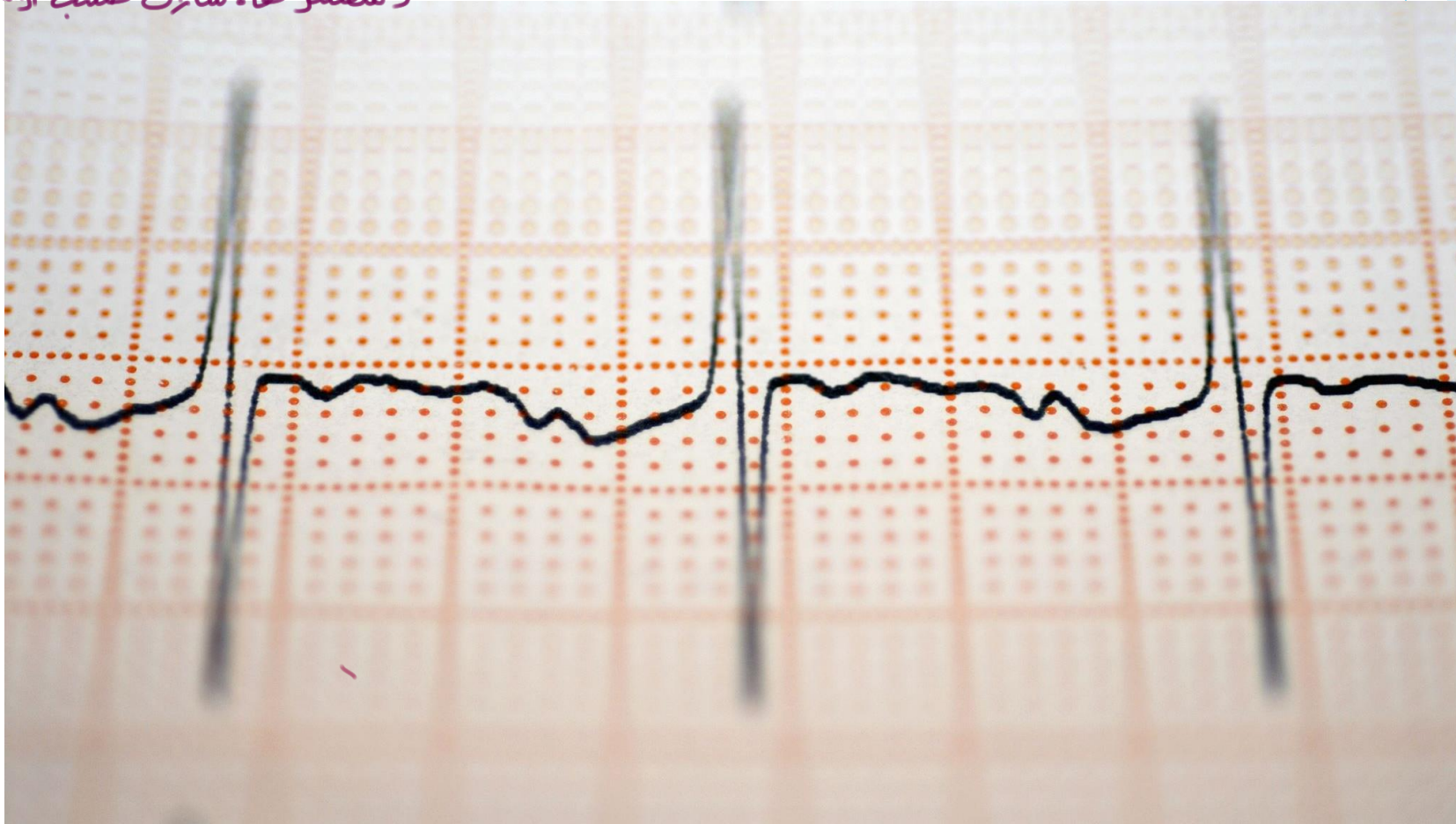


Systematic approach of EKG interpretation

DR. Arwa Rawashdeh

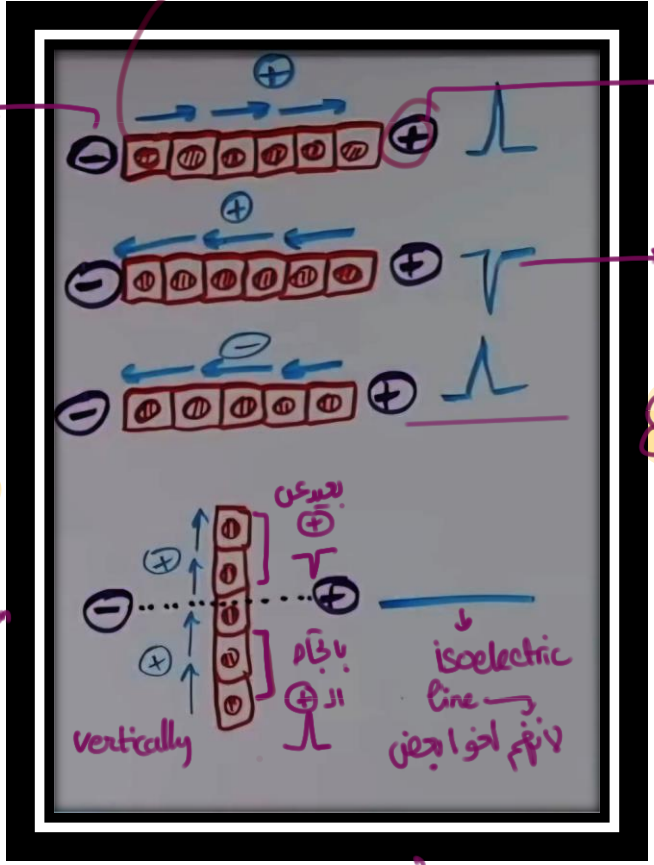
EKG

القسط، الإشارات العصبية من القلب (myocardium) ←
و تفسيرها لاسرار حسب الinterpretation Left.

