Intraventricular conduction defects

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DESCRIPTION

A 62-year-old woman with ischaemic heart disease reported having dyspnoea, chest pain in the left hemithorax, epigastric pain and nausea for 4 weeks. The patient’s blood pressure was 150/90 mm Hg and ejection-fraction on echocardiography was 30–35%. An electrocardiogram showed a regular rhythm, with a widened QRS complex in all leads. There were notched R waves in V5, V6, aVL, II, III and aVF (figure 1). The small initial R waves in V1 and V2 were followed by deep S waves and wide S waves in left precordial leads (V5 and V6). The electrocardiogram showed characteristics of LBBB and RBBB simultaneously and a wide QRS complex; thus, we suspected an intraventricular conduction defect (IVCD). The ECG appearance of the IVCD was difficult to characterise, because IVCD is often the end result of a number of different pathophysiological processes rather than a discrete defect in the conduction system (as usually occurs with RBBB or LBBB).

Figure 1 The EKG of the patient.