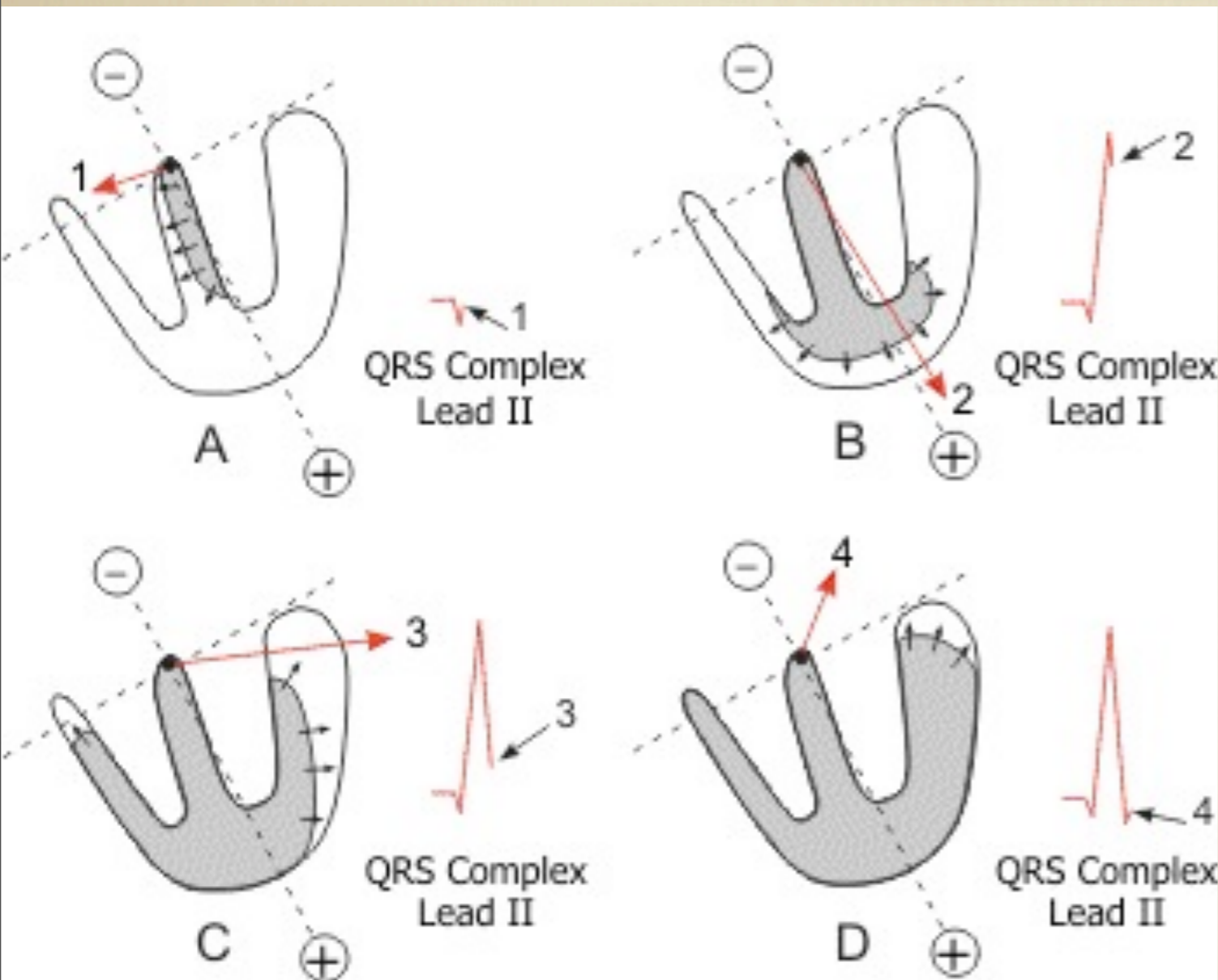


EKG AT REST: QRS COMPLEX(1)



