Eagles 2019
Hyperkalemia
ECG Changes You Should Know

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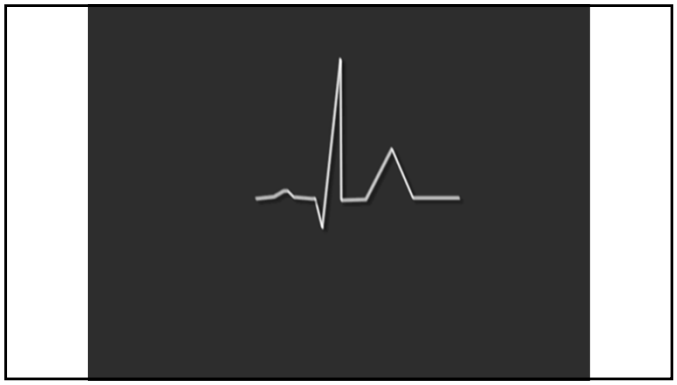
Hyperkalemia is the Most Dangerous Acute Electrolyte Emergency

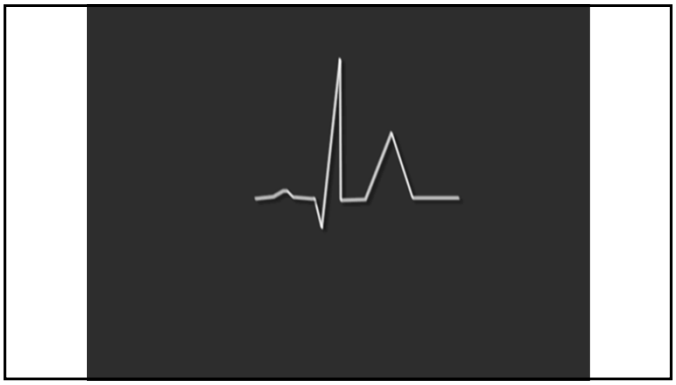
HyperK = ECG

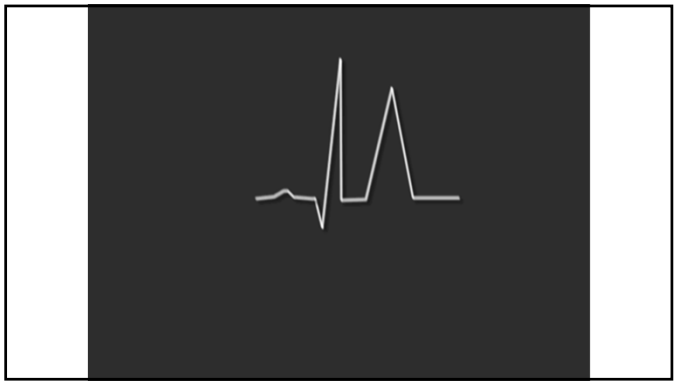
ECG Changes	Serum Level
Tall Peaked T	5.5 - 6.5
Loss of P Wave	6.5 - 7.5
Widened QRS	usually > 8

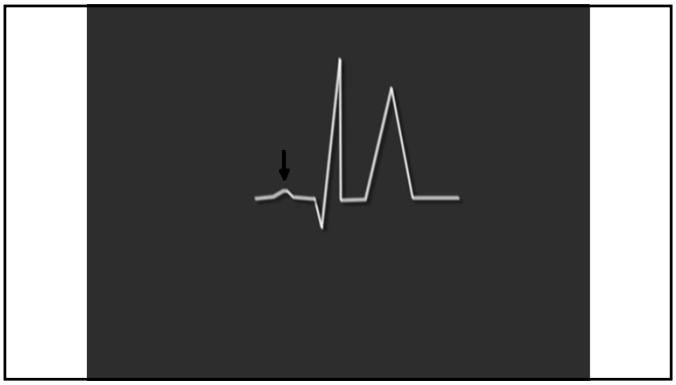
What are the 5 ECG Changes Seen in Hyperkalemia