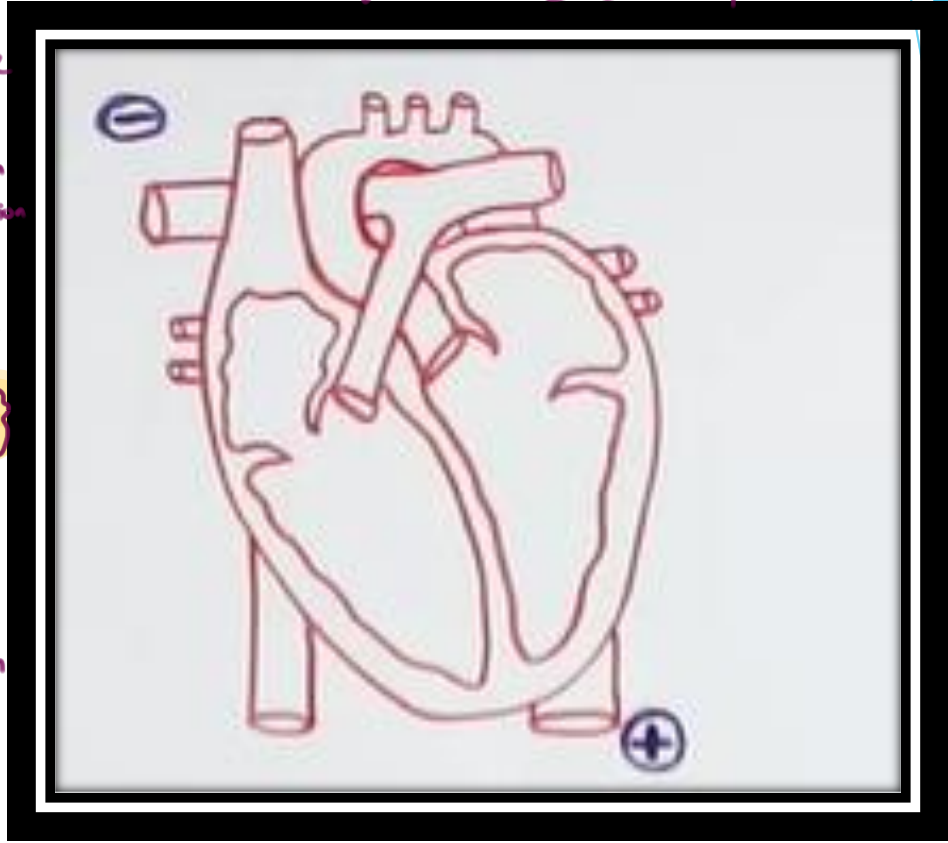


← كاتبة من القلب ← وكبيرها

يحل Stimulation لوحده في
 الـ electrodes
 Action Potential
 ↓
 Stimulation بالسنا
 negative في الـ
 depolarization
 يغيرني
 العينة الموجبة
 تنتقل بالخلايا
 ↓
 باتجاه الـ positive
 ↓
 ببطئ
 Positive deflection



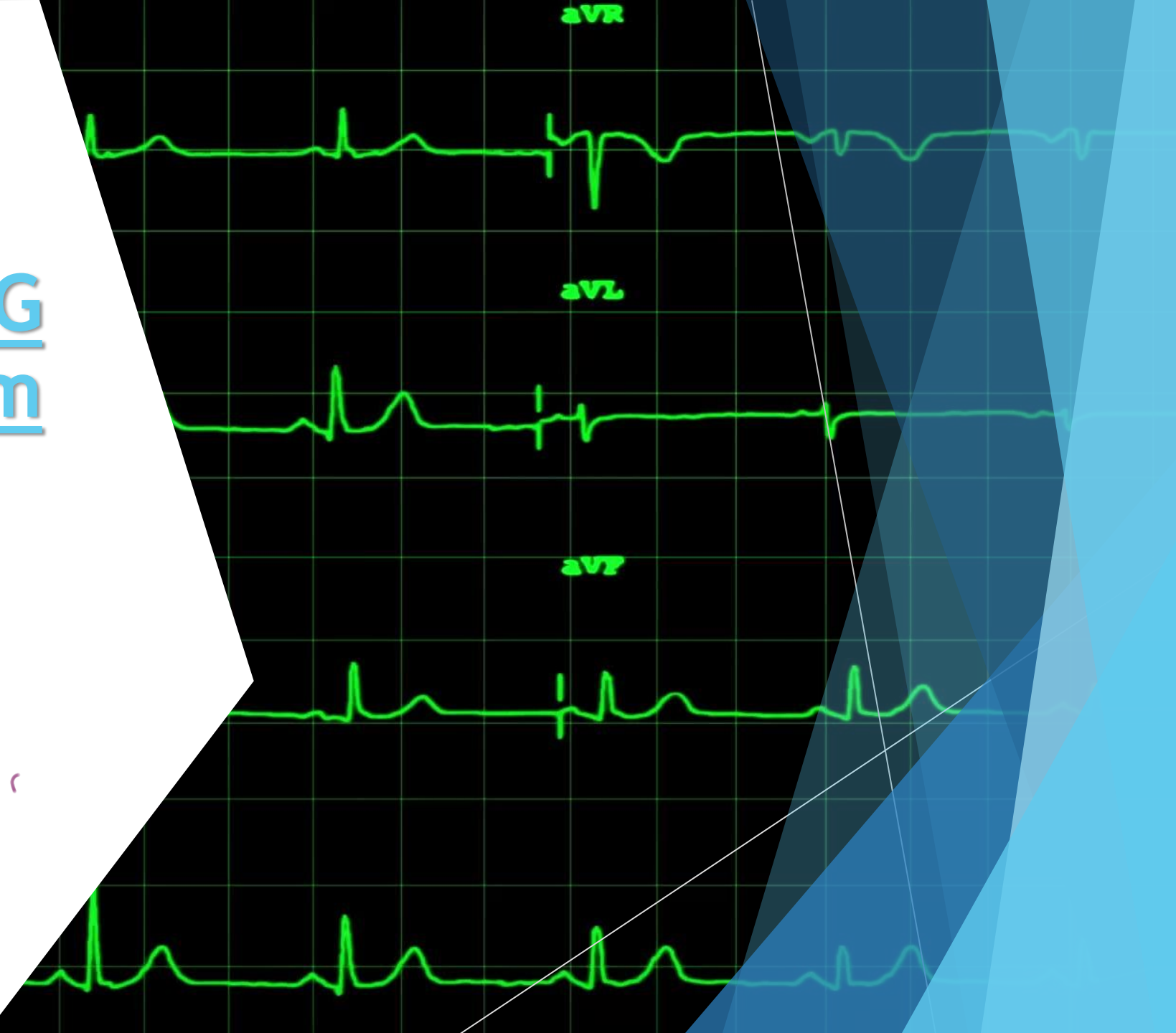
electrode
 stimulation
 ↓
 depolarization
 toward
 the neg.
 electrode
 ↓
 بعيد عن
 positive
 ↓
 negative
 deflection



