

Case study. A first-degree relative of a person with sudden cardiac death

Nick, a 32-year-old man, presents for 'a full check up'. He is very concerned because, 10 days ago, his 25-year-old brother died suddenly while playing soccer. Generally, Nick is fit and healthy; he works as a builder. He smokes five to 10 cigarettes a day and drinks alcohol 'in moderation' (20 to 40g, three times a week). He is not on any medication.

Examination reveals a double apical pulse and grade 3/6 systolic ejection murmur, loudest in the aortic area, that intensifies during the Valsalva manoeuvre or with Valsalva strain. Nick was referred to a cardiologist for echocardiography and was subsequently diagnosed with hypertrophic cardiomyopathy. An ECG is shown below (Figure).

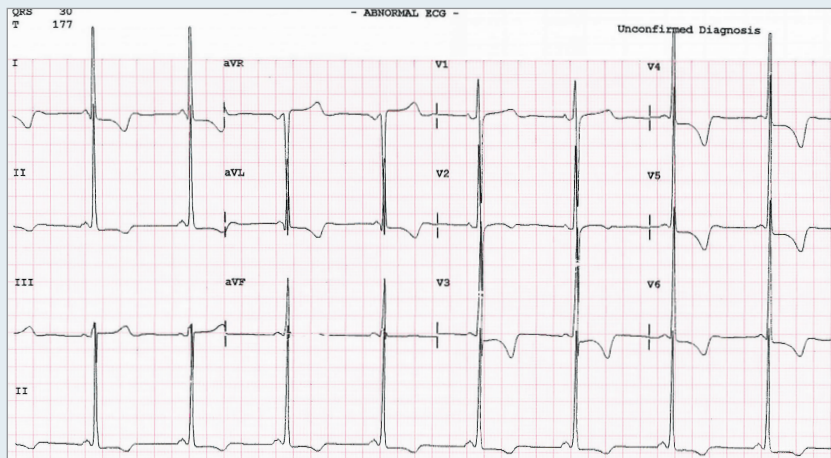


Figure. ECG showing features of left ventricular hypertrophy including high QRS voltage, with S wave in V1 and R wave height >35 mm in V5 or V6 (Sokolov-Lyon criteria) and diffuse ST depression and T wave inversion (most prominent in I and V3 to V6).