



Courtesy of Dr Stephen Fenton

Pregnant pauses



Dr Stephen Fenton

Dr Stephen Fenton is a cardiologist in private practice with the Sydney Cardiology Group.

CLINICAL SCENARIO

A 32-year-old female school teacher who was born in Indonesia presented after bradycardia was noted on an automatic device used for blood pressure measurement.

A heart rate of 36 was detected while the patient remained asymptomatic. She was known to be approximately 16 weeks pregnant with her first child.

There were no identifiable risk factors. Recent blood tests showed a normal full blood count, biochemistry and thyroid function.

Examination revealed a pulse of 40 bpm, which was regular, and a BP of 130/70 mmHg.

There was also a prominent systolic murmur along the patient's left sternal edge.

Study this patient's ECG (shown above) and answer the following questions:

Q. 1) WHAT IS YOUR DIAGNOSIS?

1. Atrial bigeminy
2. Ventricular trigeminy
3. Ventricular tachycardia
4. Sinus rhythm
5. None of the above.

Q. 2) WHAT WOULD BE YOUR NEXT STEP IN THE MANAGEMENT?

1. Reassurance but consider echocardiography to assess the murmur
2. Holter monitor study
3. Electrophysiology study
4. Commence antiarrhythmic medication such as flecainide
5. Consider permanent pacemaker.

DISCUSSION

This patient is clinically well, asymptomatic and 16 weeks pregnant. The ECG shows ventricular bigeminy with every normal sinus beat being followed by a ventricular ectopic beat.

The correct answer to question one is therefore number 5.

The patient can be reassured. This rhythm is frequently

detected by an apparent bradycardia on a heart rate monitor, with the explanation being that the ventricular ectopic beat is not conducted through to the pulse and therefore not detected. The true heart rate is usually double what the monitor would say in this situation.

The presence of a murmur suggests an echocardiogram should be performed, but in a

pregnant patient this is probably just a flow murmur. The correct answer to question two is therefore no. 1.

A Holter monitor is not likely to yield anything of significance, although it could be considered if the patient were to experience symptoms such as dizziness or light-headedness.

Antiarrhythmic medication is not indicated, and provided the patient is asymptomatic, no further measures are required.

Some lifestyle questions should be addressed, such as ensuring the patient does not have significant alcohol or caffeine intake. Providing the echo is normal, this condition is likely to be benign.