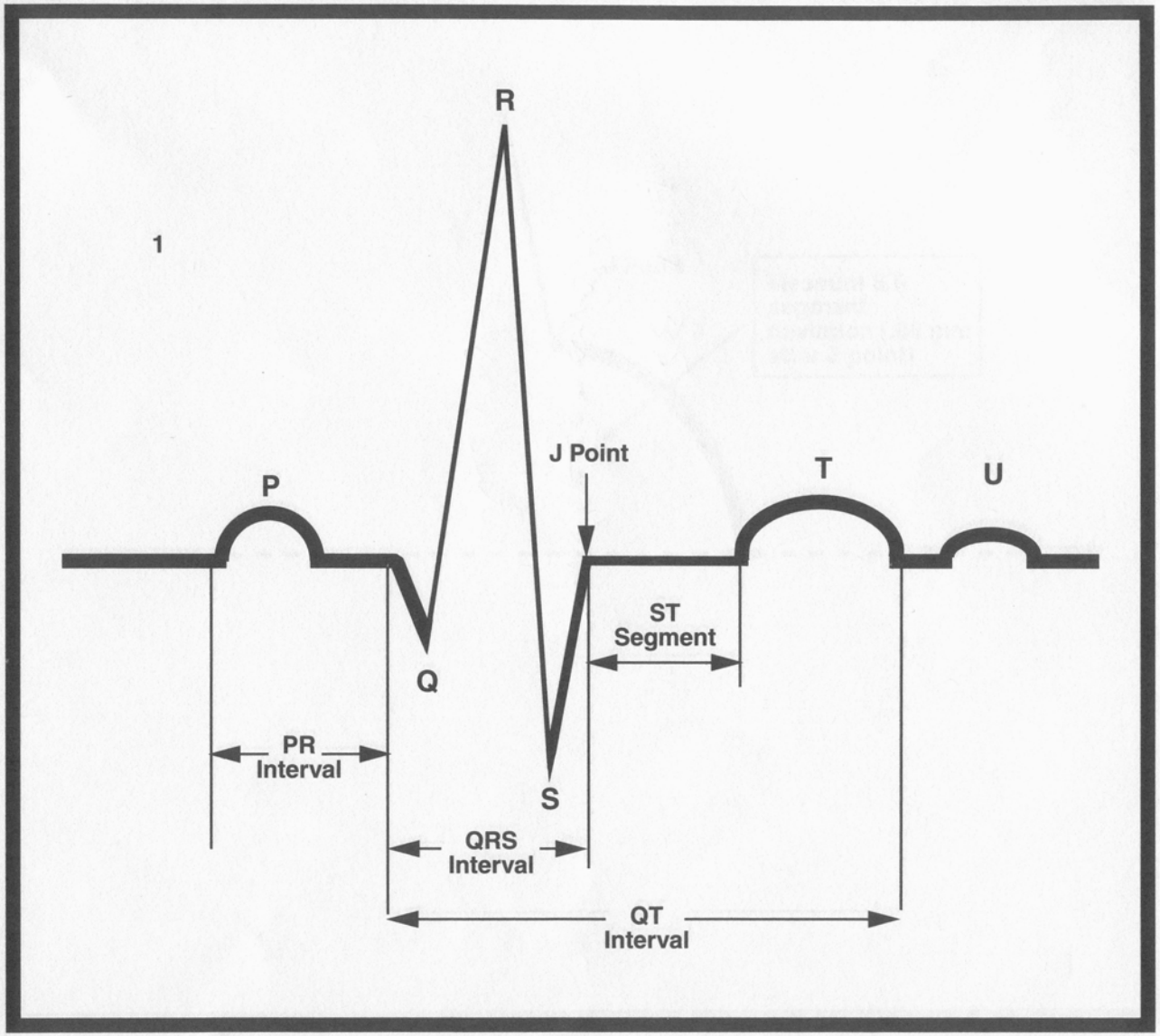
