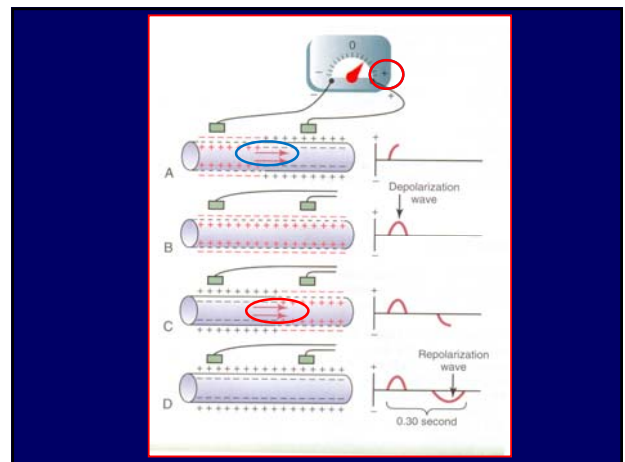
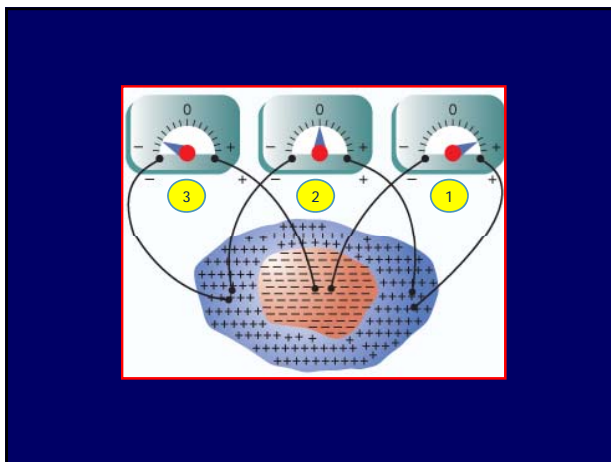


ELECTROCARDIOGRAM "ECG"
Physiology Department
Cairo University
2010-2011

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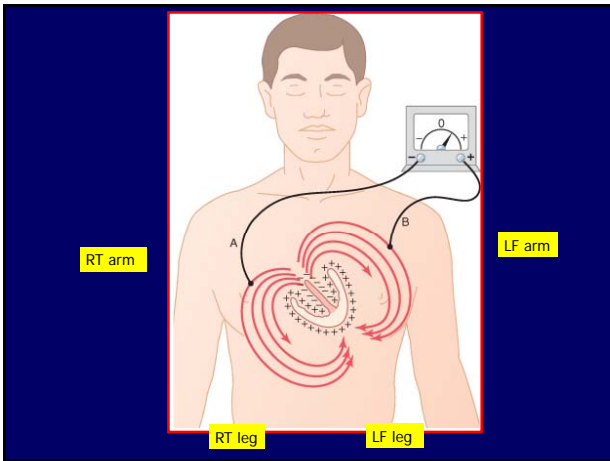


41- Regarding the causes of the ECG waves all the following are correct EXCEPT:

- a- P wave by atrial depolarization.**
- b- QRS complex by ventricular depolarization.**
- c- T wave by ventricular repolarization.**
- d- U wave by papillary muscle depolarization. 😊**

