5 MINUTE SPEEDY SESSION

Electrolytes and EKGs

Proper electrolyte balance is absolutely necessary to maintain an adequate cardiac rhythm. When imbalances occur, predictable cardiac changes can be seen on the telemetry monitor. As the imbalances progress; so to do the changes. Listed below are the common electrolyte imbalances and their progressive EKG changes.

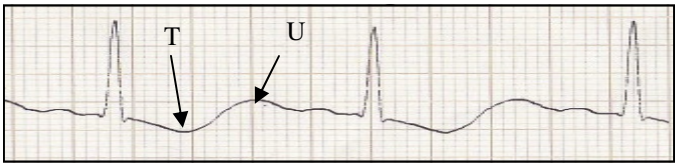
** indicates point of deterioration noted on EKG strips shown. Not all phases of deterioration are shown.

Hyperkalemia:

Tall peaked T-waves**, short QT interval, long PR interval, loss of P waves, widened QRS

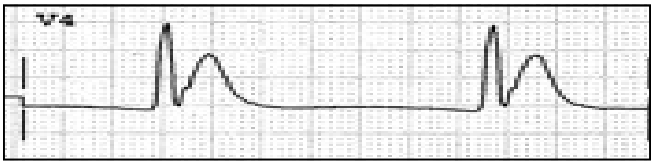
Hypokalemia:

ST-segment depression, T-wave inversion, prominent U waves**



Hypercalcemia:

Shortened QT-interval, broad based tall peaking T-waves



Hypocalcemia:

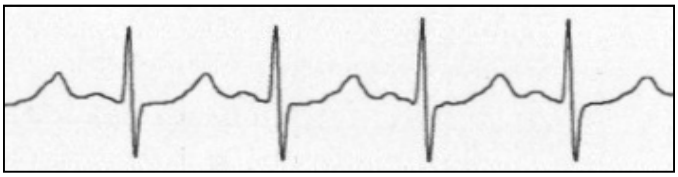
Narrowing of QRS, prolonged QT-interval**, prominient U-wave, Prolonged ST and ST-depression

Hypermagnesemia:

Increased PR and QT interval, widened QRS, complete AV block**

Hypomagnesemia:

Prolonged PR and QT intervals, ST-segment depression**, T-wave inversion, widened QRS, Torsades de Pointes



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