysis or Rhabdomyolysis (muscle cell lysis) in case of  $\downarrow$   $\text{O}_2$ .
9. Trauma.
10. End stage renal failure (**Creatinine > urea in body**).
11.  $\text{Na}^+$ - $\text{K}^+$  pump failure.
12. Metabolic acidosis ( $\downarrow$   $\text{TCO}_2$ ) /Normal anion gap;  $\uparrow$   $\text{K}^+$  **IV type RTA**.
13. Drugs: **spironolactone**.
14. Renin-angiotensin system blockage.
15.  $\downarrow$  insulin/hyperglycemia.
16. **Digitalis therapy**.