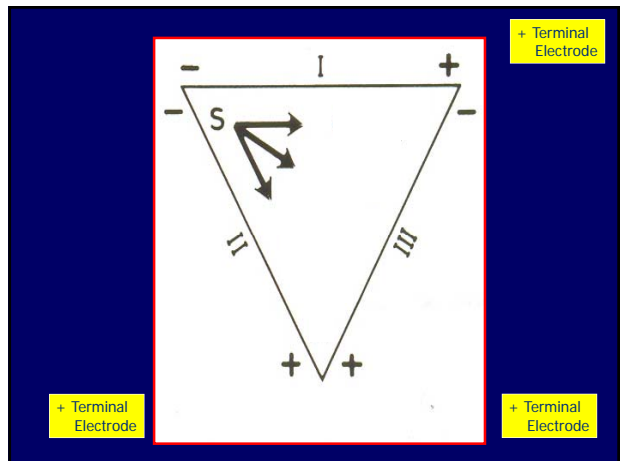
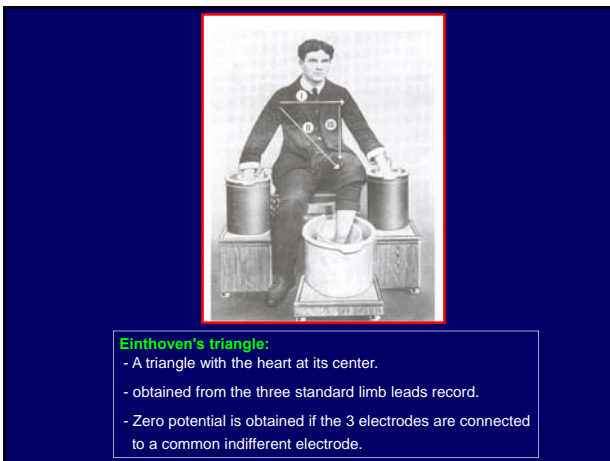
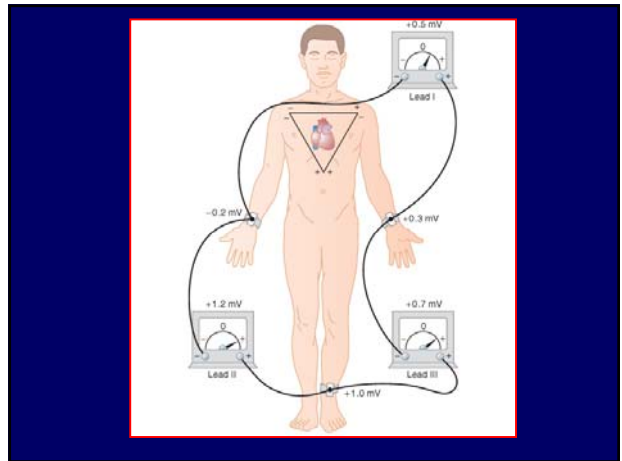
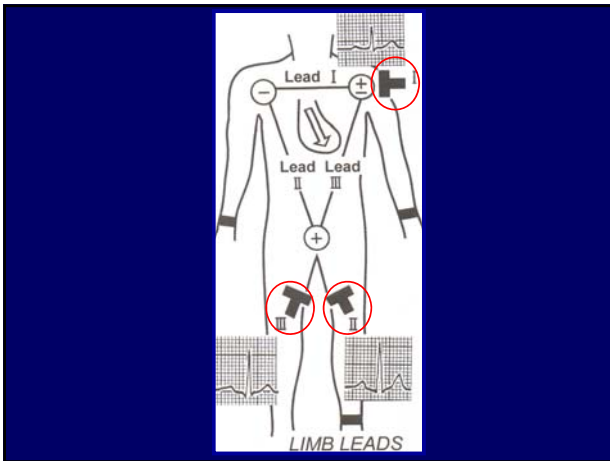
40- In the fundamental rules of the ECG all the following are right EXCEPT:

