Determine the following:

Rhythm: ________________________________
Rate: _________________________________
P waves: _______________________________
PR interval: ____________________________
QRS complex: _________________________

What’s your interpretation?

[Answers on next page]
Name that strip: Answers

Second-degree AV block, Mobitz type II: Identifying ECG features

Rhythm: Regular

Ventricular: Usually regular but may be irregular if AV conduction ratios vary

Rate: atrial: That of the underlying sinus rhythm

P waves: Sinus; two or three P waves (sometimes more) before each QRS complex

PR interval: Consistent; may be normal or prolonged

QRS complex: Normal if block is located at the level of bundle of His; wide if block is located in bundle branches

Second-degree atroventricular (AV) block, Mobitz type II is usually associated with an anterior wall myocardial infarction and, unlike Mobitz I, is not the result of increased vagal tone or drug toxicity. Other causes include acute myocarditis and degeneration of the electrical conduction system seen in older adults.

The patient’s response to Mobitz II is usually related to the ventricular rate. If the ventricular rate is within normal limits (rare), the patient may be asymptomatic. More commonly, the ventricular rate is extremely slow, cardiac output is decreased, and signs and symptoms are present [hypotension, shortness of breath, heart failure, chest pain, or syncope].

Mobitz II is less common but more serious than Mobitz I. Mobitz II has the potential to progress suddenly to third-degree AV block or ventricular standstill (asystole) with little or no warning. A 2:1 conduction ratio is common with Mobitz II (two P waves to each QRS complex).

If the ventricular rate is slow and the patient is symptomatic with severe signs and symptoms related to the slow heart rate, Advanced Cardiovascular Life Support guidelines for clinically unstable bradycardia with a pulse (atropine, transcutaneous pacing, epinephrine infusion, and dopamine infusion) should be followed.

DOI:10.1097/01.CCN.0000660404.68435.9c