# HYPOKALAEMIA

K + < 3.5

### IMPORTANCE

- Potassium (K=+) is essential in normal electrical activity of the heart.
- Low K+ results in Hyperexcitability of the myocardium.
- Hyper-excitability can develop into re-entry arrhythmias.
- latrogenic and GI disease most common causes

## DIAGNOSIS

<u>Mild</u> - Often asymptomatic <u>Moderate</u> - Muscle weakness, hypotonia, hyporeflexia, cramps, palpitations, light-headedness, constipation <u>Severe</u> - Palpitations, reduced peripheral sensation, arrhythmias

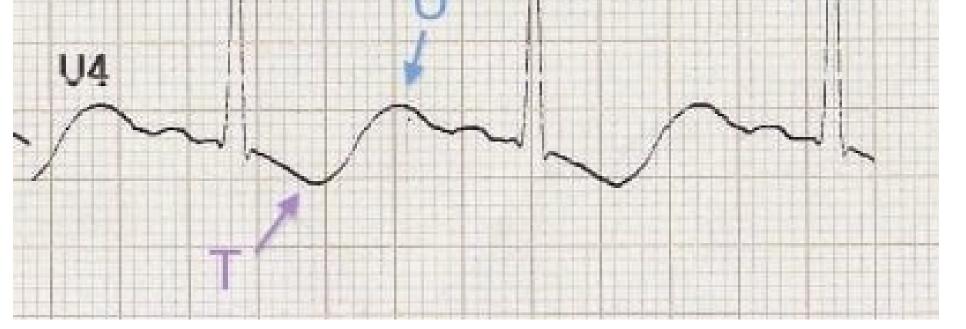
#### **USEFUL TIPS**

- Hypokalaemia is often present with Hypomagnesia

- Suspect Conn's syndrome if also hypertensive and not on a diuretic

- Hypokalaemia exacerbates digoxin toxicity

# ECG CHANGES



# MANAGEMENTMILD 3-3.5MODERATE 2.5-3

If Asymptomatic;

- Intervention required?
- if yes, Sando-K (2 tabs 8hrly) until >4.0 mmol/L
- Monitor K+ twice weekly
- Perform ECG
- Repeat bloods
- Consider stopping medicinal cause
- Sando-K (3 tabs 8hrly) until
- >3mmol/L then reduce to 2 tabs
- Monitor K+ daily

- Small/inverted T-waves
- Prominent U-waves
- Peaked P-waves
- VT/VF
- Long QT
- Torsades de pointes

### SEVERE <2.6

Non-acute situation

- ECG monitoring
- Iv supplementation with 20-

40mmol K+ in 1L saline (do not exceed rate of 10mmol/hr)

Life threatening arrhythmia

- K+ 20mmol over 10mins
- Mg2+ 10mmol/hr over 10mins

References - Life in the fasr lane (litfl.com/hypokalaemia), GGC Medicines Handbook (hypokalaemia), GP Notebook (https://gpnotebook.com)