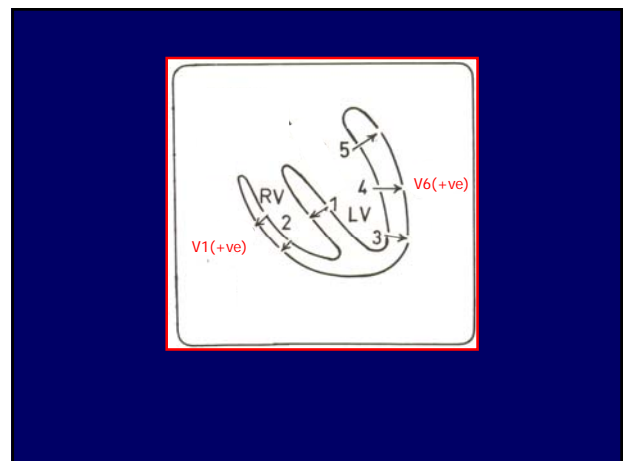
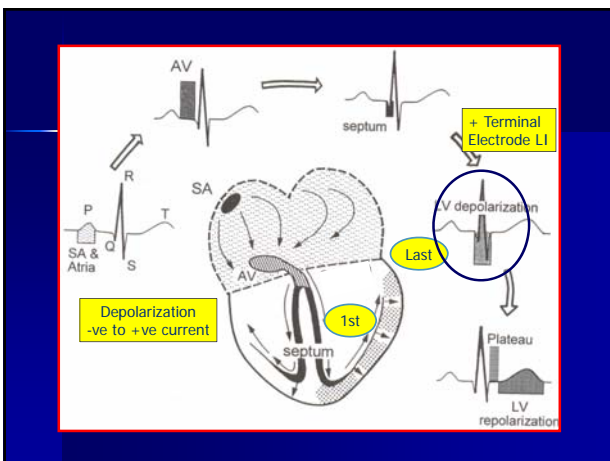
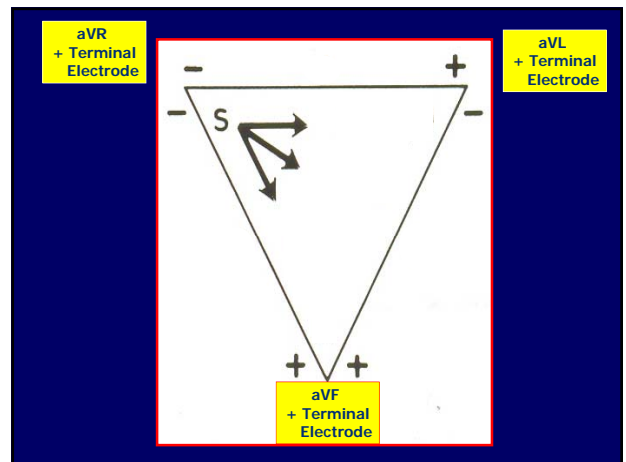
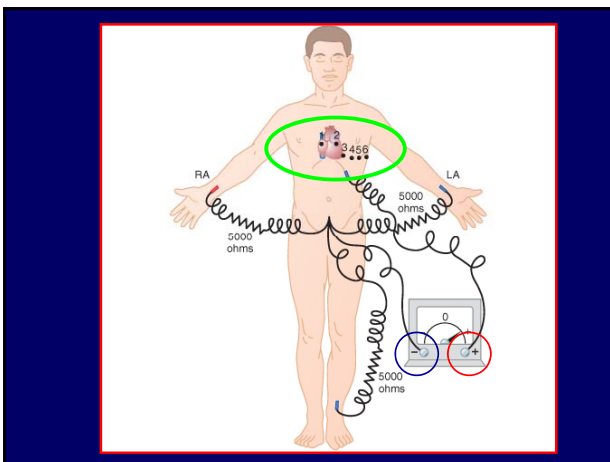
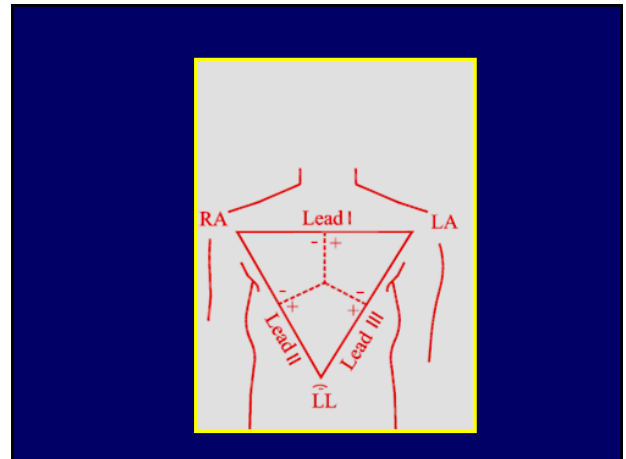
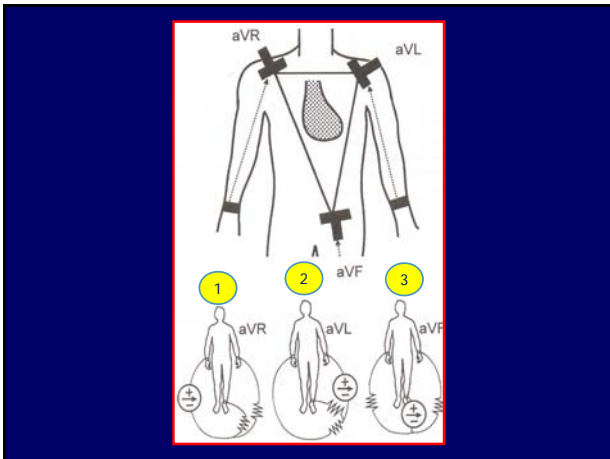
- a- It is a biphasic record of myocardial action potential fluctuations.**
- b- Deflection record occurs only during complete depolarization or repolarization. 😊**
- c- +ve wave occurs when depolarizing current approaches the +ve terminal electrode of the meter.**
- d- -ve wave happens when repolarizing current approaches the +ve terminal electrode.**

