

1. Introduction to Electrocardiography

Introduction to Electrocardiography

Munther K. Homoud, MD
Tufts-New England Medical Center
Spring 2008

1

(c) 2007, Munther K. Homoud, MD

2. The Monophasic Action Potential

The Monophasic Action Potential

Image not available due to copyright restrictions.

2

(c) 2007, Munther K. Homoud, MD

3. The Cardiac Conduction System

The Cardiac Conduction System

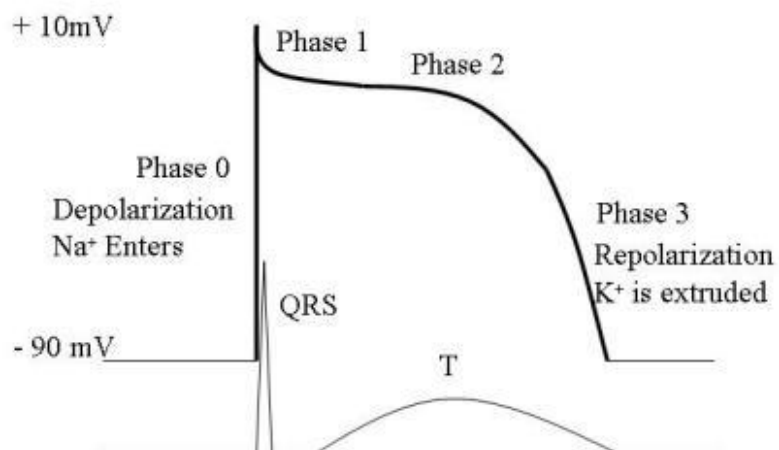
Image not available due to copyright restrictions.

3

(c) 2007, Munther K. Homoud, MD

4. Monophasic Action Potential (Cardiac Muscle Cell)

Monophasic Action Potential (Cardiac Muscle Cell)

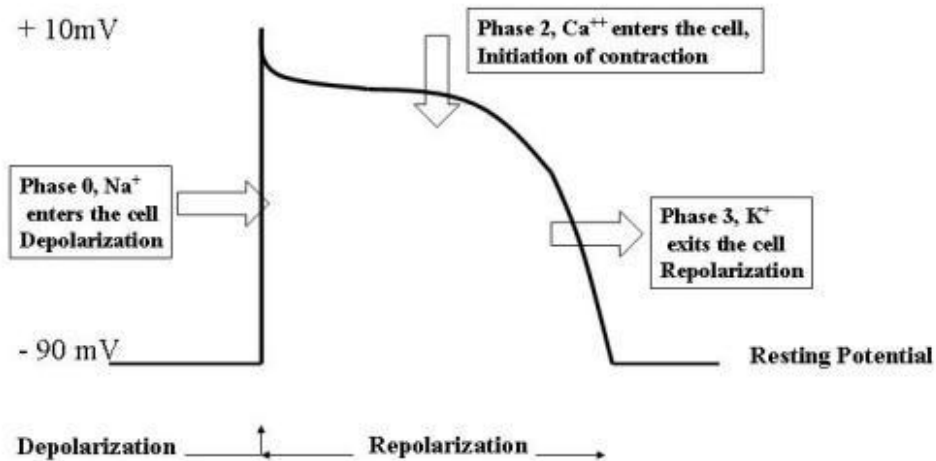


4

(c) 2007, Munther K. Homoud, MD

5. Monophasic Action Potential (Cardiac Muscle Cell)

Monophasic Action Potential (Cardiac Muscle Cell)

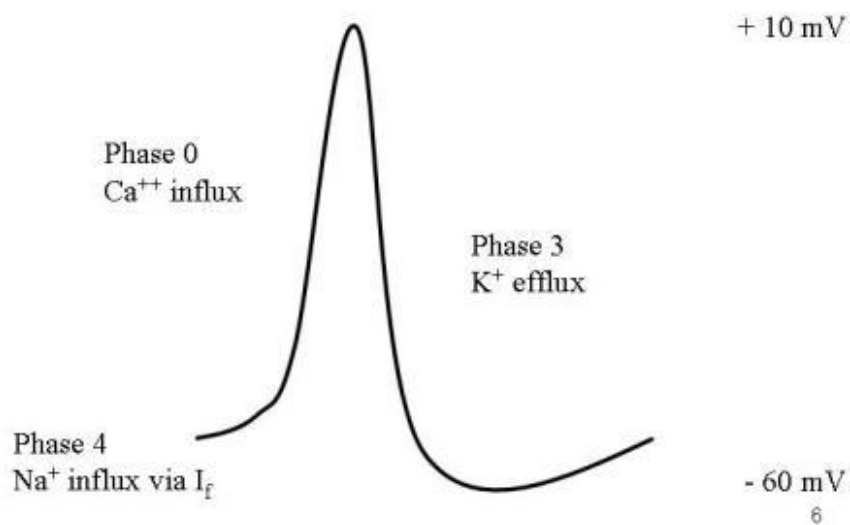


5

(c) 2007, Munther K. Homoud, MD

6. Monophasic Action Potential (Cardiac Pacemaker Cell)

Monophasic Action Potential (Cardiac Pacemaker Cell)