Ask Mish

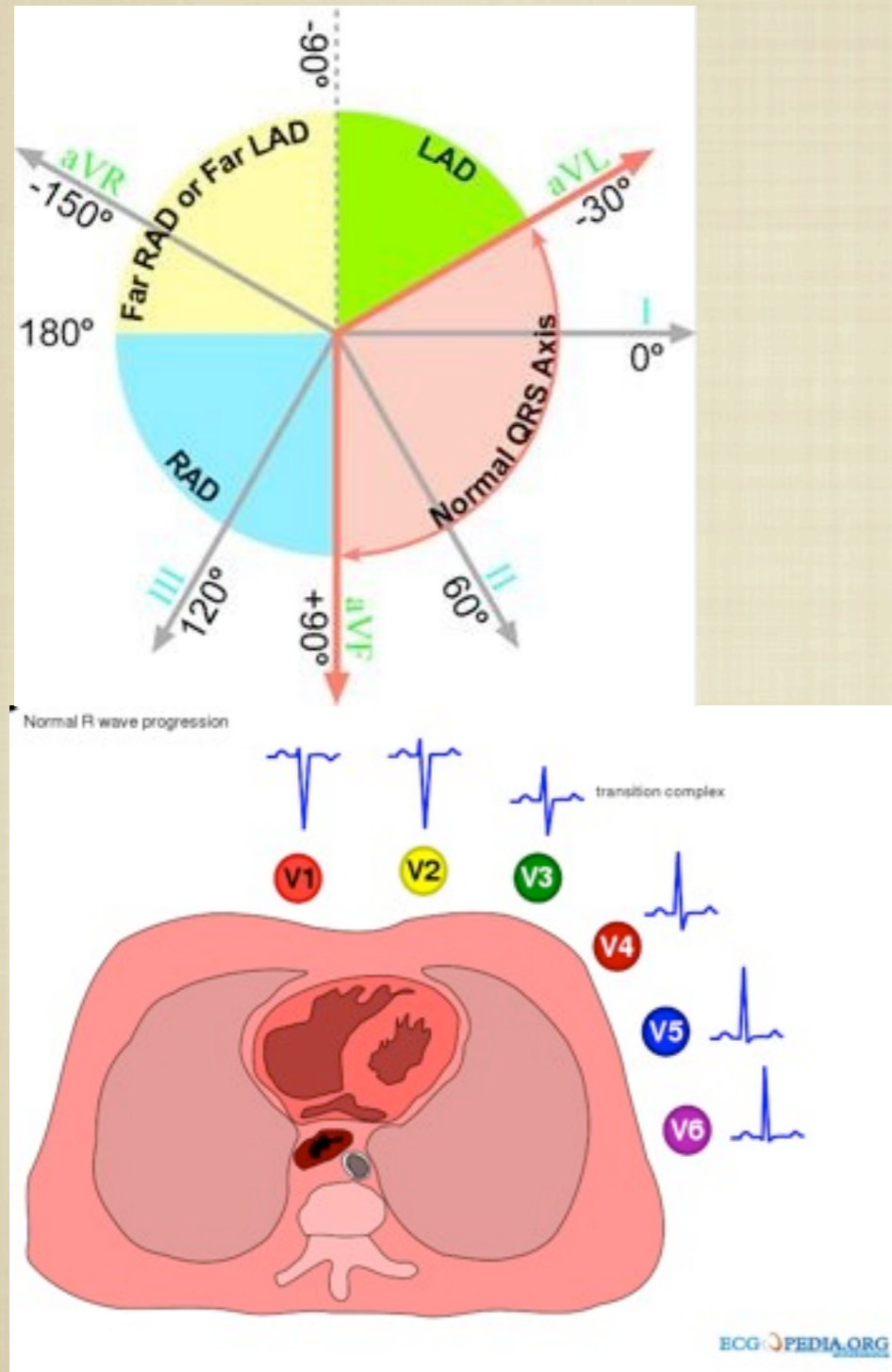


- **Q wave** represents **septal** (wall btw R & L ventricles) **depolarization**. This is the beginning of ventricular depolarization.(1)
- It is propagated from left to right.
- The septal depolarization is initiated by the action potential arrived at the **septal fascicle of left bundle branch (LBB)**
- Q wave appears as a negative deflection in lateral, inferior and anterior leads with an **amplitude < 0.1 mV**
- Sometimes Q wave is not visible on a normal EKG

EKG AT REST: QRS COMPLEX(2)



Ask Mish



- RS represents **VENTRICULAR MUSCLE depolarization**. R is the positive deflection and S the negative one.
- Left Ventricle is more massive than the right one and the average vector points left, anywhere from **-30 to +90 degrees**. So R (positive) waves will be found in the inferior and lateral leads while S(negative wave)in aVR for ex.
- In sagittal plan: **V1 and V2** covers the **R ventricle** while **V5 and V6** the **L ventricle**. So an S wave will appear in the first 2 V leads and an R in the last 2 V leads. V3 and V4 are biphasic and called transition zone.
- The progressively increasing R wave from right to left in the precordial leads is known as **R-wave progression**
- **QRS amplitude >> P wave amplitude** due to much more muscle mass of the ventricles in comparison with the atria generating a greater action potential