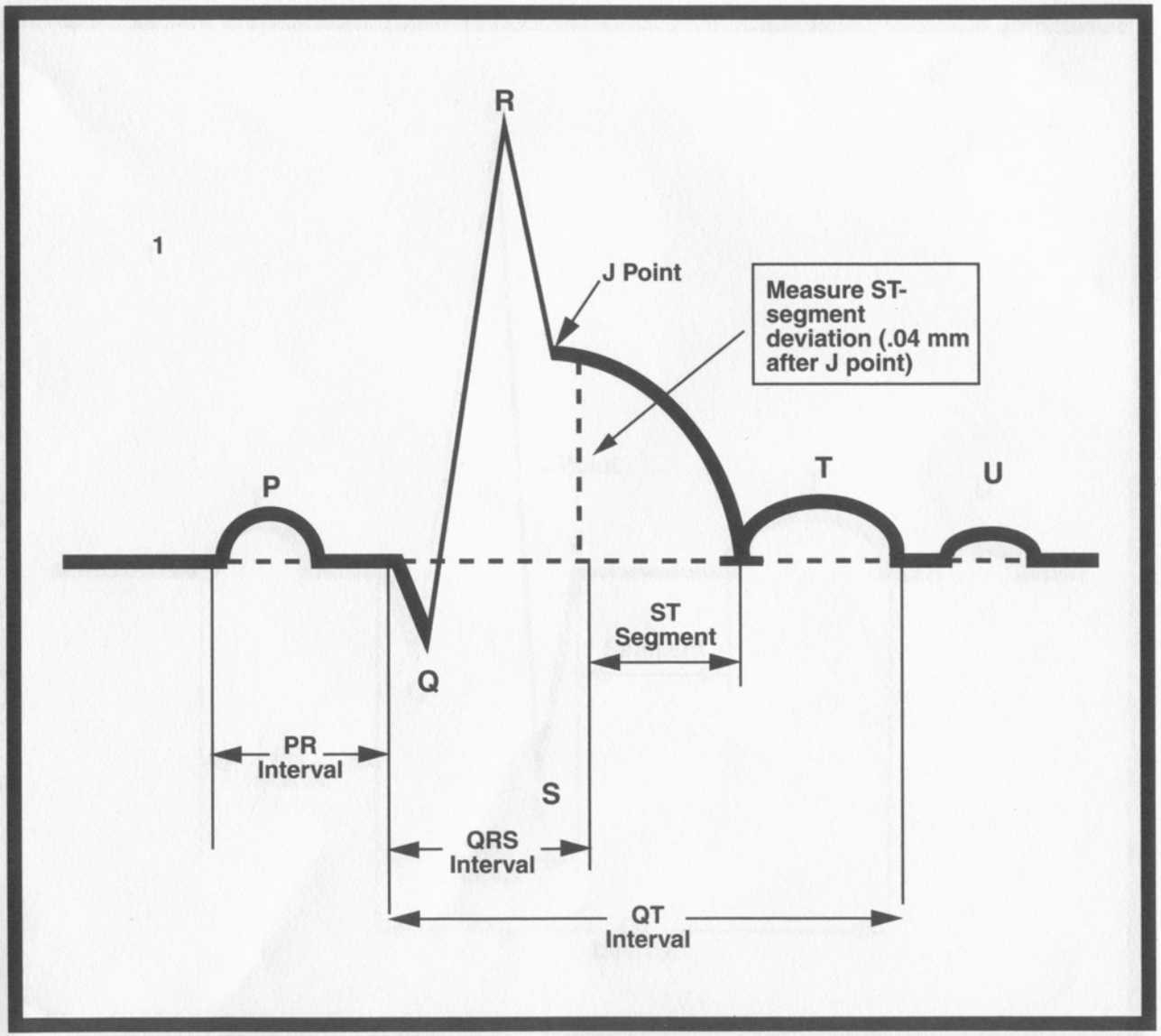
## Figure 1


