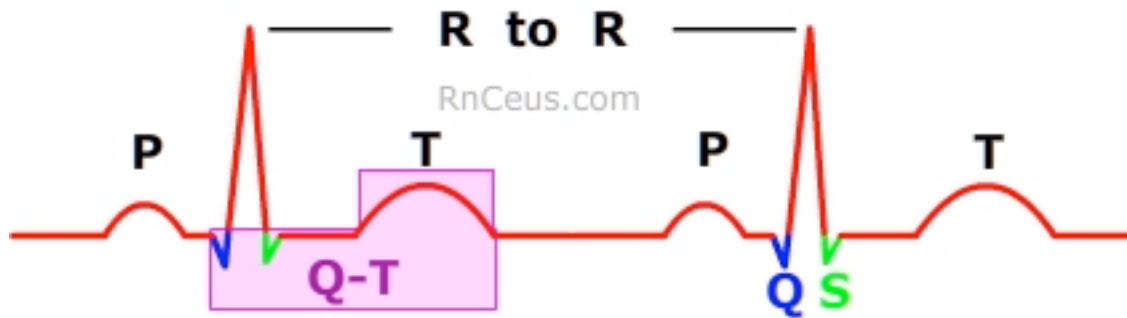


Normal ECG Waveform Components



P wave

- Indicates atrial depolarization, or contraction of the atrium.
- Normal duration is no longer than 0.11 seconds (<3 small squares)
- Amplitude (height) is no more than 3 mm

QRS complex

- Indicates ventricular depolarization, or contraction of the ventricles.
- Normally not longer than .10 seconds in duration
- Amplitude is not less than 5 mm in lead II or 9 mm in V3 and V4
- R waves are deflected positively and the Q and S waves are negative

T wave

- Indicates ventricular repolarization
- <5 mm in amplitude in standard leads; 10 mm in precordial leads
- Rounded and asymmetrical

ST segment

- Indicates early ventricular repolarization
- Normally not depressed more than 0.5 mm
- May be elevated slightly in some leads (no more than 1 mm)

PR interval

- Indicates AV conduction time
- Duration time is 0.12 to 0.20 seconds

QT interval

- Measured from the Q to the end of the T.
- Represents ventricular depolarization and repolarization
- Prolonged QT may be inherited or acquired
 - * Inherited - defective sodium or potassium channels
 - * Acquired - drugs, electrolyte imbalance or MI