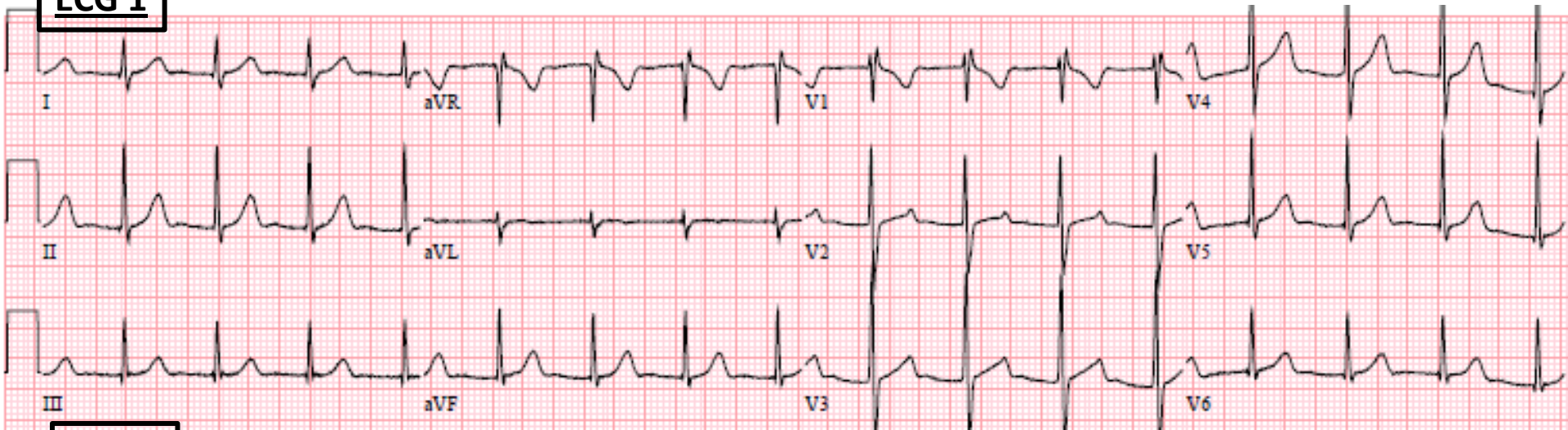


ECG of the Week 8/26/11

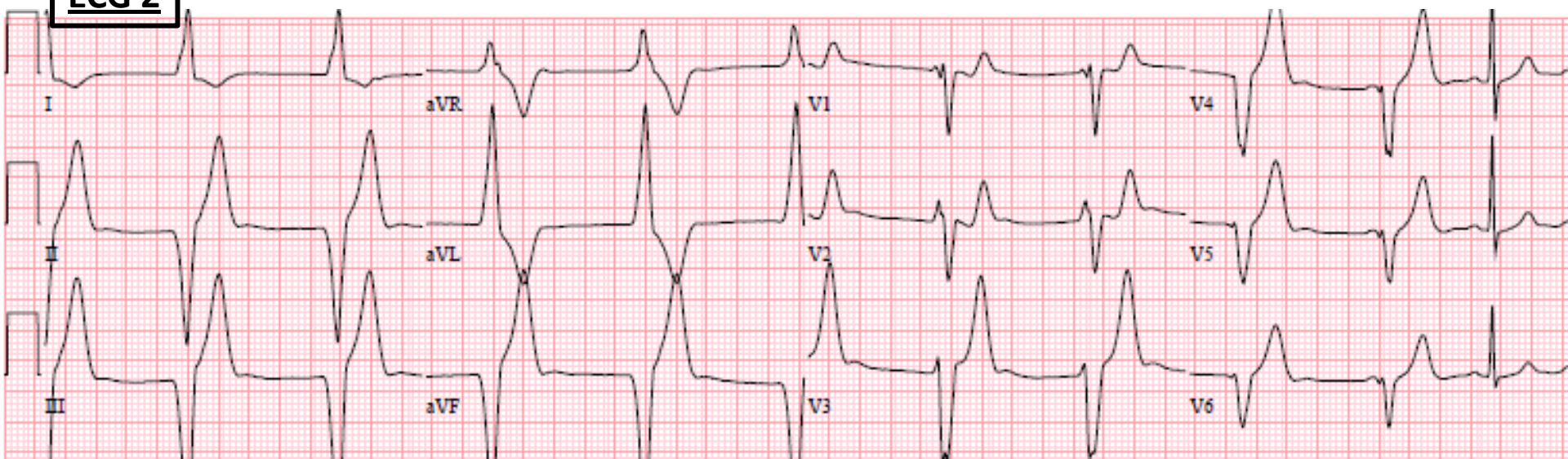
Below you will see two ECG's from different patients.