1
R
J Point
P
T
U
ST
Segment
Q
PR
Interval
S
QRS
Interval
QT
Interval

## Figure 2


1
R
J Point
Measure ST-segment deviation (.04 mm after J point)
P
T
U
ST Segment
Q
PR Interval
S
QRS Interval
QT Interval

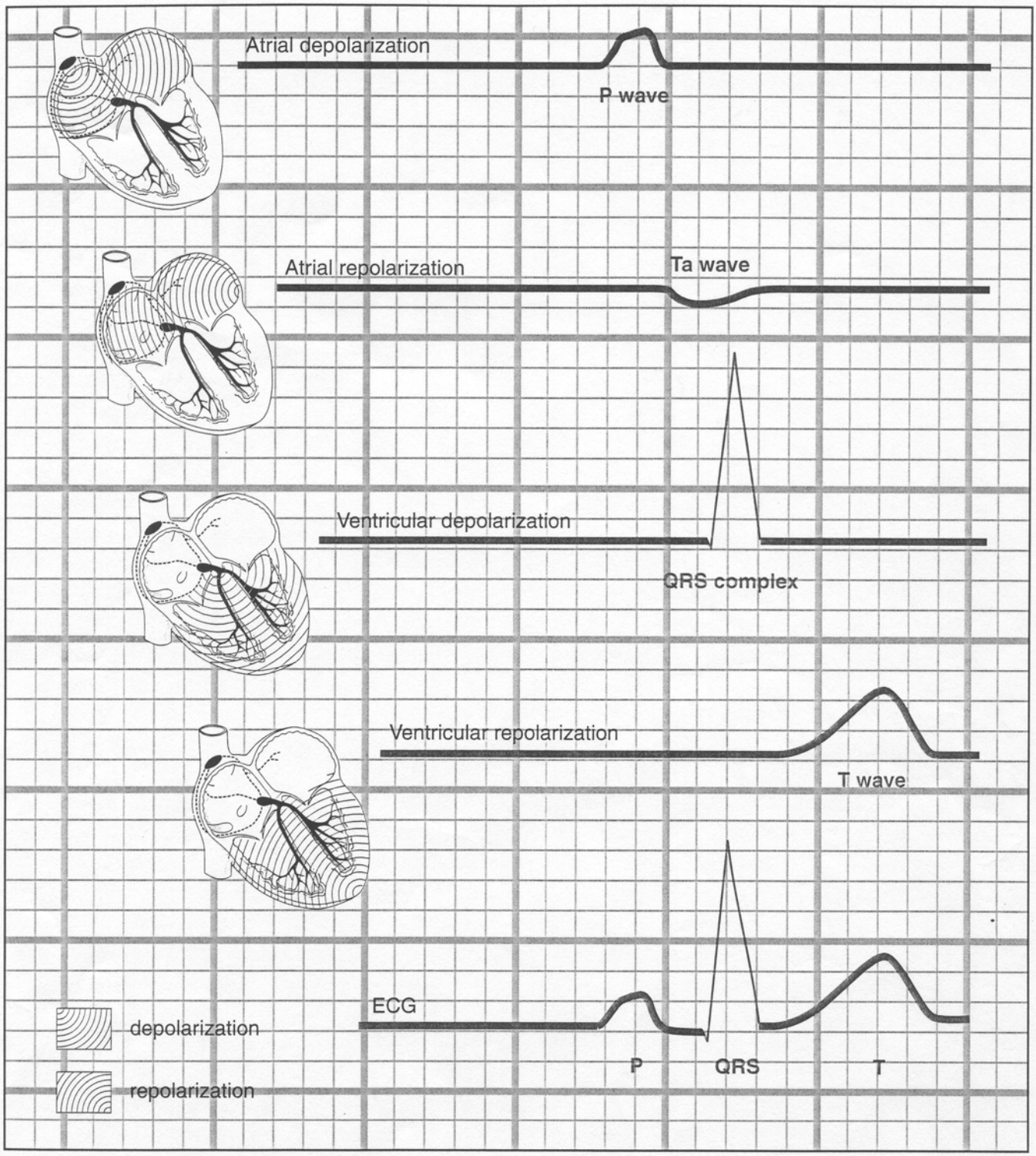
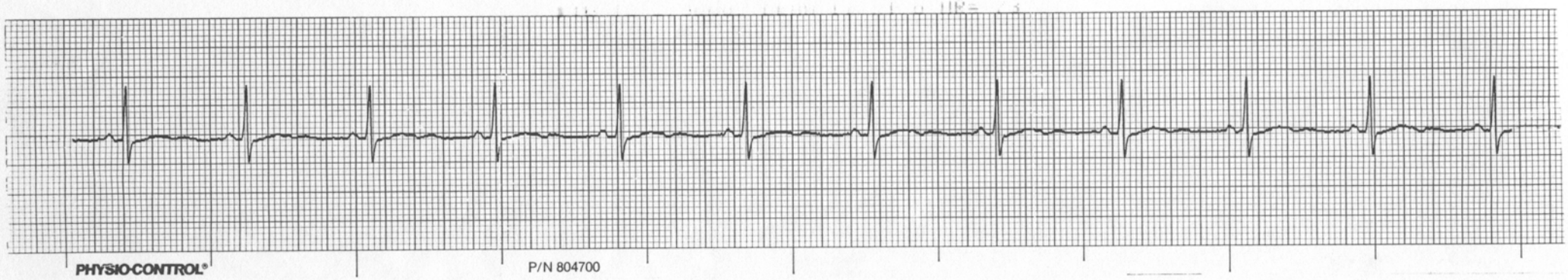