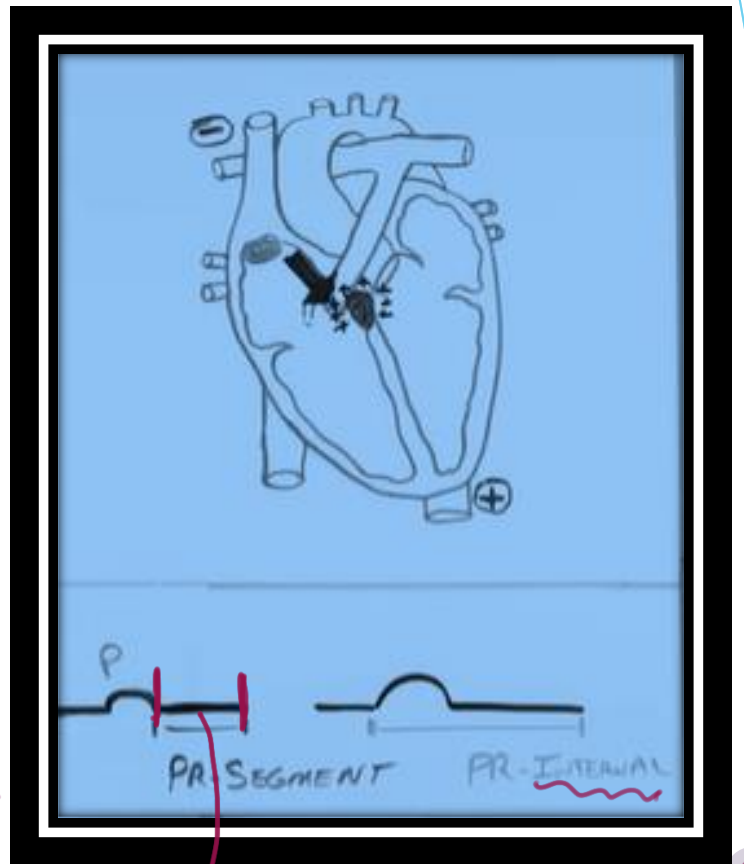
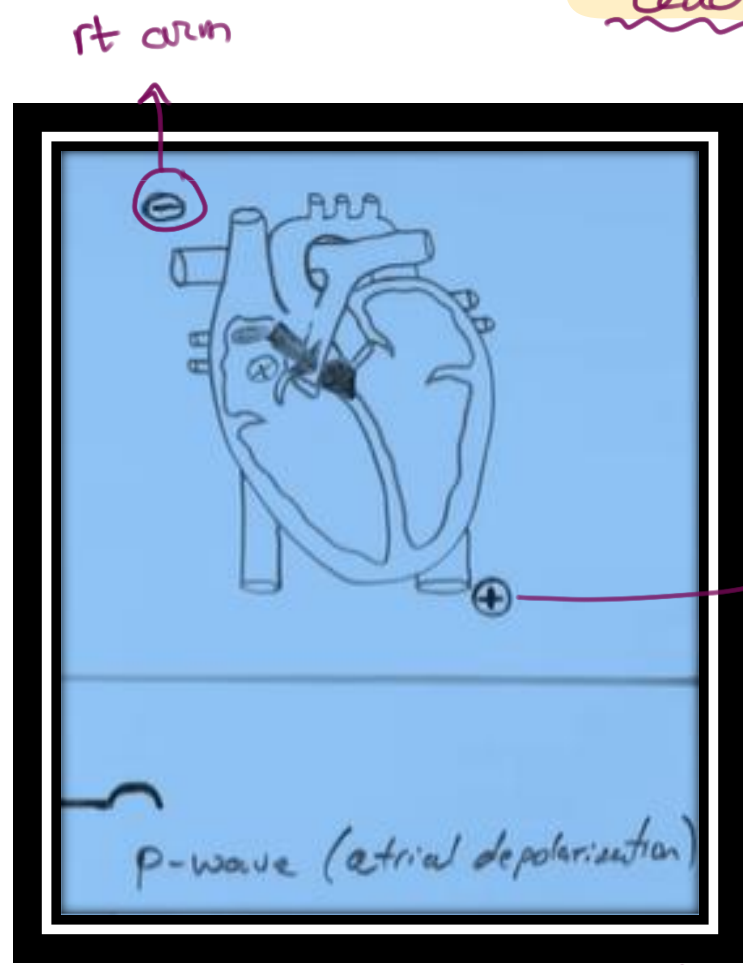
← بنا أنا بالموجب بين الخلية خلال repolarization
 السحبات السالبة → flow for negative toward negative → بقرف كليها → انها Positive deflection

Positive, negative and isoelectric deflection

Map the EKG wave form



Lead II → MC → افلاستقاده و قراءته
 من ساكنه بكل ال image



left leg

important clinically

①

Stimulation of SA Node → right atrium
 ↳ AV node (inferior medially on right atrium) → at the junctional region
 ↳ above the fibrous skeleton
 ↳ deep between endocardium & pericardium
 ↳ c-line, moved toward the ⊕ electrode

junctional region

isoelectric deflection
 Because of the delay
 (التي لا تفرق)

