

DIAGNOSIS

The short PR interval (0.10 seconds), wide QRS complex (0.12 seconds), and delta waves (best seen in leads II, III, aVF, V1, V3-V6), are features of ventricular preexcitation of the Wolff-Parkinson-White type (WPW).¹

WPW is a notorious mimic of other conditions, especially myocardial infarct and left ventricular hypertrophy. WPW is best known for its association with supraventricular tachycardias which are usually initiated by an atrial premature complex, but can be initiated by ventricular premature complexes. The ensuing atrioventricular reciprocating tachycardia has a reentrant circuit usually characterized by so-called orthodromic conduction down the atrioventricular node, His bundle, and bundle branches, i.e., the normal conduction pathways, with conduction back to the atria via the accessory pathway, and the QRS complex is usually narrow unless the patient has a coexisting bundle branch block.¹ In a minority of cases, conduction is antidromic, i.e., down the accessory pathway with return to the atria retrogradely via the normal conduction system. Under these circumstances, the QRS complex is wide and not typical of block in either bundle branch. Not all patients with WPW-type ventricular preexcitation have tachyarrhythmias,² and thus far this patient has no history of same.

REFERENCES

1. Fisch C, Knoebel SB. *Electrocardiography of Clinical Arrhythmias*. Armonk, NY: Futura;2000:293-313.
2. Goudevenas JA, Katsouras CS, Graekas G, et al. Ventricular pre-excitation in the general population: a study of the mode of presentation and clinical course. *Heart* 2000;83:29-34.

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