



Bus driver with dizziness



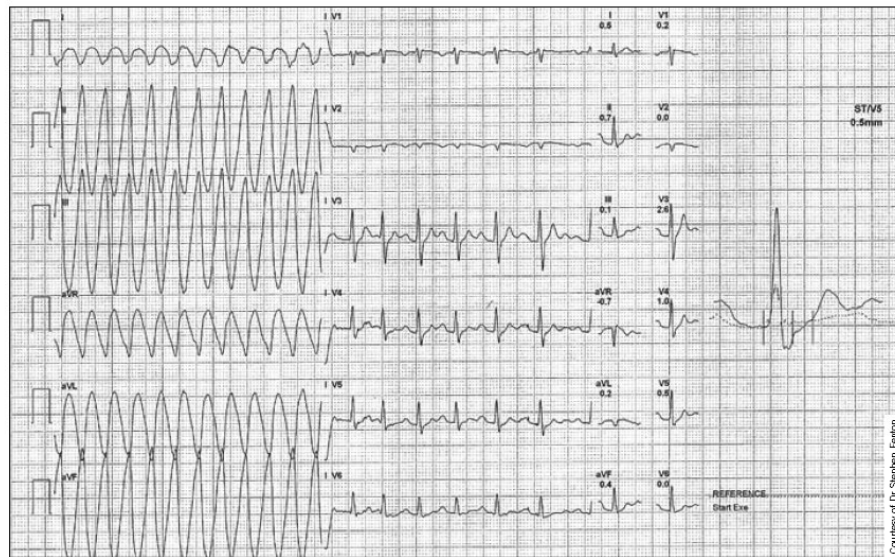
Dr Stephen Fenton

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

A middle-aged man's dizziness and palpitations are concerning, given his job as a bus driver.

A 48-YEAR-OLD bus driver presents with a recent history of intermittent dizziness and mild palpitations.

There have been no episodes of syncope. His dizziness is manifest as profound lightheadedness with certain situations involving mild to moderate effort, such as walking up hills or stairs.



Courtesy of Dr Stephen Fenton

Based on this ECG, which of the following is NOT correct:

1. There is a wide complex tachycardia occurring for the first few seconds which needs to be considered as ventricular tachycardia (VT) until excluded.
2. There is a wide complex tachycardia occurring for the first few seconds and this is possibly supraventricular tachycardia (SVT) with aberrancy.
3. The patient has no real risk factors for underlying obstructive coronary artery disease but should be considered for coronary angiography.
4. Until further notice, the patient should be advised not to drive a bus.
5. Immediate therapy with amiodarone starting with a loading dose and reducing to 200 mg per day would be the best management. If symptoms settle, no further investigations required.

There is no associated chest discomfort or dyspnoea. The patient has no history of hypertension or smoking.

His total cholesterol level was 4.2, with LDL 2.4, when tested previously.

There is no relevant family history, he is not on any medications and he has no significant alcohol or caffeine intake.

On examination, the patient was clinically well, with a BP

reading 130/70 mmHg. His resting ECG was normal.

The patient then underwent a treadmill exercise study. He exercised to a good workload with a satisfactory heart rate and BP response and felt fine during the test.

Two minutes into the recovery period, the patient said that he felt mildly dizzy and the following ECG was recorded. Read the box above and choose

an answer to the question, then read the following discussion.

DISCUSSION

This ECG demonstrates a rapid, regular wide complex tachycardia at a rate of 190 per minute which reverts spontaneously back to sinus tachycardia.

In the context of this patient's history, it is highly likely that this is the cause of the patient's presyncope and palpitations.

A regular wide complex tachycardia like this should be considered to be VT until excluded, but the possibility of SVT with aberrancy can also be considered.

The normal complexes in this case represent sinus tachycardia with no evidence of Wolff-Parkinson-White syndrome (WPW).

This would be another possible theoretical cause for this – that is, SVT in the presence of WPW.

This is a potentially serious abnormality that requires further investigation to exclude the possibility of any underlying ischaemic heart disease, and, despite the absence of risk factors, coronary angiography would be considered indicated.

Prior to a definite diagnosis and effective management, the patient should be advised not to

drive a bus.

Other tests would include an echocardiogram and a full screen of blood testing, including FBC, MBA, TFT and lipids.

In this patient, all of these investigations were normal.

The patient subsequently had coronary angiography which was normal and then an electrophysiology study which demonstrated ventricular tachycardia arising from the right ventricular outflow tract.

This was successfully managed with radiofrequency ablation.

This patient was investigated promptly and effectively and was subsequently cured of his arrhythmia, and there was no necessity or indication for commencing regular amiodarone.

Therefore, no. 5 is incorrect and is thus the right answer to the question.