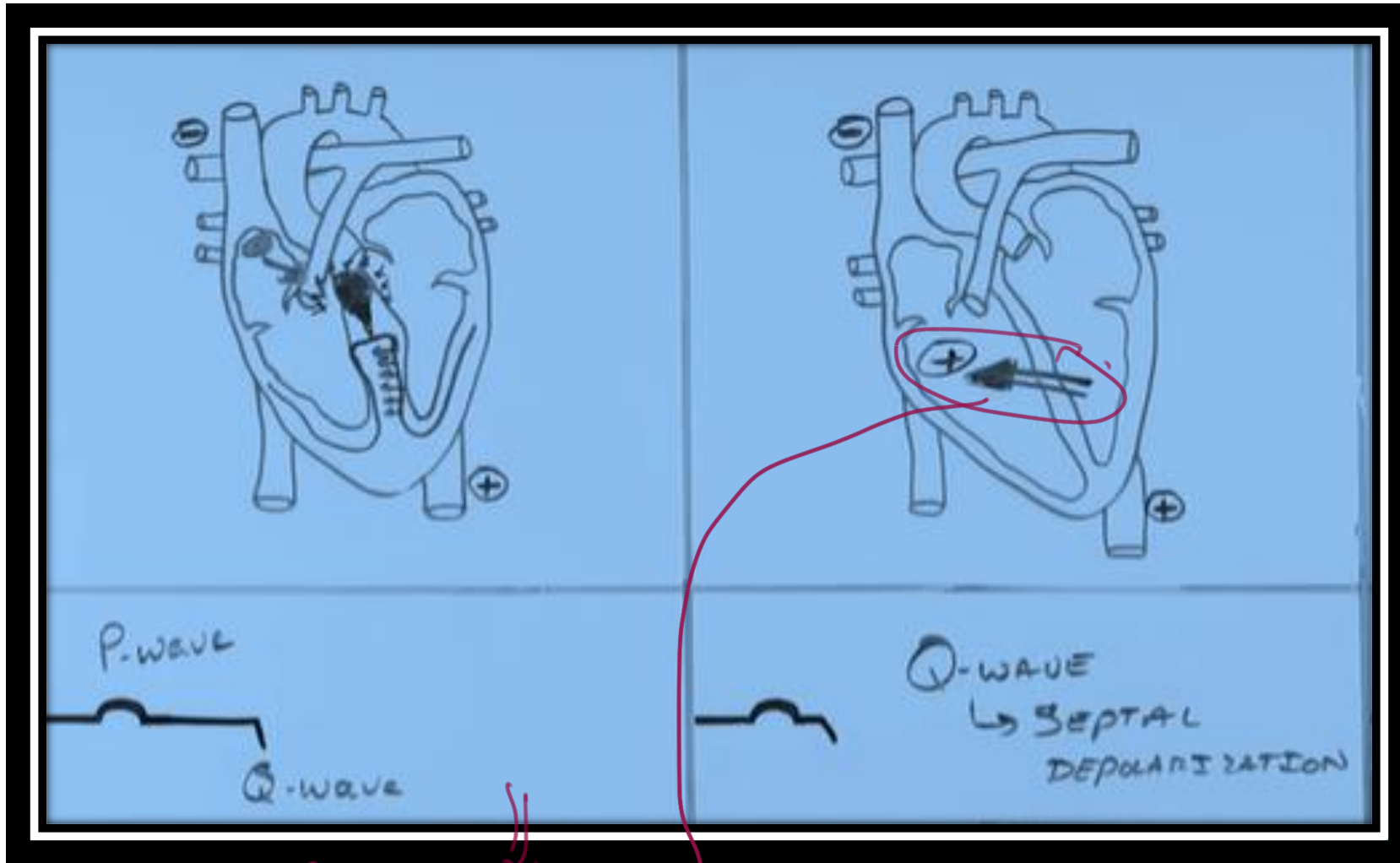
PR-segment

②

P-wave (atrial depolarization)

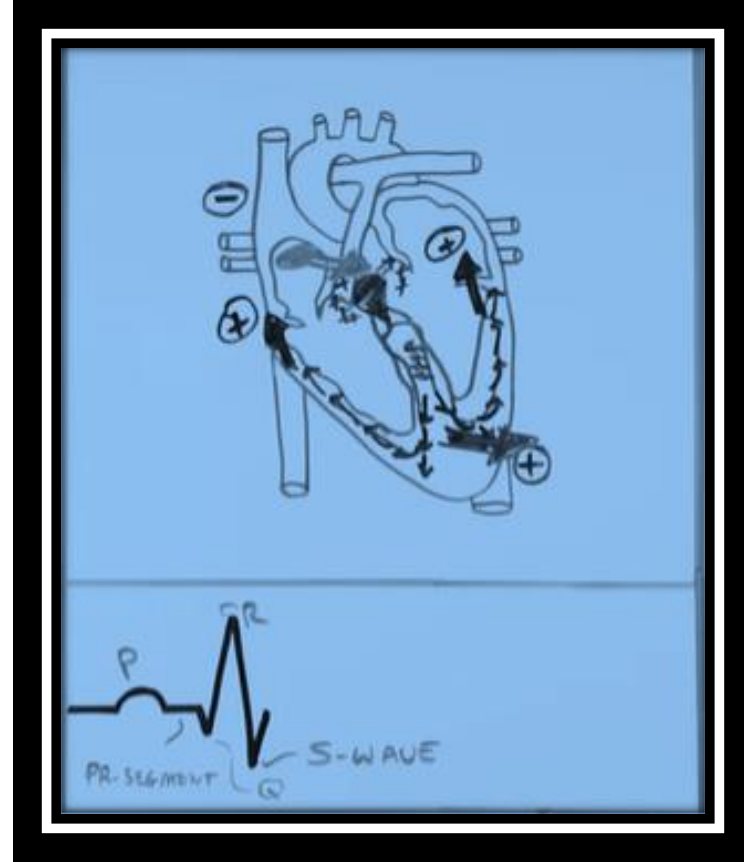
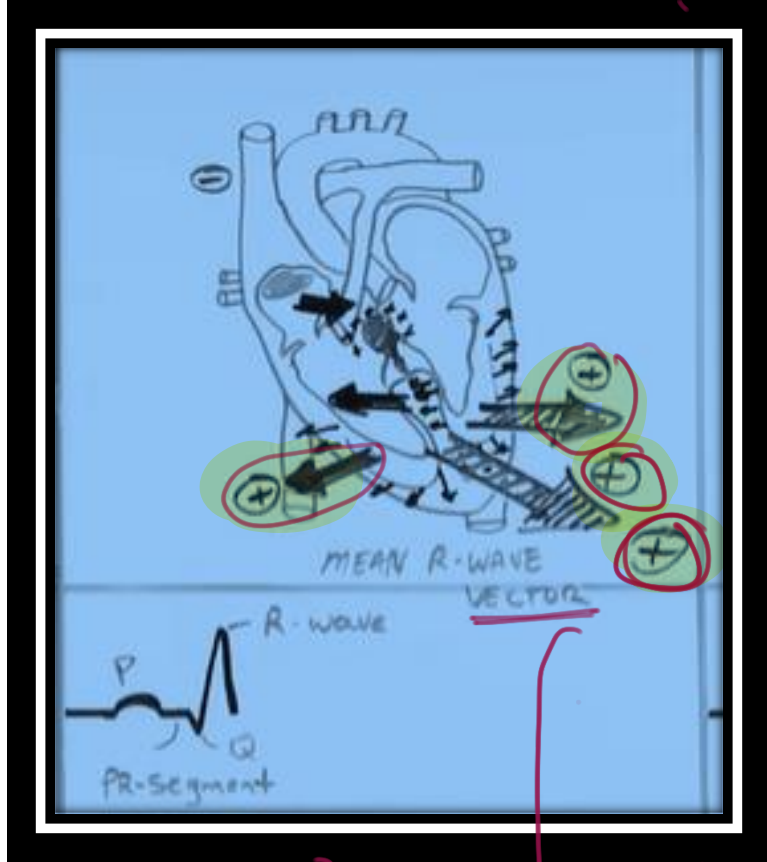
AV → SA
 delay

atrium → ventricles



Bundle of His ← AV
 ① the heart lies obliquely & 2/3 to the left.
 (also) vector is right, left
 topography right & left