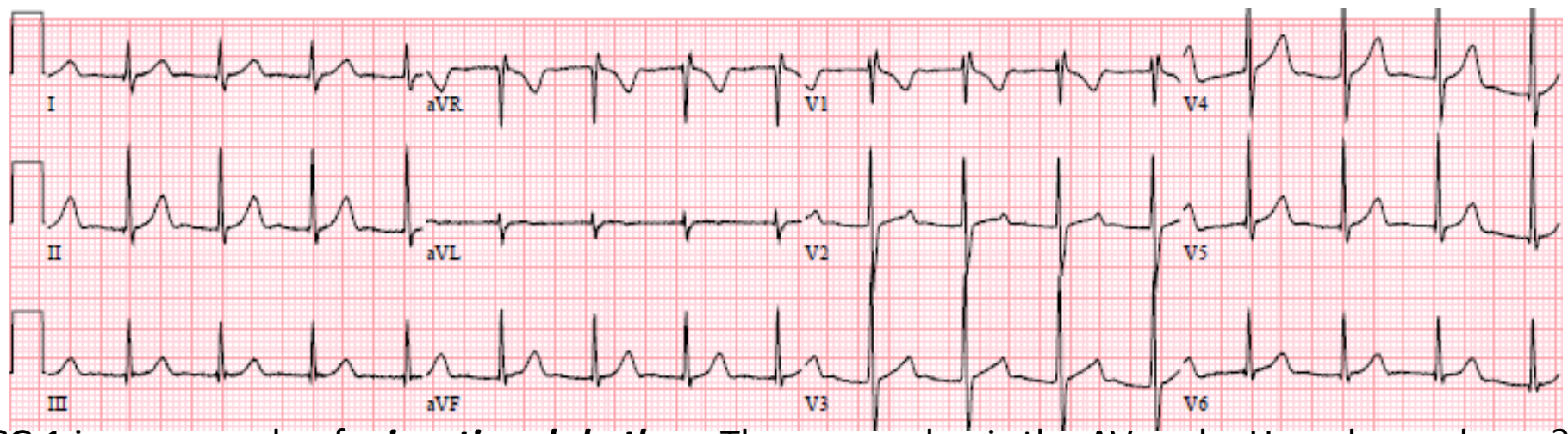
- 1) What tissue or structure serves as the pacemaker for ECG1? For ECG2? (1 point ea)
- 2) How do you know where the pacemaker is for ECG1? For ECG2? (1 point ea)

ECG 1

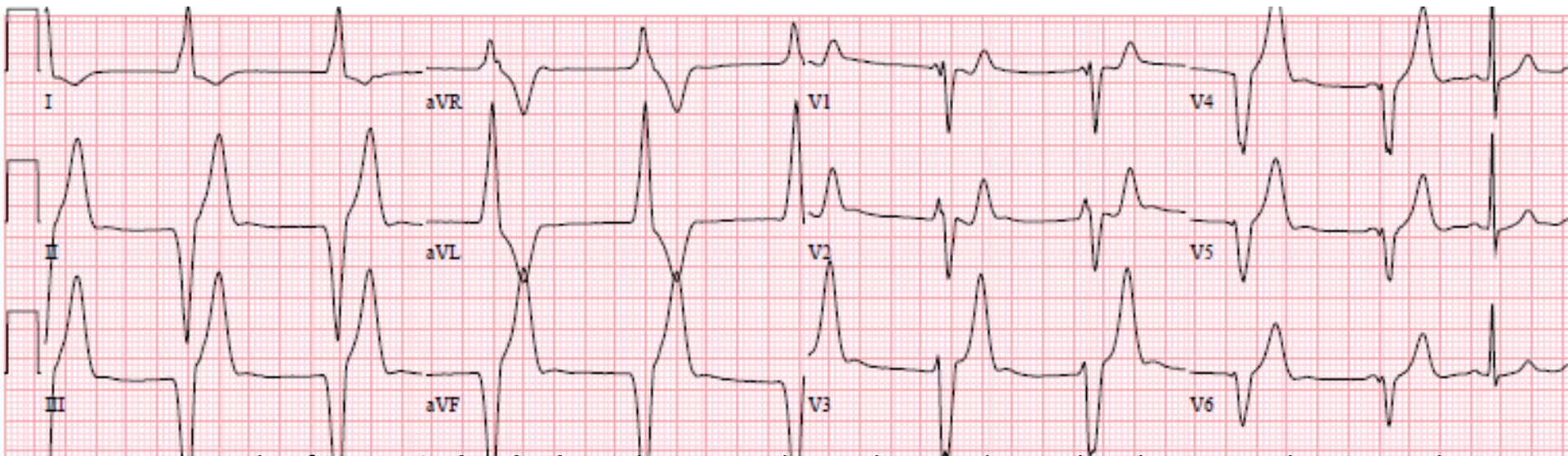


ECG 2





ECG 1 is an example of a **junctional rhythm**. The pacemaker is the AV node. How do you know? Note there are no visible P waves, yet the QRS complexes are **narrow**. A narrow QRS means the His-Purkinje system is being used. The only possible pacemaker is therefore the AV node



ECG 2 is an example of a **ventricular rhythm**. The pacemaker in this case lies within the ventricular myocardium. How do you know? Note there are no visible P waves (except the last beat!), and the QRS complexes are **wide**. This indicates the rhythm doesn't use the His-Purkinje system and therefore must originate in the ventricles. The signal moving through the ventricles moves more slowly, from myocyte to myocyte, stretching out the QRS over time.