A 19 Year Old Girl with Lightheadedness and Palpitations

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A 19 year old patient with a past medical history significant only for recurrent syncope presented to the emergency department after 90 minutes of palpitations, chest tightness, lightheadedness and shortness of breath. Electrocardiogram on admission is shown in Figure 1.

The patient was immediately treated with infusions of procainamide and amiodarone and the tachycardia broke to reveal a sinus rhythm. An electrocardiogram from several hours later is shown in Figure 2.

The patient underwent electrophysiologic study and a trans-septal ablation of a left lateral accessory pathway. The post-procedure electrocardiogram is shown in Figure 3. Interestingly, the delta waves on her initial electrocardiogram (Figure 2) are no longer present, an indication of the success of the procedure. She tolerated the procedure well and was discharged the following day.

In 1930, Louis Wolff, Sir John Parkinson, and Paul Dudley White published a review of 11 patients who suffered from bouts of tachycardia similar to this patient. To this day, their names are still well associated with the condition. ■

References

1. Wolff, L, Parkinson, J, White, PD. Bundle branch block with a short P-R interval in healthy young people prone to paroxysmal tachycardia. Am Heart J 1930; 5:685.

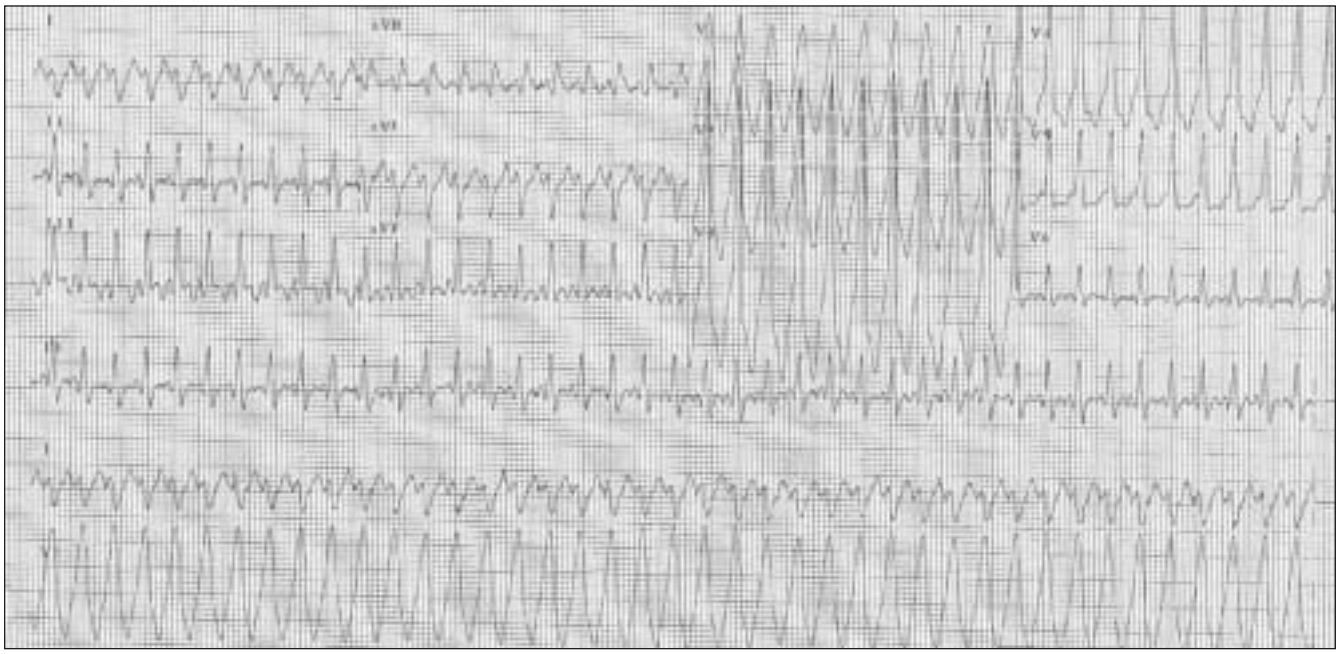

Figure 1. Wide complex tachycardia with a ventricular rate of approximately 250.