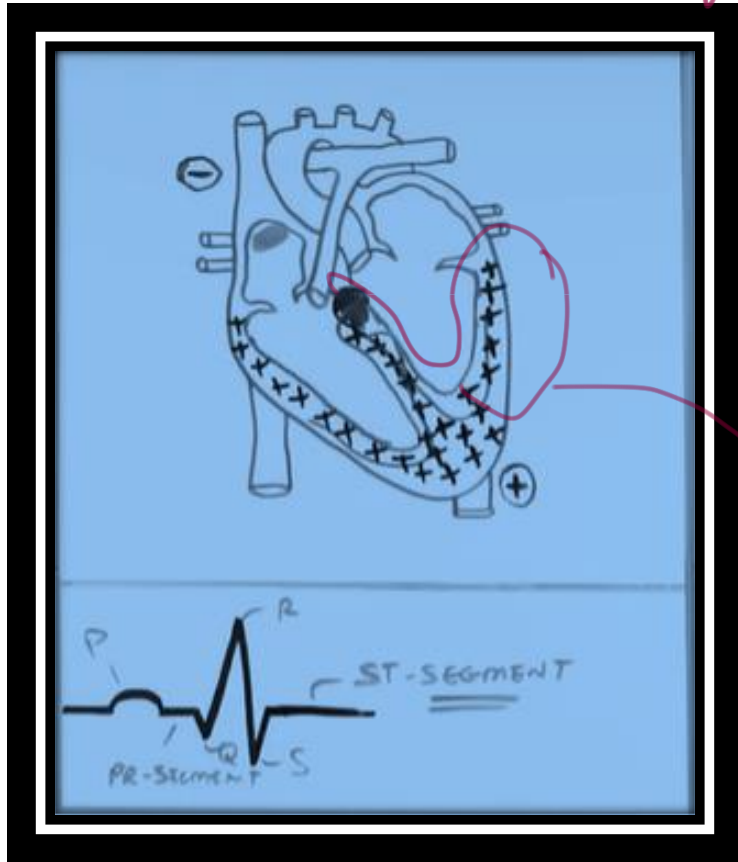
Big vector from the left to the right → away from (+) → Septal depolarization ③



Base ١١, ١٢, ١٣! فين ٢ اولين (+)
 of the ventricles from inner myocardium
 to outer → R & Lt
 (+) - toward the (+) ← فين ١٣ آي فين
 deflection (Big vector)

↑ R wave
 ↓
 depolarization
 of ventricle (4)

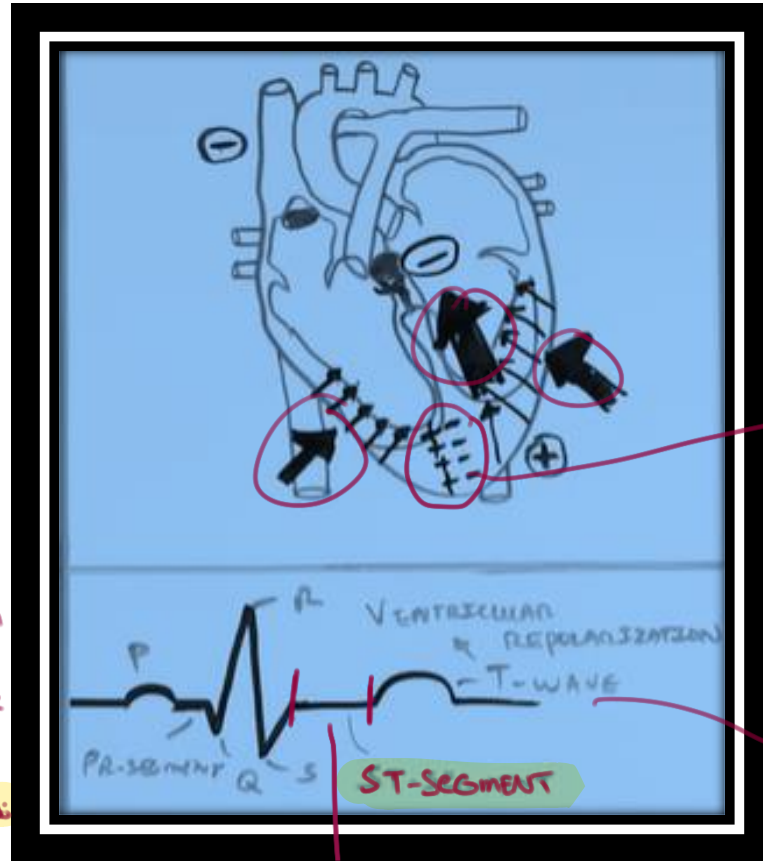
Base of the heart is positive and apex is negative of the heart