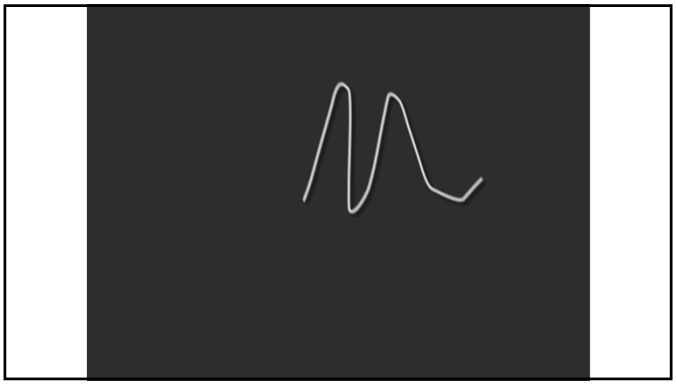
- **Tall Peaked T-Waves**
- Prolonged P-R Interval
- **Loss of P Wave**
- **Widening of QRS**
- Sine Wave

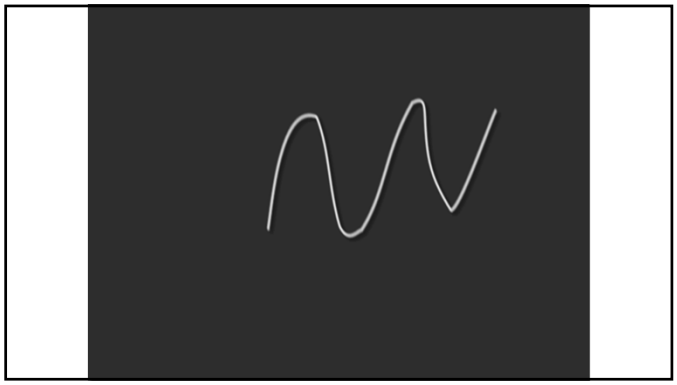


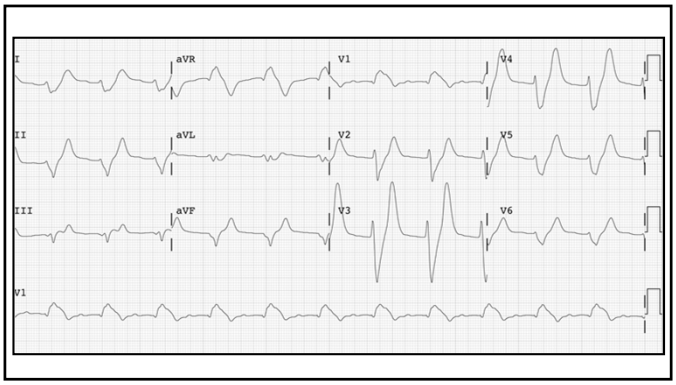


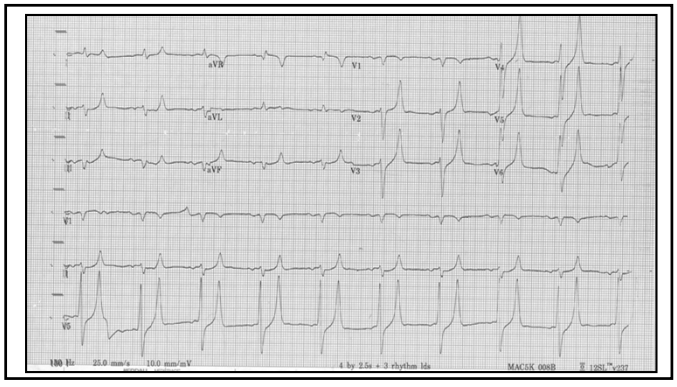









I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
V1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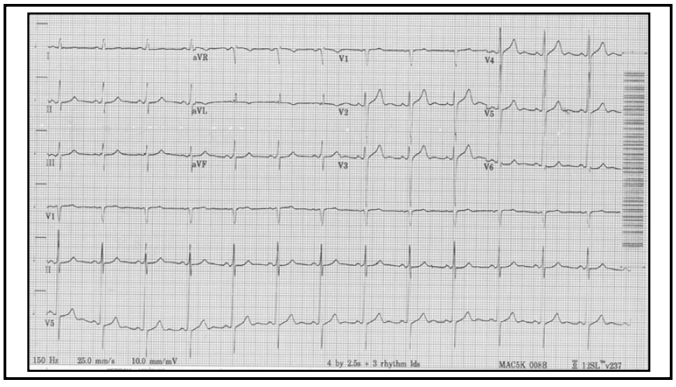
V1
V4
aVL
V2
V5
aVF
V3
V6
V1
II
V5
150 Hz 25.0 mm/s 10.0 mm/mV 4 by 2.5s + 3 rhythm lds MAC5K 008B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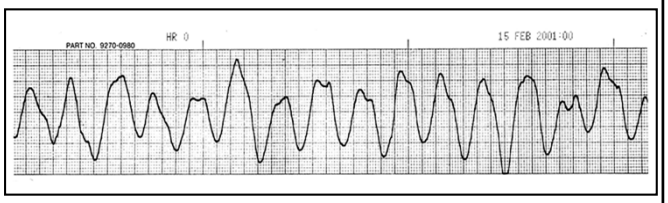