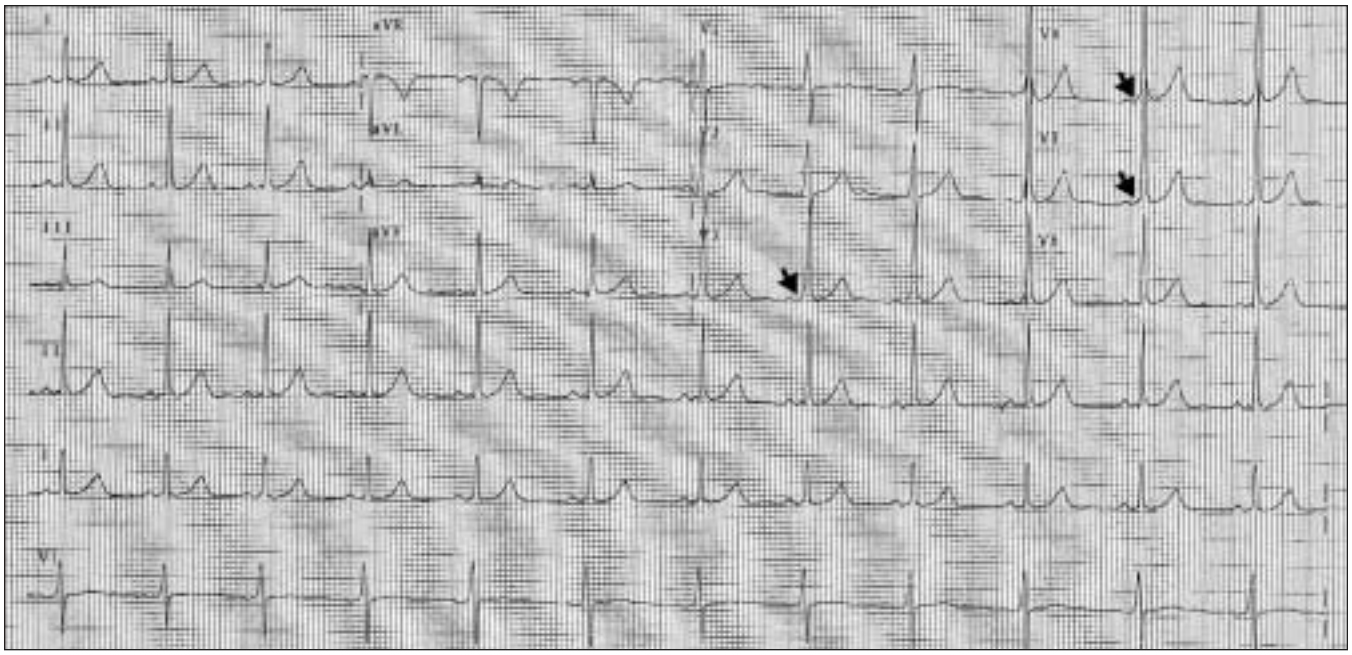

Figure 2. The rhythm is regular and initiated by the sinus node. There are slightly shortened PR intervals and the QRS has a slurred upstroke in leads V3-V5 (arrows).

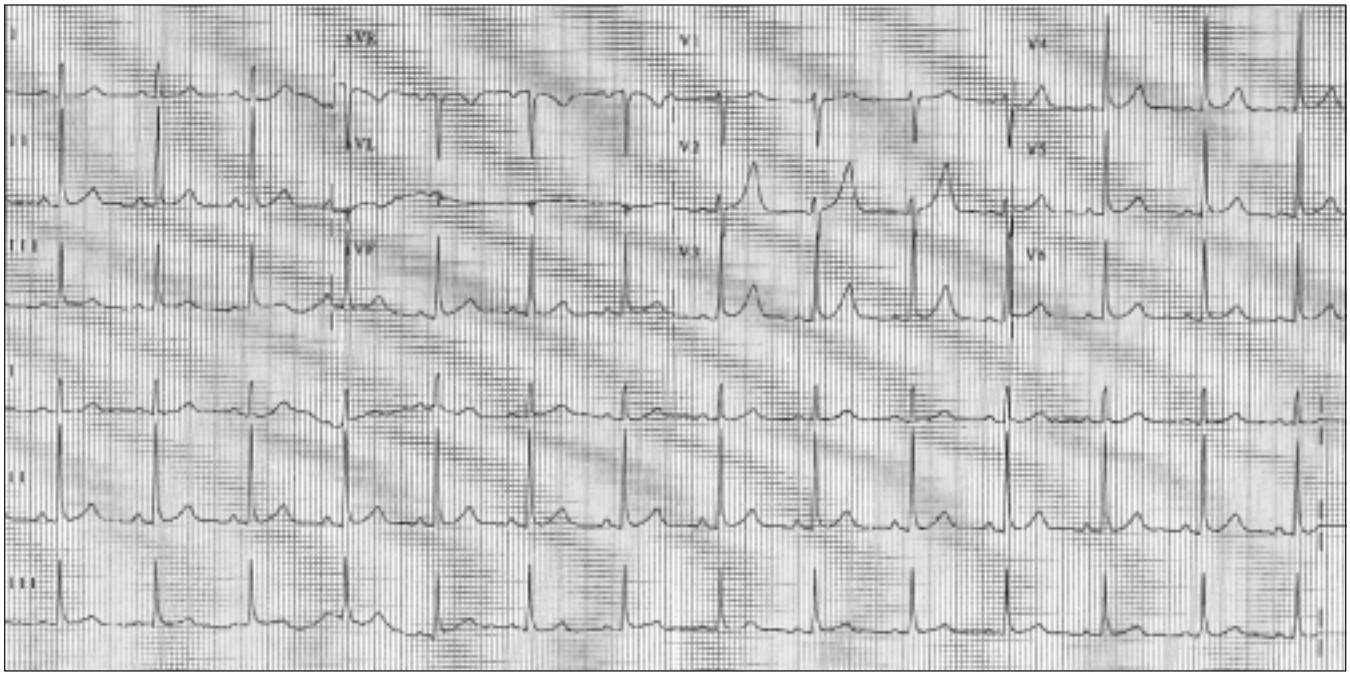

Figure 3. Post ablation EKG. Note the disappearance of the delta waves present in Figure 2.