filaments
away from the positive
↓
depolarization

5

Swave of the base of the heart



Repolarization 7

كل الموجب ع يتحول الى سلب

Big vector
↓
negative towards the negative

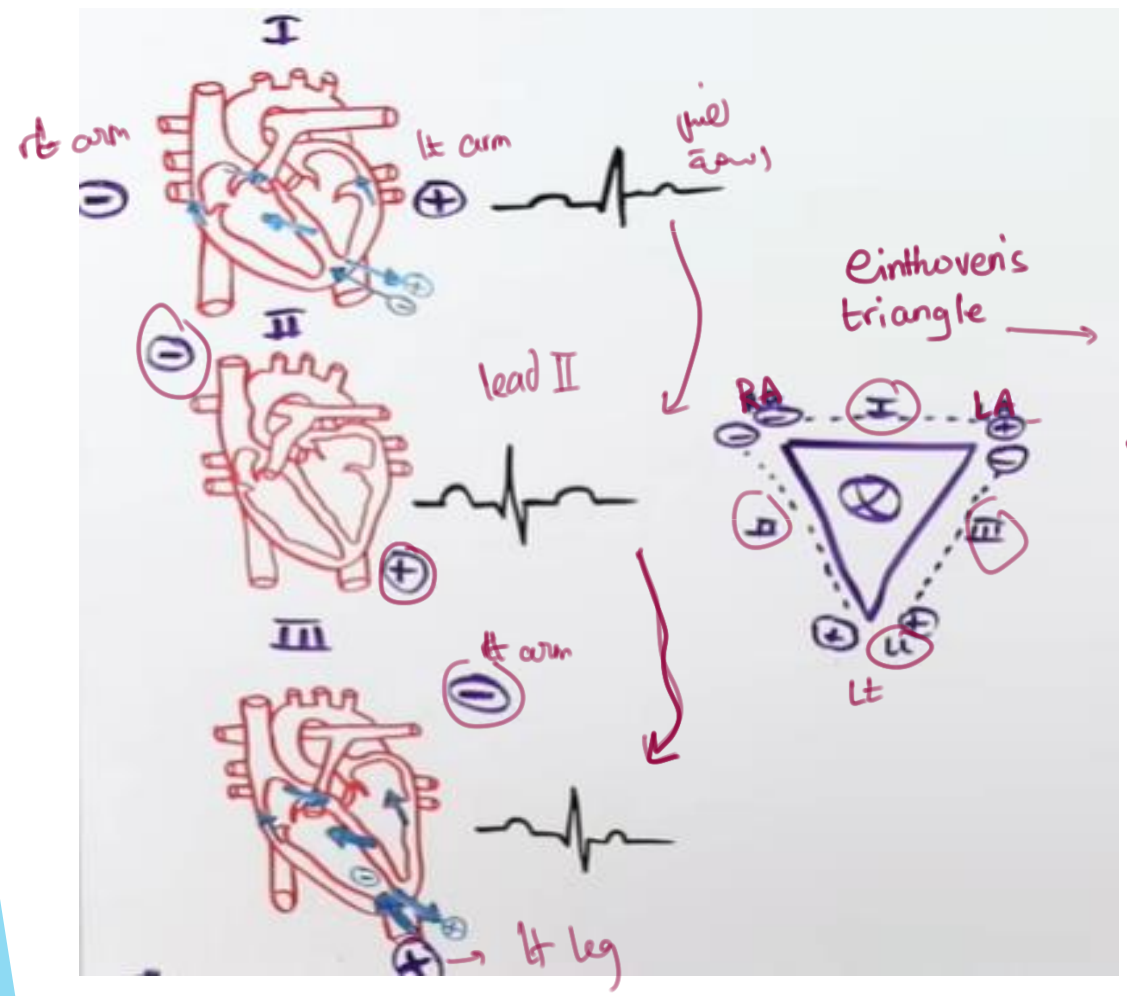
T wave
Positive deflection

isoelectric line 6
خطي صفر السكون

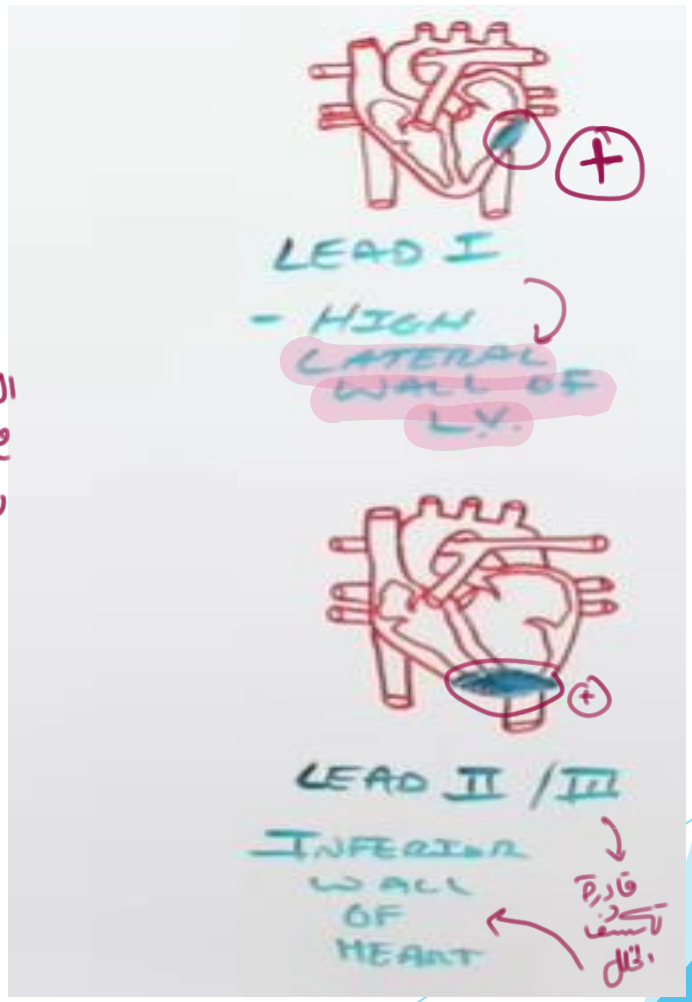
سكون نهائياً
very important clinically
له أهمية بسبب فيه
Steru → MI

Lead I , II, III

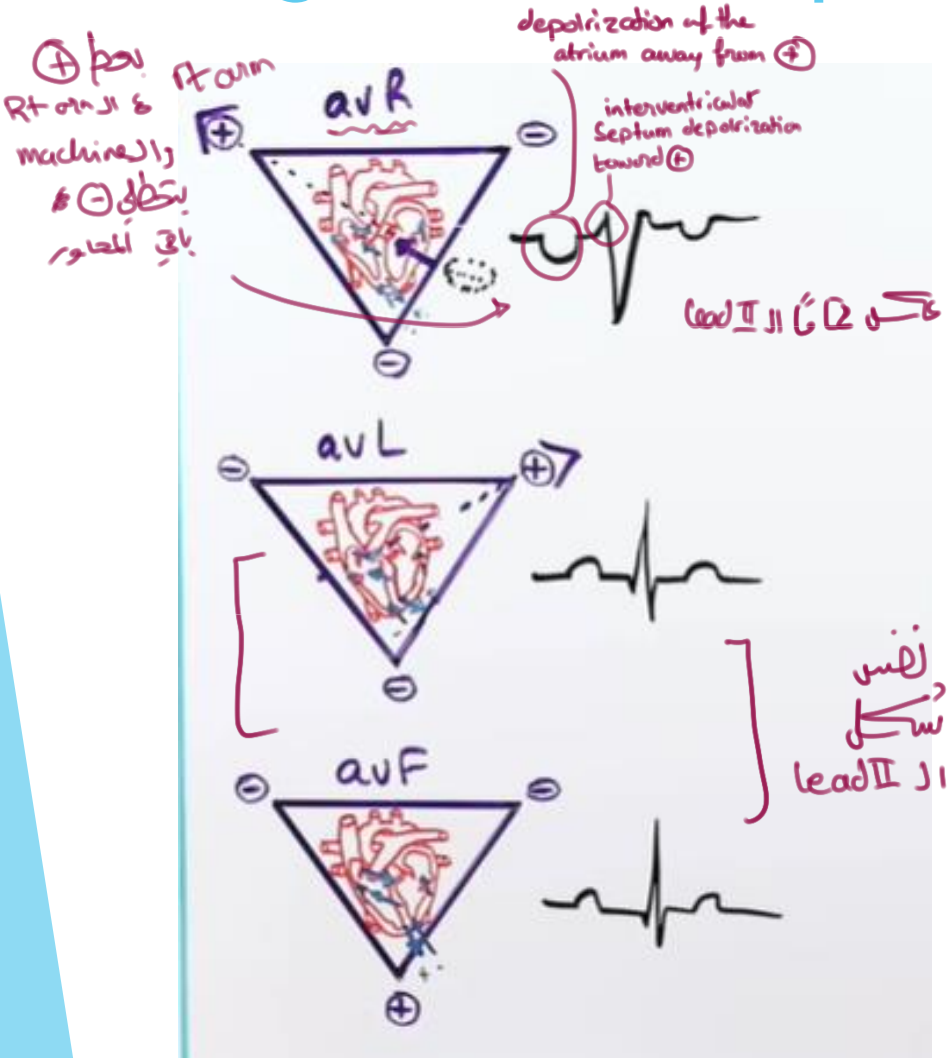
لا أسوف جزء القلب الي عند
 يمكن electrode ⊕