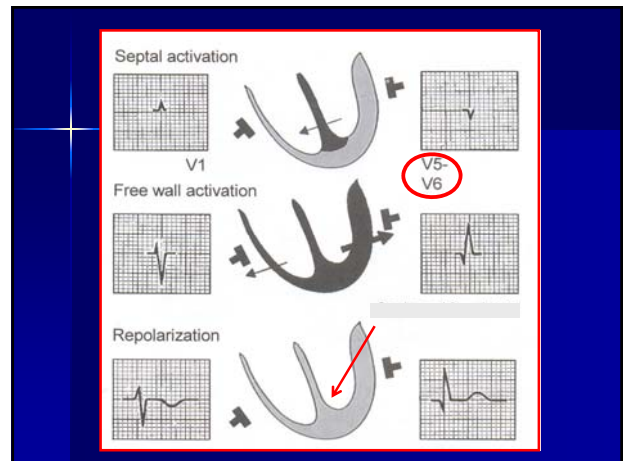
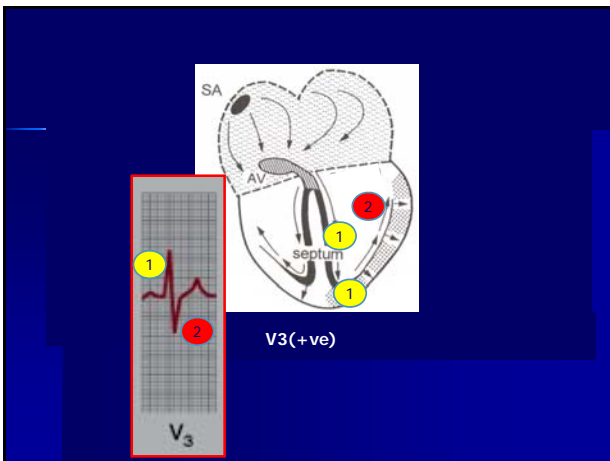
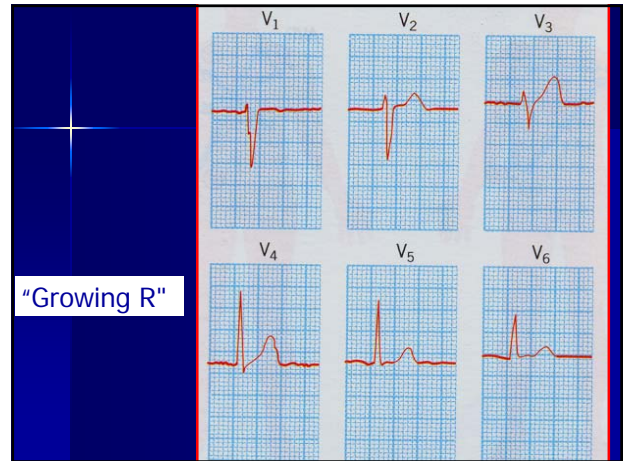
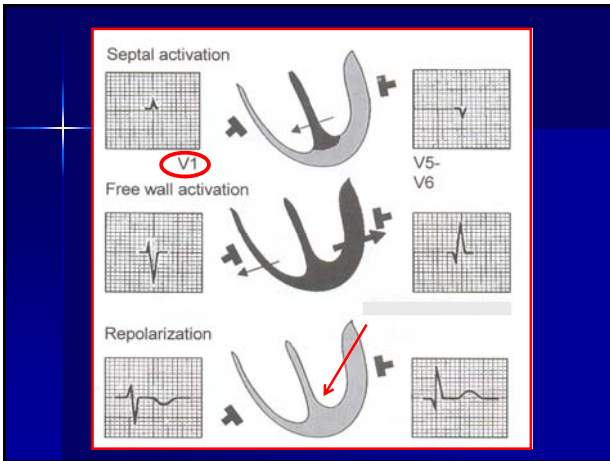
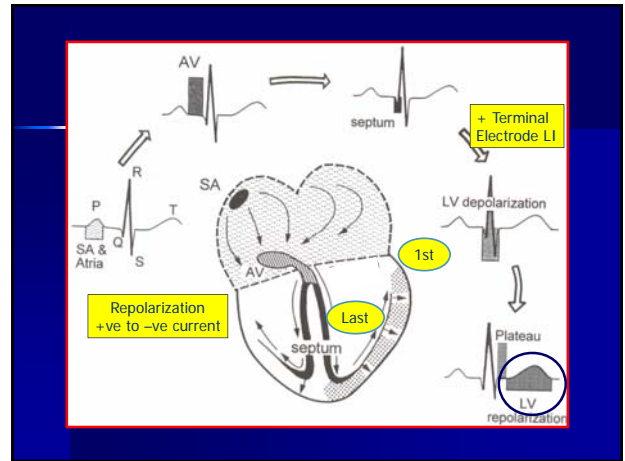
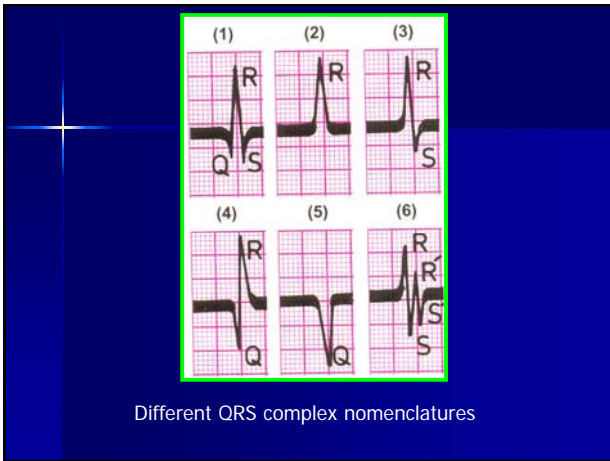


