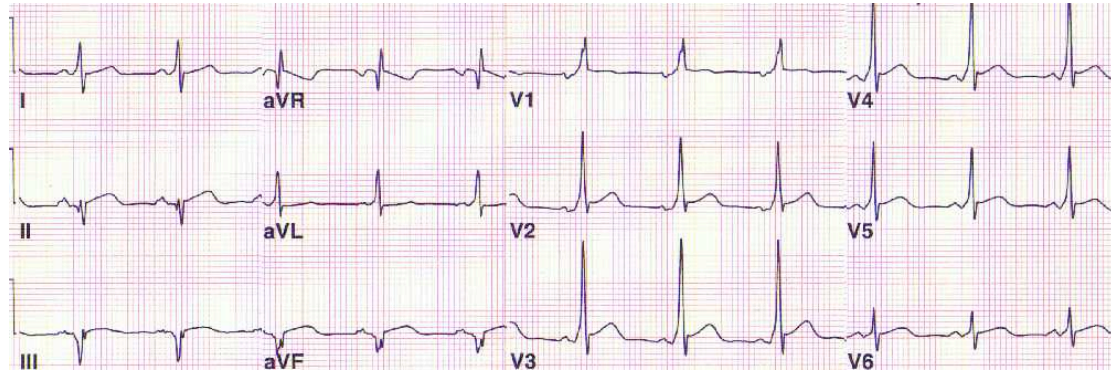


This 39 year old man attends the ED after an prolonged episode of palpitations. He has had frequent episodes in the past of palpitations in the past but has never sought medical advice. On his arrival the palpitations have stopped and he feels fine again.

Comment on the ECG. (2)



*Sinus rhythm rate 90/min*

*L axis deviation*

*Short PR interval*

*Delta waves*

*Dominant R wave in V1*

*½ mark each*

What is the likely diagnosis? (1)

*Wolfe-Parkinson-White syndrome*

Give 4 causes of a dominant R wave in V1 (2)

*Normal in children*

*RVH*

*RBBB*

*Posterior MI*

*Ventricular pre-excitation (WPW)*

*Duchene muscular dystrophy*

*½ mark each*

Give 6 ECG changes associated with hyperkalaemia. (3)

*Small or absent p waves*

*Long PR*

*AF*

*Broad QRS*

*Axis deviation*

*Tall tented T waves*

*Shortened or absent ST segment*

*VF*

*Decreased R wave size*

*½ mark each*



Give 4 causes of a prominent U wave. (2)

*Hypokalaemia*

*Hypocalcaemia*

*Digoxin*

*Thyrotoxicosis*

*Class 1A (procainamide) and class 3 antiarrhythmics (amiodarone, sotalol)*

*Intracranial haemorrhage*

*Exercise*

*Congenital long QT syndrome*

*½ mark each*