

HYPERKALEMIA

Hyperkalemia = EKG. EKG Changes = Calcium

Causes of Hyperkalemia

- Drawing blood too forcefully, causes cells to break open and potassium level rises artificially= pseudo-hyperkalemia
- Damaged cells in the body, Ex: muscle breakdown during marathon or crush injuries
- Kidney disease: Missed dialysis, acute urinary obstruction, organ failure → Shock.

Approach to Hyperkalemia

• Check a potassium level and it is elevated (~6.5)- 5 steps:

- 1) **Recheck the potassium**- Most common cause is pseudo-hyperkalemia, so recheck while going on to step 2
- 2) **Get an EKG**: Any EKG changes need to be treated immediately. Earliest sign is peaked T waves → P-wave flattening → QRS lengthening → Sine wave → Death
- 3) **Protect the heart** with calcium: Usually 1 amp of calcium chloride (can be hard on veins) can use calcium gluconate if you have time
- 4) **Push potassium** back into the cells: can give Insulin and D50 together, Albuterol to shift potassium into cells
- 5) **Remove potassium** from the body: can give Kayexalate (make pt remove excess potassium in stool), can give diuretics, definitive treatment is dialysis

References

Petrino R, Marino R. Fluids and Electrolytes. In: Tintinalli JE, Stapczynski J, Ma O, Yealy DM, Meckler GD, Cline DM. eds. Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8e. New York, NY: McGraw-Hill; 2016. <http://accessemergencymedicine.mhmedical.com/content.aspx?bookid=1658&Sectionid=109385225>. Accessed December 01, 2016.