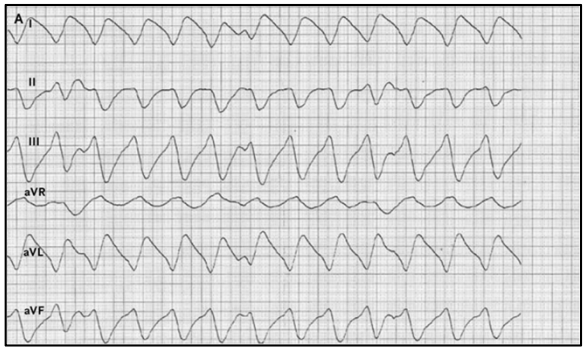
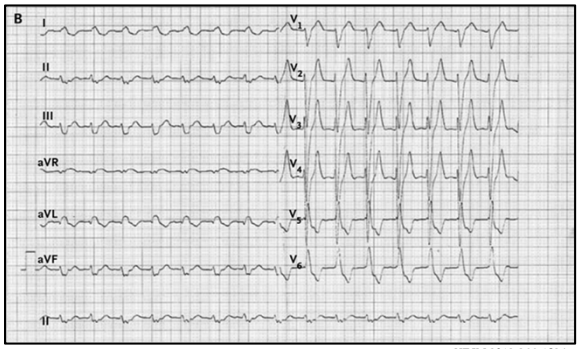




NEJM 2012;366:1824



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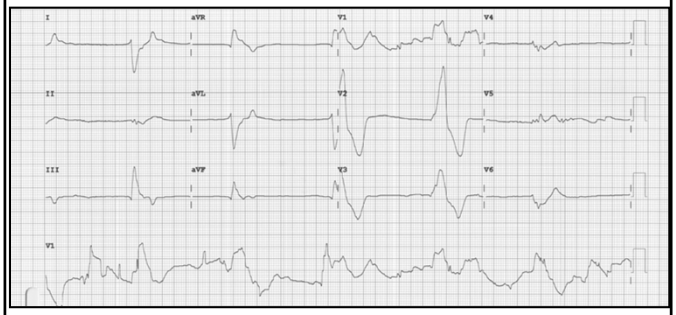
Calcium in Hyperkalemia

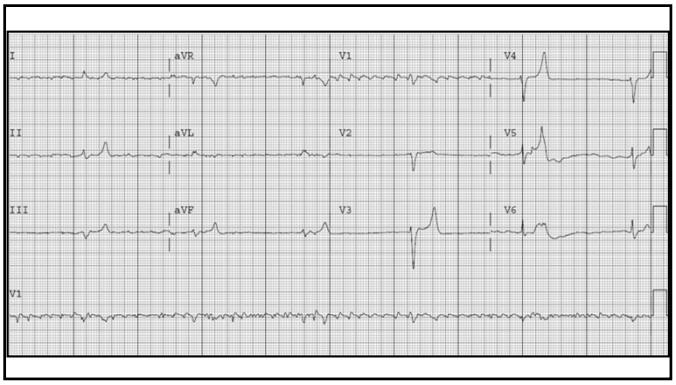
- Tricks Cell
- Recreates Electrical Gradient
- Temporary, lasts only 5-20 minutes
- Dose is 5-20 cc CaCl IV
- Potentially Dangerous

Be sure before using!

~~Only give calcium if . . .~~

~~there is a wide QRS~~





Hyperkalemia
Indications for CaCl

- Wide QRS
- Sine Wave
- Bradycardia and/or Heart Block

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