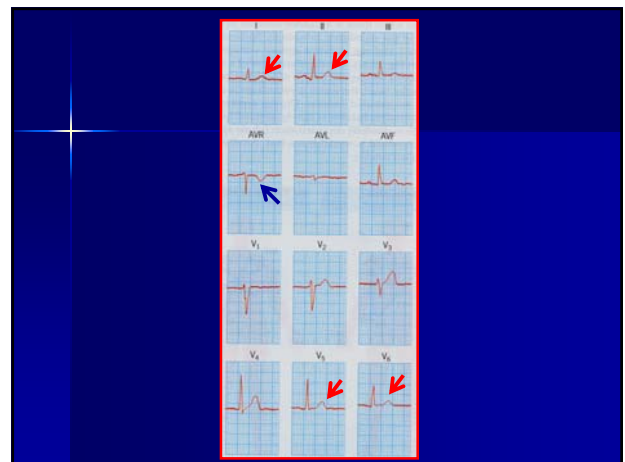
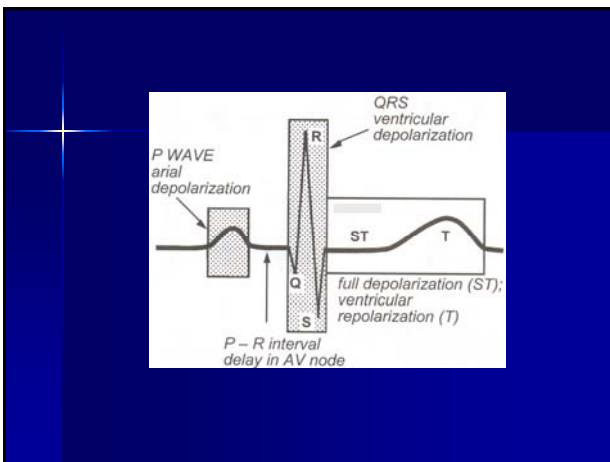
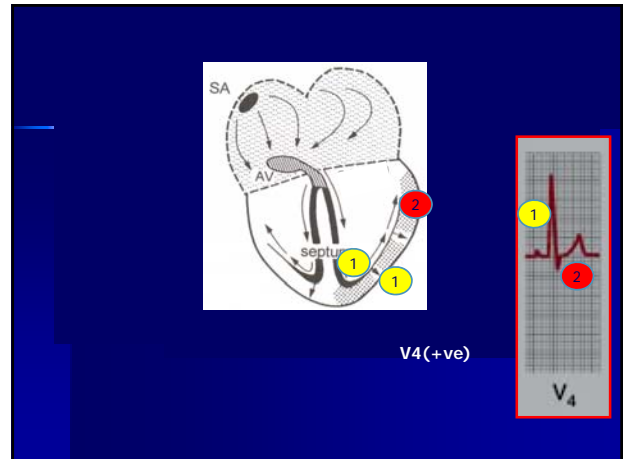
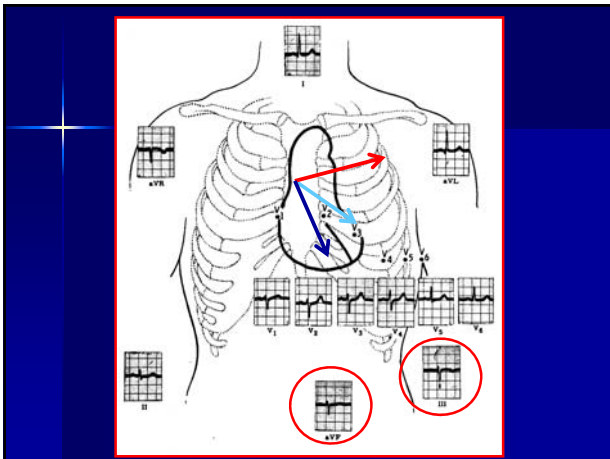
42- The causes of the ECG "intervals":

