

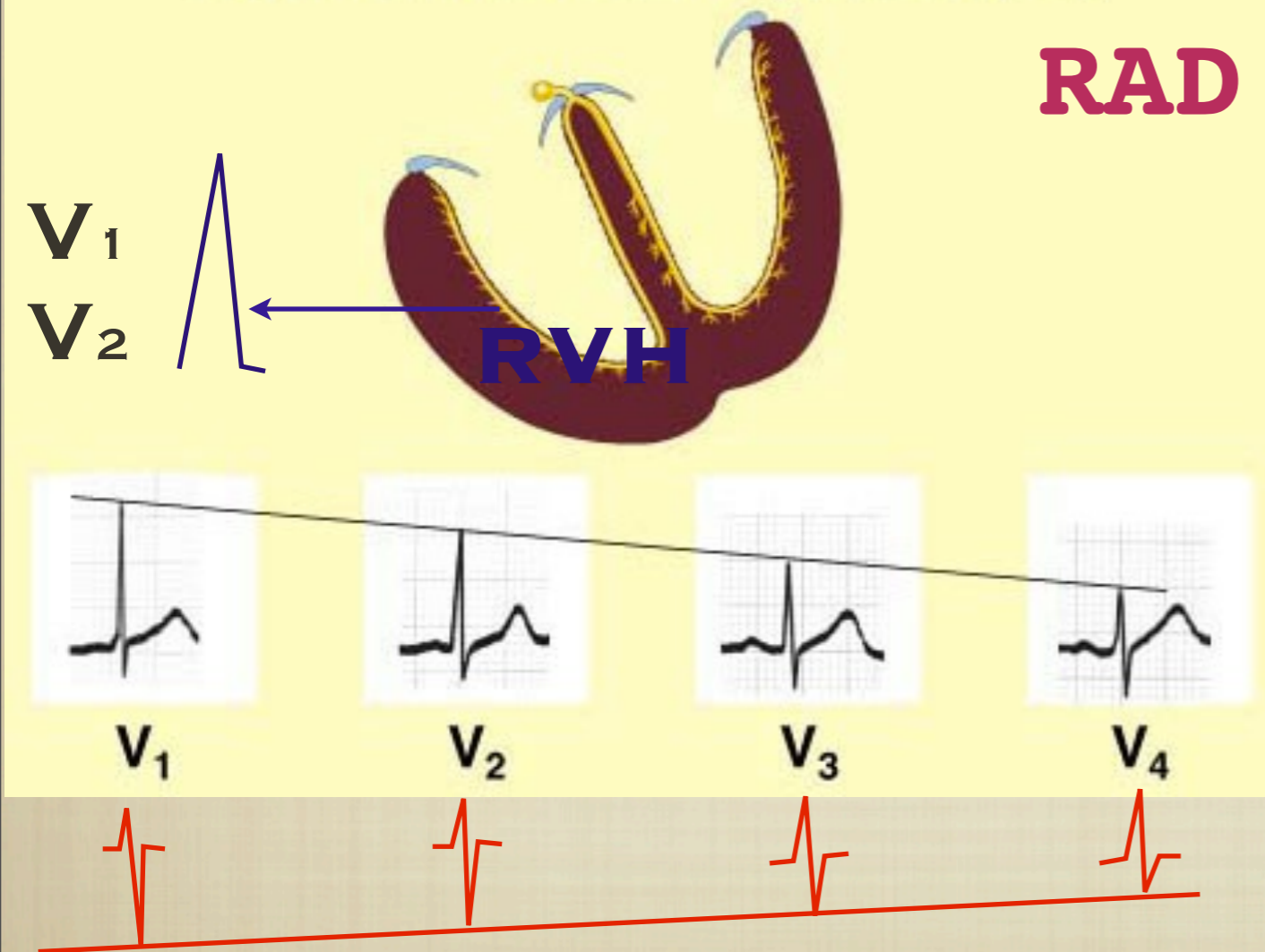
RIGHT VENTRICULAR HYPERTROPHY



Ask Mish

Right Ventricular Hypertrophy

RAD



- In RVH, a big RV depolarization vector due to increased RV muscle mass is pointing toward V1 and V2 leads that covers the RV.
- The result of this vector on EKG is a **high positive R wave in V1 and V2** and deep negative S waves in V5 and V6 and lateral leads. This disrupts the **normal R wave progression** (red on graph) on the EKG, sometimes looking like quite a **reversed R wave progression**.
- Many times, axis is deviated to the right **RAD** in RVH. Other possible findings: **RAE** and conduction problems **RBBB**.
- In **COPD with RVH**, due to overinflated lungs and positive intrathoracic pressure producing a downward displacement of the heart and diaphragm, the characteristic RVH tall R waves in right precordial leads never appear. Instead **small R waves** appear in **right-to-midprecordial leads**. **Low voltage complexes** appear in **all leads**.