



QUESTION FOR DAY 3 POLLING COMPETITION

1. A 15 years old boy who is an active player, feels tired after his foot-ball practice. He suddenly paralysed and his friends bring him to the emergency room. Blood gas shows potassium of 2.1mEq/L and you are suspecting hypokalemic paralysis as he had mild weakness following exercise on and off from his starting of teens. The most common defect for the underlying problem is
- a) Mutations in the CACNA1S voltage-gated calcium
 - b) defect in Kir2.1 channels for terminal repolarization
 - c) mutation of the voltage-gated sodium-channel SCN4A gene
 - d) Licorice ingestion prior to play

Ans: a (30 sec)

2. Correction of concurrent deficiency should be done while treating hypokalemia.
- a) Calcium
 - b) Magnesium
 - c) Sodium
 - d) Bicarbonate

Ans: b (20 sec)

3. The mechanism of action of which of these anti hyperkalemic drugs is NOT intracellular transfer of potassium:
- a) Salbutamol nebulization
 - b) Glucose insulin drip
 - c) Calcium gluconate
 - d) Sodium bicarbonate

Ans C (20 sec)

4. The dose of hydrocortisone for a child aged 2 years (weighing 10 kg) with acute adrenal insufficiency and severe hyperkalemia is:
- a) 10 mg
 - b) 20 mg
 - c) 25 mg
 - d) 50 mg

Ans C (20 sec)

5. A child with refractory hyperkalemia had estimation of plasma renin activity (elevated) and serum aldosterone concentration (elevated). The likely diagnosis is:

- a) Congenital adrenal hyperplasia
- b) Hypoaldosteronism
- c) Pseudohypoaldosteronism
- d) Intrinsic renal disease

Ans c (20 sec)

6. Magnesium levels in body is maintained at a constant level as a function of

- a) intestinal absorption and renal excretion
- b) renal absorption and intestinal excretion
- c) renal absorption and renal excretion
- d) intestinal absorption and intestinal excretion

Ans a (20 sec)

7. Renal magnesium transportation occurs primarily via

- a) $3\text{Na}/2\text{K}$ -ATPase in proximal convoluted tubule
- b) NKCC2 channel in TAL in loop of henle
- c) paracellular shunt pathway in TAL
- d) NCC channel in DCT

Ans d (20 sec)

8. Drugs which cause hypokalemia?

- a) Amphotericin B
- b) Spironolactone
- c) Angiotensin converting enzyme inhibitors
- d) None of the above

Ans: a (20 sec)

9. Hypokalemia associated with hypertension

- a) Bartter syndrome
- b) Gitelman syndrome
- c) Liddle syndrome
- d) None of the above

Ans: c (20 sec)

10. Identify the wrong statement?

- a) Potassium in peripheral line 40mEq/L
- b) Peripheral line potassium correction – 0.2 – 0.5mEq/kg (Maximum 40 mEq/hour)
- c) Each 1ml of Injection KCl contains 2mEq
- d) Prominent U wave in ECG is a feature of Hypokalemia

Ans: b (30 sec)