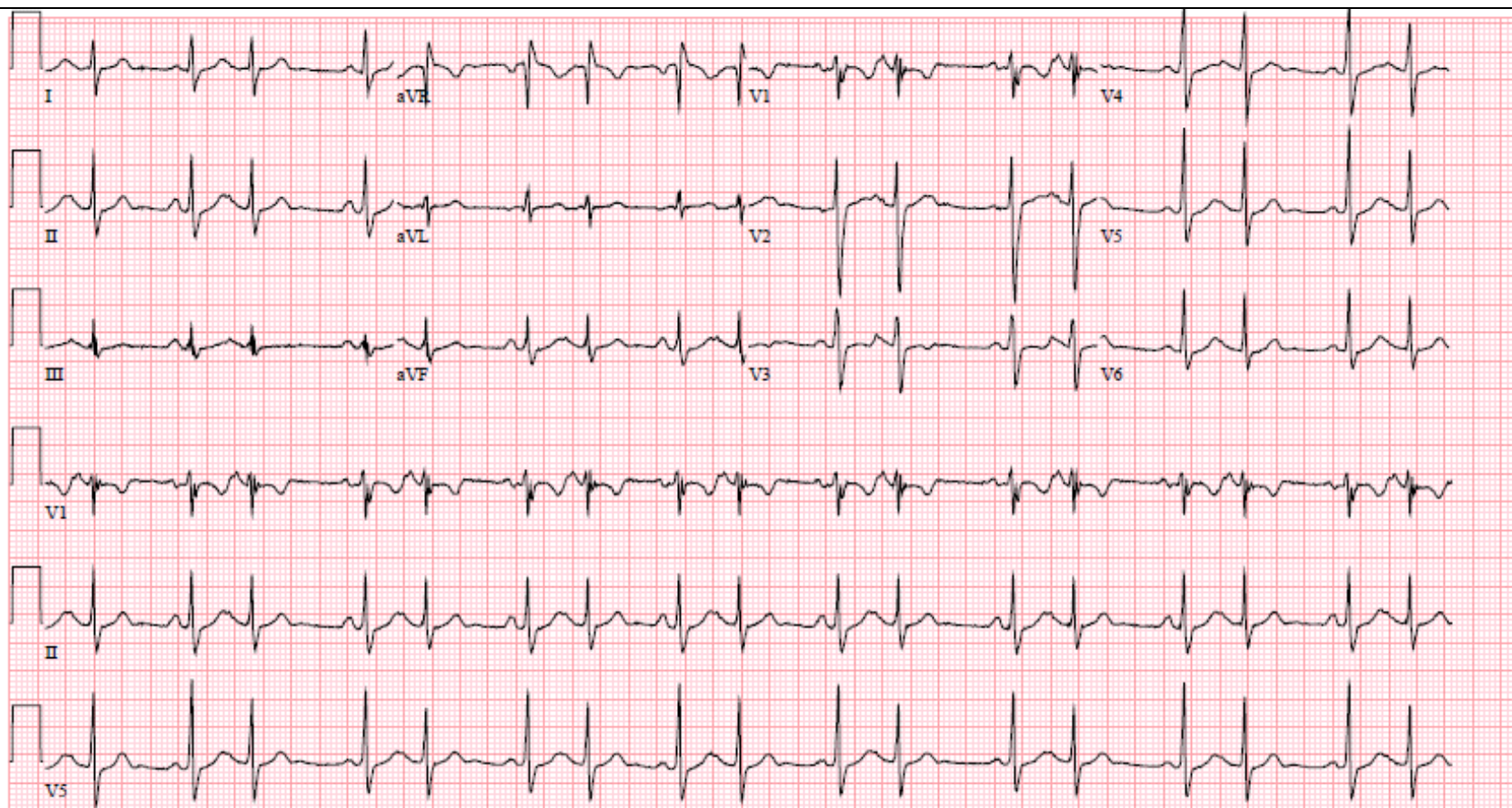


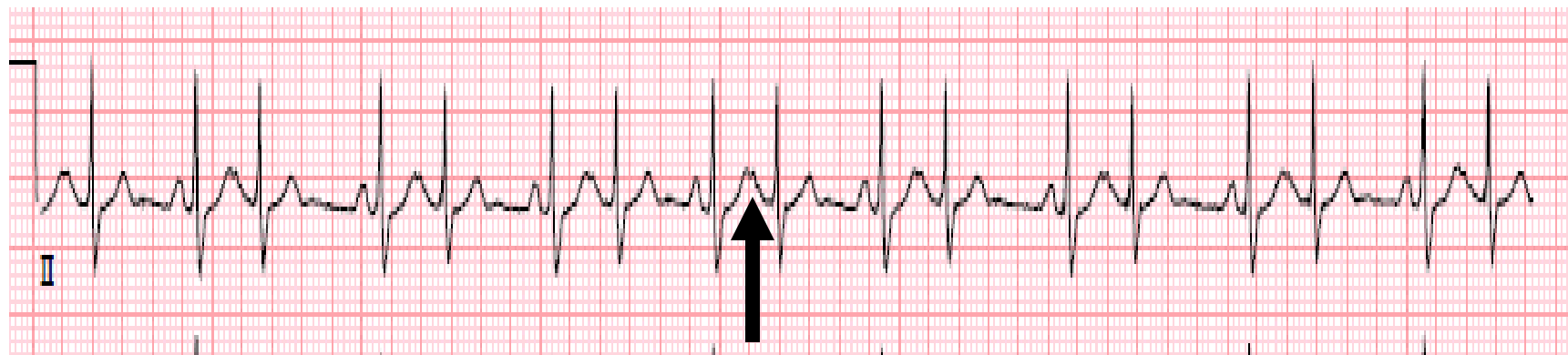
EKG of the Week 6/1/2011

1. What is the rhythm represented on this ECG? (1 point)
2. The patient is asymptomatic, is any treatment required? (1 point)
3. How does this same type of rhythm result in bradycardia either pre or postnatally? (1 point)



EKG of the Week 6/1 Answers

1. Atrial Bigeminy is the name of this rhythm. Note that this is a regularly irregular rhythm that is grouped in couplets. The arrow is pointing to an irregularity in the T wave, which represents the P wave of the next beat. It is coming early, but it is conducted as evidenced by the accompanying narrow QRS complex. This is a premature atrial contraction that happens every other beat, that is in a bigeminal pattern.



2. No treatment is necessary in the asymptomatic patient. Some patients experience palpitations with atrial bigeminy, but in the absence of symptoms or concerns for supraventricular tachycardia, no treatment is required.
3. In the example above, each PAC is being conducted and then there is a compensatory pause as the heart resets. If these early atrial contractions occur during the ventricular refractory period, they may be “blocked” or not conducted. This will result in a ventricular rate that is half of the sinus rate and subsequent bradycardia. This can be seen in fetuses, but it requires fetal echocardiography to demonstrate a normal atrial rate with non-conducted PACs. Typically, no treatment is required *in utero*.