لوجهت
 leads
 مع حاورهم
 مع يطينه
 فلت



Augmented unipolar leads

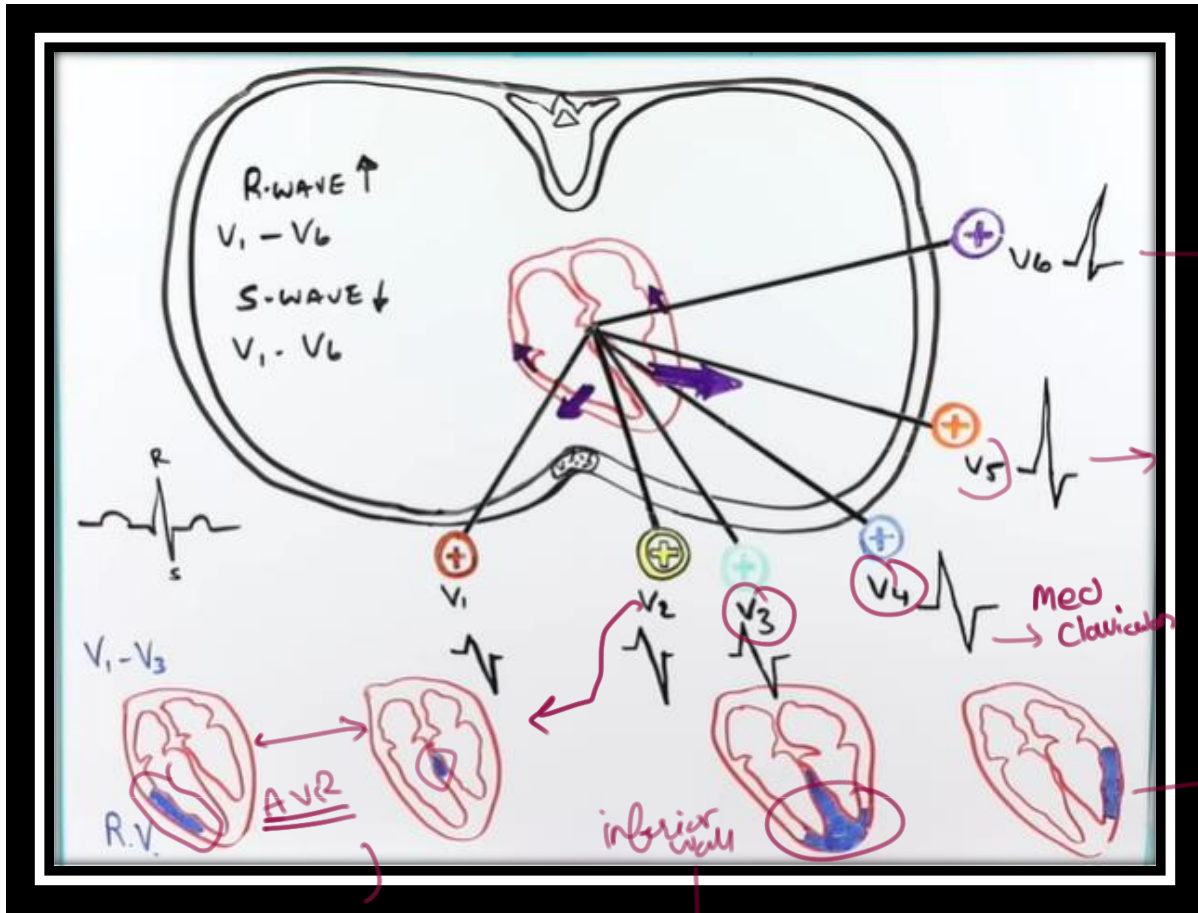


أدق

Precordial leads

unipolar leads

↳ put on chest → to see every part of the heart



also leads I, II, III ⊕
good images &

Armpit

med axillary

Med. Clavicular

V4, V5, V6

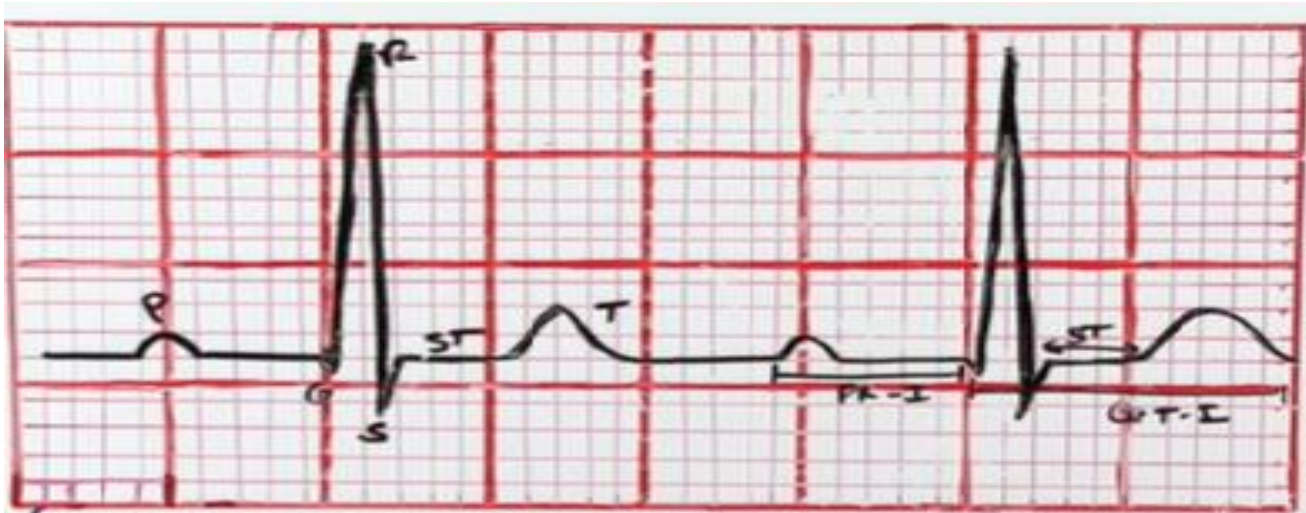
↳ lead I, AVL

lateral wall of ventricle

septal & right wall

lead II, III, AVF

Voltage ↑
time →



LARGE BOX

- * → WIDTH: 5mm = 0.20 Secs
- HEIGHT: 5mm = 0.5 mv