**Figure 2-1** Electrical basis of the ECG.

AVERY® C
PV119



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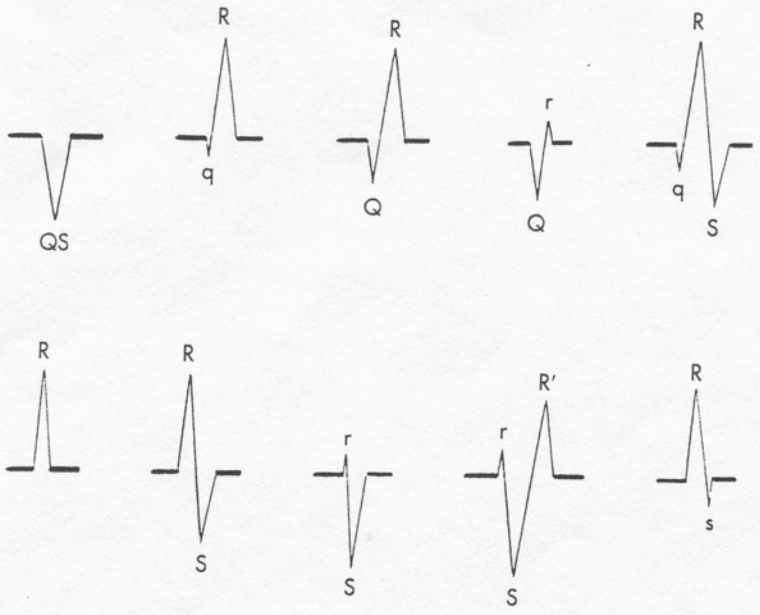
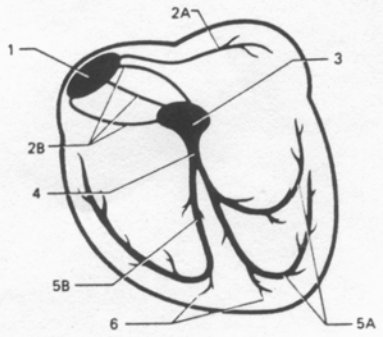

QS
R
q
R
Q
r
Q
R
q
S
R
R
S
r
S
R'
r
S
R
s

## Electrical Conduction through the Heart

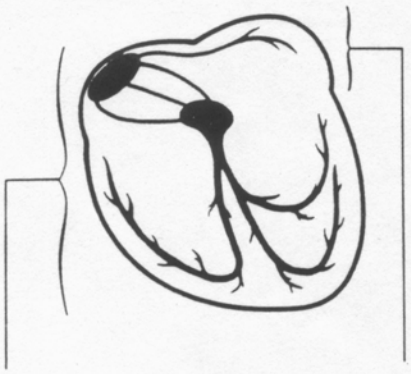



1. Sinoatrial (SA) node
2A. Intraatrial pathway
2B. Internodal pathways
3. Atrioventricular (AV) junction
4. Bundle of His
5A. Left bundle branches (2 divisions)
5B. Right bundle branch
6. Purkinje fibers





## Innervation of the Heart by the Autonomic Nervous System

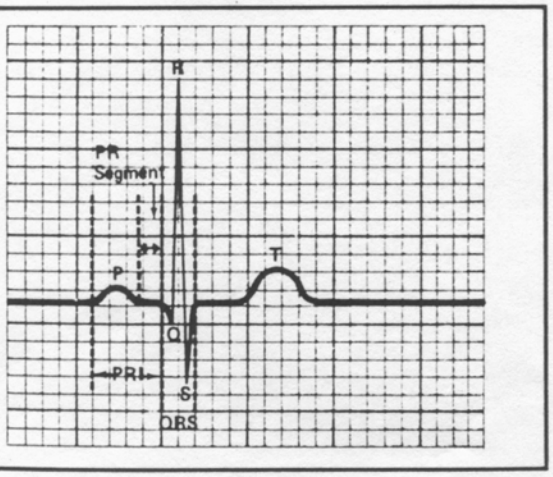


| SYMPATHETIC | PARASYMPATHETIC |
|---|---|
| • Affects the atria and the ventricles | • Affects only the atria |
| • Increases: heart rate conduction irritability | • Decreases: heart rate conduction irritability |





