

Telemetry: Analyzing a strip

Follow these steps to assist you in interpreting a rhythm.

Rate:

- Determine the Ventricular Rate (R-to-R intervals)
- Determine the Atrial Rate (P wave to P wave)
- Tachycardia is Rate > 100, Bradycardia is Rate < 60.

Rhythm and Regularity:

- Ventricular beats— measure R-to-R, compare to other R-to-Rs
- Atrial beats— Measure P-to-P, compare to other P-to-Ps
- Rhythm is regular if intervals measure out the same

P-wave assessment:

- Find the P-wave; one should precede each QRS and should appear similar in size, shape and position.
- If P-wave is positive and QRS is narrow; probably a sinus rhythm.
- If the P-wave is negative or absent and QRS are regular, rhythm may be junctional.
- If the P-wave is absent may indicate A-fib, Junctional or Ventricular rhythm

PR Interval:

- Measure PR intervals; if consistently 0.12-0.20 then normal
- If intervals are longer than 0.20 or consistently inconsistent then consider HB
- If intervals are lengthening and then a QRS disappears; consider HB

QRS Complex:

- Measure QRS complex; normal is < 0.10
- If < 0.10 complex is presumed to be supraventricular in origin
- If > 0.10 complex is considered wide

QT Interval:

- Measure the QT interval; an interval less than half of the R-to-R is normal
- QT intervals longer than half the R-to-R puts patient at risk for dysrhythmia like Torsades.

ST Segment:

- Compare the ST segment height to the PR segment; it is elevated or depressed if different by 1mm (one box) above or below the PR segment level.

T Waves:

- Evaluate; normal is upright and expected height.
- Abnormal is tall and pointed (hyperkalemia), negative inflection (myocardial ischemia), or opposite the direction of the QRS (means abnormal QRS)

Using these steps you can interpret the rhythm's site of origin, type and rate.

(Like Sinus Tachycardia at 109/min)