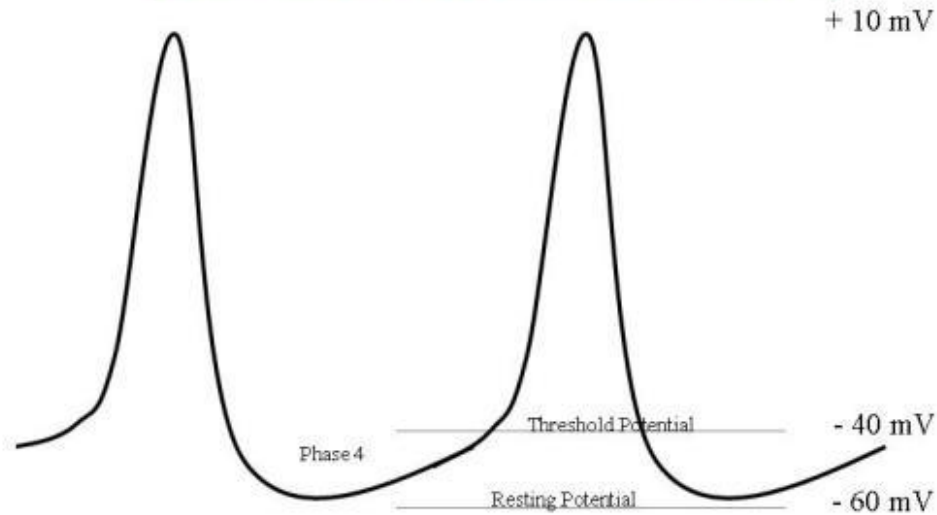


6

(c) 2007, Munther K. Homoud, MD

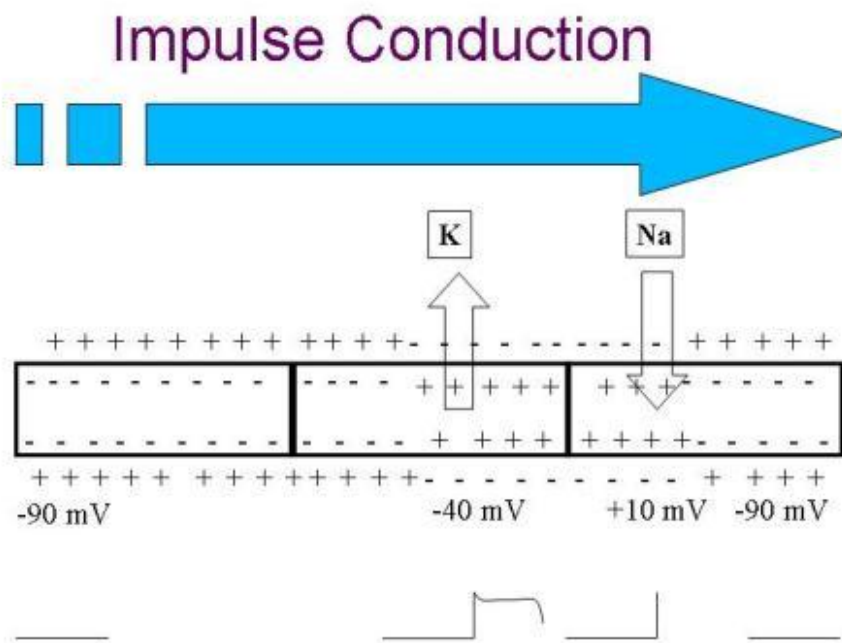
7. Monophasic Action Potential (Cardiac Pacemaker Cell)

Monophasic Action Potential (Cardiac Pacemaker Cell)