## EKG Complex








## EKG Wave Patterns

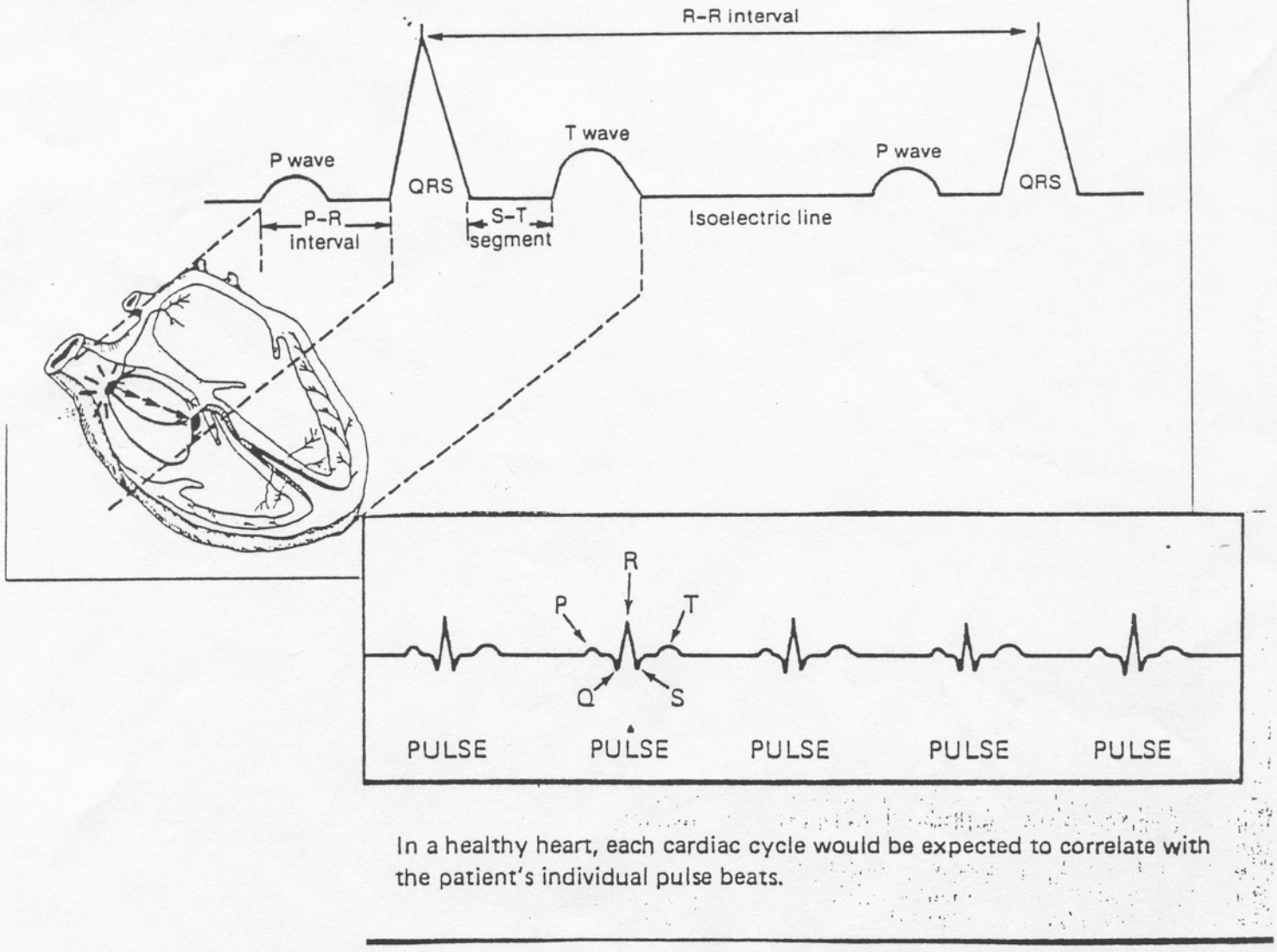
| Electrical Activity | Associated Pattern | Graphic Depiction |
|---|---|---|
| Atrial Depolarization | P Wave | |
| Delay at AV Node | PR Segment | |
| Ventricular Depolarization | QRS Complex | |
| Ventricular Repolarization | T Wave | |
| No Electrical Activity | Isoelectric Line | |

# ELECTROCARDIAGRAM (ECG)

The electrical events of the heart can be recorded as a series of waves and complexes.

The P-wave represents the contraction (depolartization) of the atria.
The QRS complex represents the contraction of the ventricles.
The T-wave represents the repolarization of the ventricles.
You do not see the repolarization of the atria. WHY?

*THE ECG AND CARDIAC EVENTS*




In a healthy heart, each cardiac cycle would be expected to correlate with the patient's individual pulse beats.