25 SMALL BOXES

- * → WIDTH: 1mm = 0.04 Secs
- * → HEIGHT: 1mm = 0.1 mv

↳ PR-I

↳ 0.20 Secs → NORMAL

↳ QRS

↳ 0.12 Secs → NORMAL

↳ QT-I

↳ < 420ms → Normal

↳ < 440ms → Normal

أقل من
1 large box

أقل من 3 مربعات صغيرة

Leads

II, III, aVF

inferior

I, aVL, V5, V6

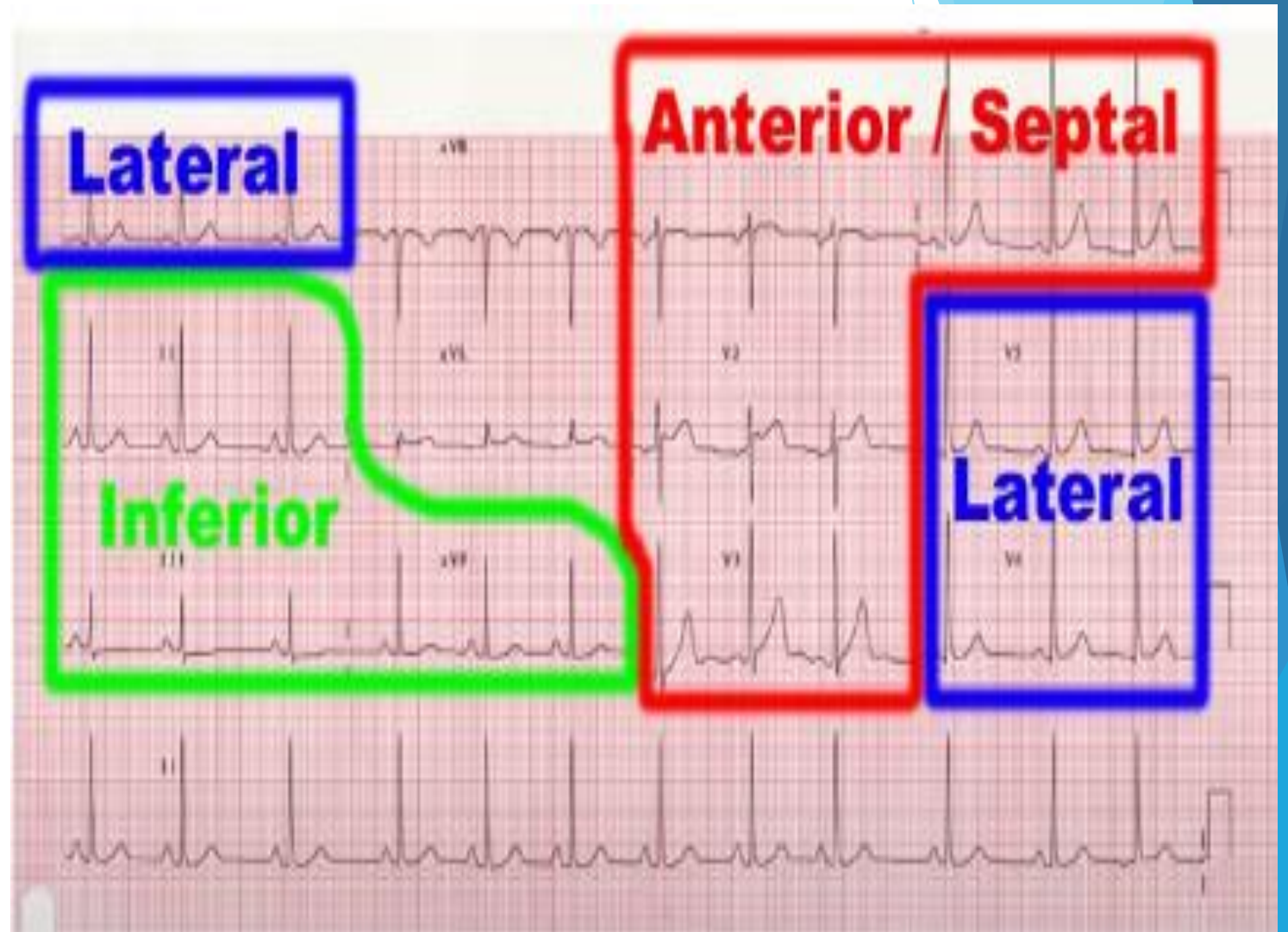
lateral

V1, V2

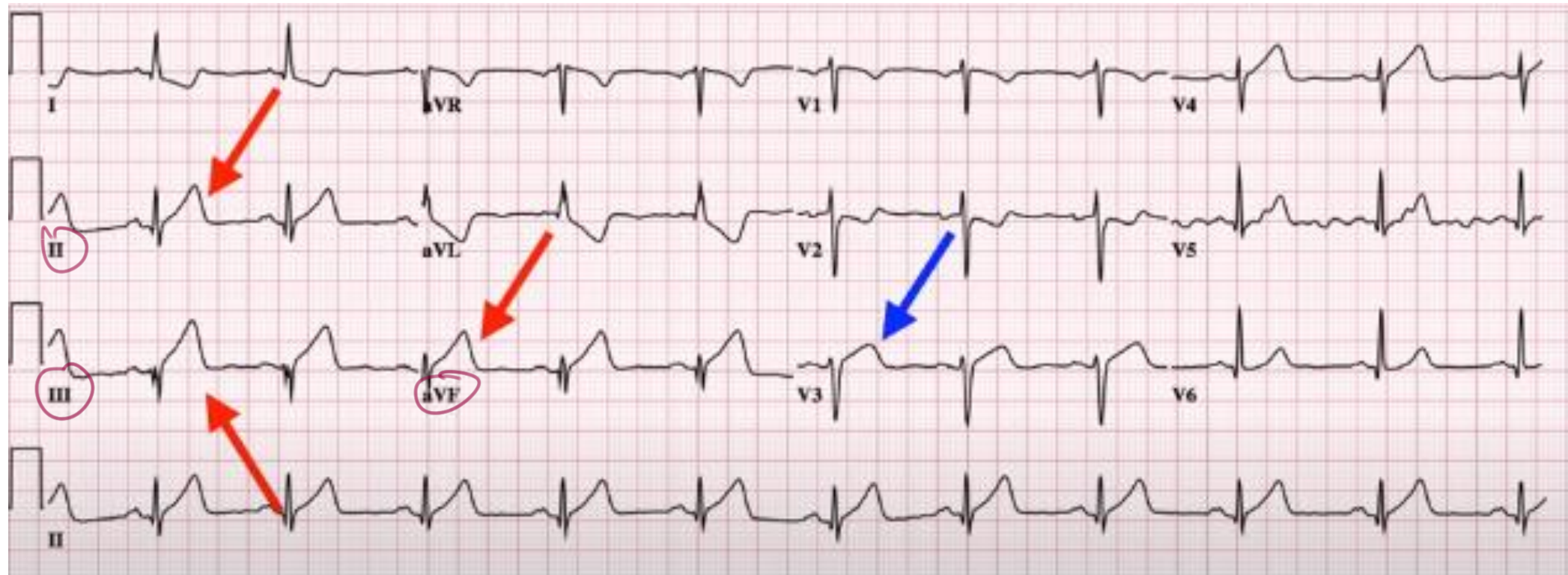
anterior

V3, V4

septal



STEMI \rightarrow ST segments \rightarrow inferior wall



STEMI (inferior leads)