7
(c) 2007, Munther K. Homoud, MD

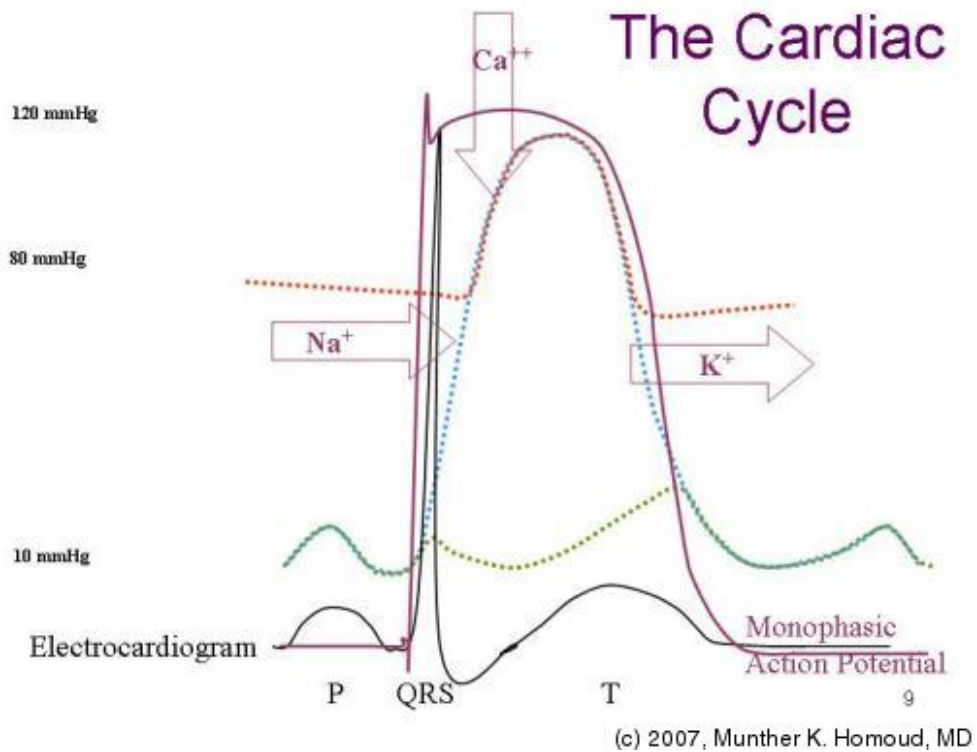
8. Impulse Conduction



8
(c) 2007, Munther K. Homoud, MD

9.

The Cardiac Cycle



10.

Location of Electrocardiographic Leads

Location of Electrocardiographic Leads

Image not available due to copyright restrictions.

11.

The P QRS T Complex

The P QRS T Complex

Image not available due to copyright restrictions.

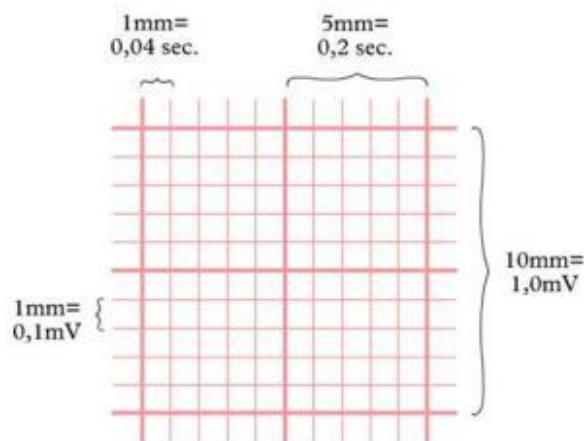
11

(c) 2007, Munther K. Homoud, MD

12.

Calculating the Heart Rate

Calculating the Heart Rate



Source: ECGPEDIA.ORG

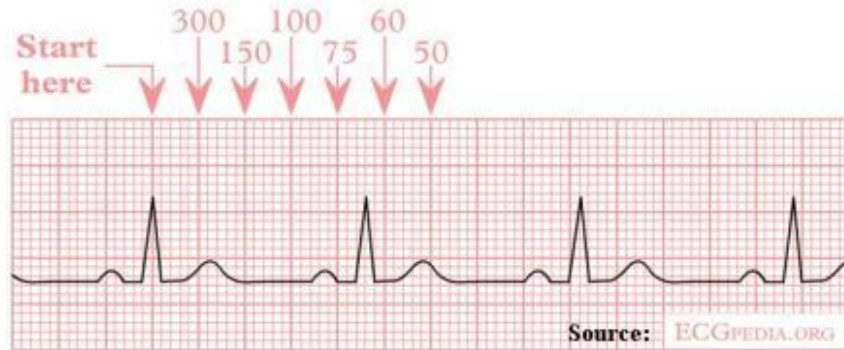
Heart Rate = 1500 / number of small squares