- a- PR by AV nodal conduction.
- b- ST by atrial repolarization.
- c- QT by ventricular depolarization and ventricular repolarization. ⊕
- d- All of the above.









45- Axis of the heart is:

- a- Mean instantaneous vector of QRS complexes in vertical plane.
- b- Normally from -30 to +60.
- c- Deviated to left side in full term pregnant woman 🟢
- d- Deviated to right side in long slender person (e.g., +80).

44- The voltage of the ECG:

- a- Is normal summation of QRS complexes in standard limb leads. 🟢
- b- Normally equals <1.5 mV.
- c- Is low in an individual having body mass index (BMI) 35.
- d- All of the above.

47- The configuration of QRS complex in normal ECG:

- a- Depends only on the direction of depolarizing current.
- b- Is mainly positive in right ventricular surface pattern.
- c- Exhibits growing R in chest leads.
- d- Is positive in aVR.

46- The P-wave of normal ECG:

- a- Has voltage and duration nearly equal 2.5 × 2.5 mm.
- b- Is upright in aVR.
- c- Represents right atrial depolarization in its second half.
- d- Coincides with atrial systole.

49- In normal ECG:

- a- The average duration of QT interval is 0.50 sec.
- b- The ST segment is an isoelectric line.
- c- The T wave is rounded and symmetrical.
- d- The height of the T wave is > 10 mm in chest leads.

48- As regards Q wave all the following are correct EXCEPT:

- a- Represents septal depolarization from left to right in V₅.
- b- Its depth is not more than 1/4 its corresponding R.
- c- Its duration is not more than 0.04 sec.
- d- Is deep and wide in recent myocardial infarction.