12

(c) 2007, Munther K. Homoud, MD

13. Calculating the Heart Rate

Calculating the Heart Rate

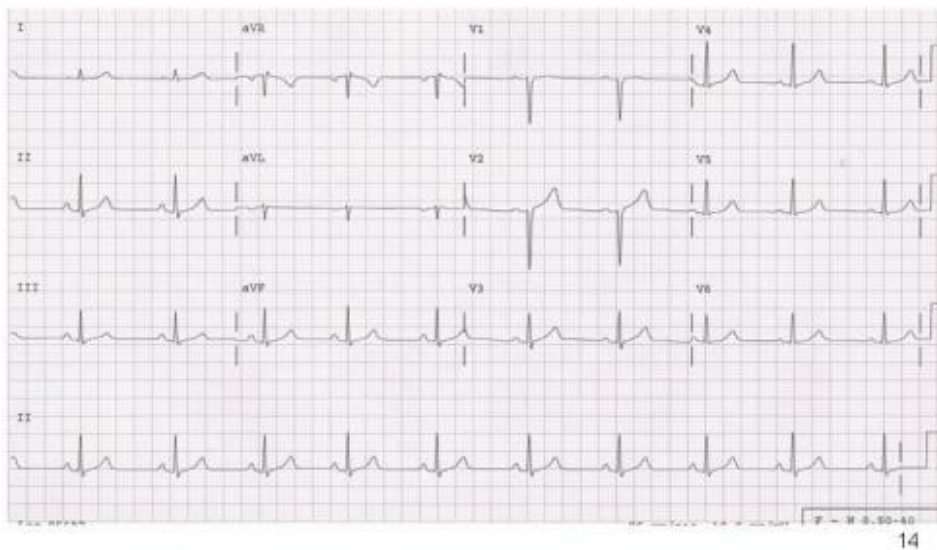


13

(c) 2007, Munther K. Homoud, MD

14. The Normal Electrocardiogram

The Normal Electrocardiogram

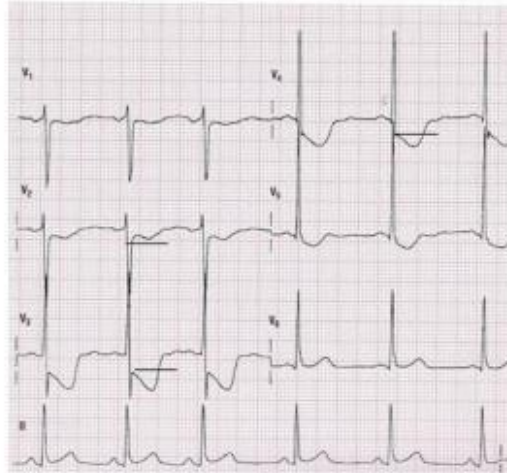


(c) 2007, Munther K. Homoud, MD

15.

ST-Segment Depression

ST-Segment Depression



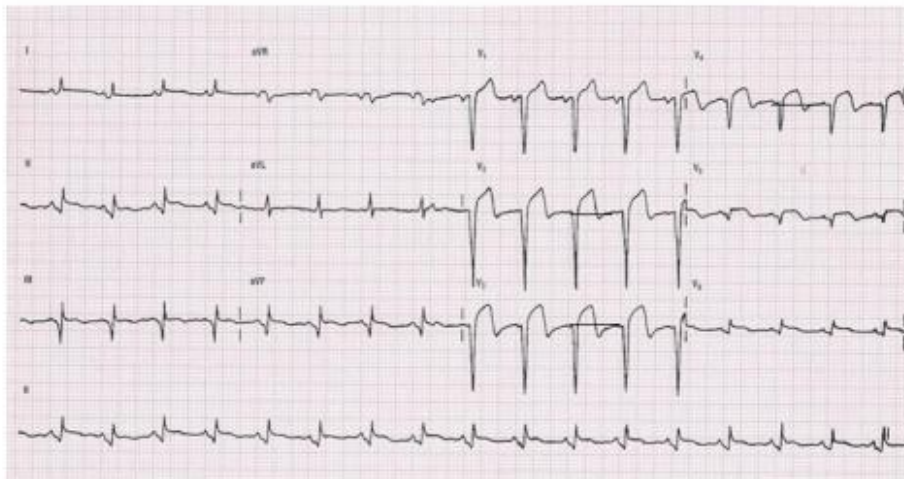
15

(c) 2007, Munther K. Homoud, MD

16.

ST-Segment Elevation

ST-Segment Elevation



16

(c) 2007, Munther K. Homoud, MD