

Epigastric Pain, Vomiting, and Cardiac Arrhythmias



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A woman with epigastric pain and nausea had atrioventricular block confined to episodes of vomiting. © 2019 Elsevier Inc. All rights reserved. (Am J Cardiol 2019;124:653–654)

Case Report

A 60-year-old, morbidly obese woman with systemic arterial hypertension, diabetes mellitus, and chronic kidney failure came to the hospital with epigastric pain and nausea. She was admitted and placed on telemetry. Rhythm strips

were recorded. Many of these showed normal sinus rhythm and sinus tachycardia (Figure 1). When she was vomiting, however, the strips showed varying degrees of atrioventricular block, including Wenckebach-type second degree, 2:1 second degree, and high-grade A-V block, some of which may be third degree block (Figure 2). The patient's transthoracic

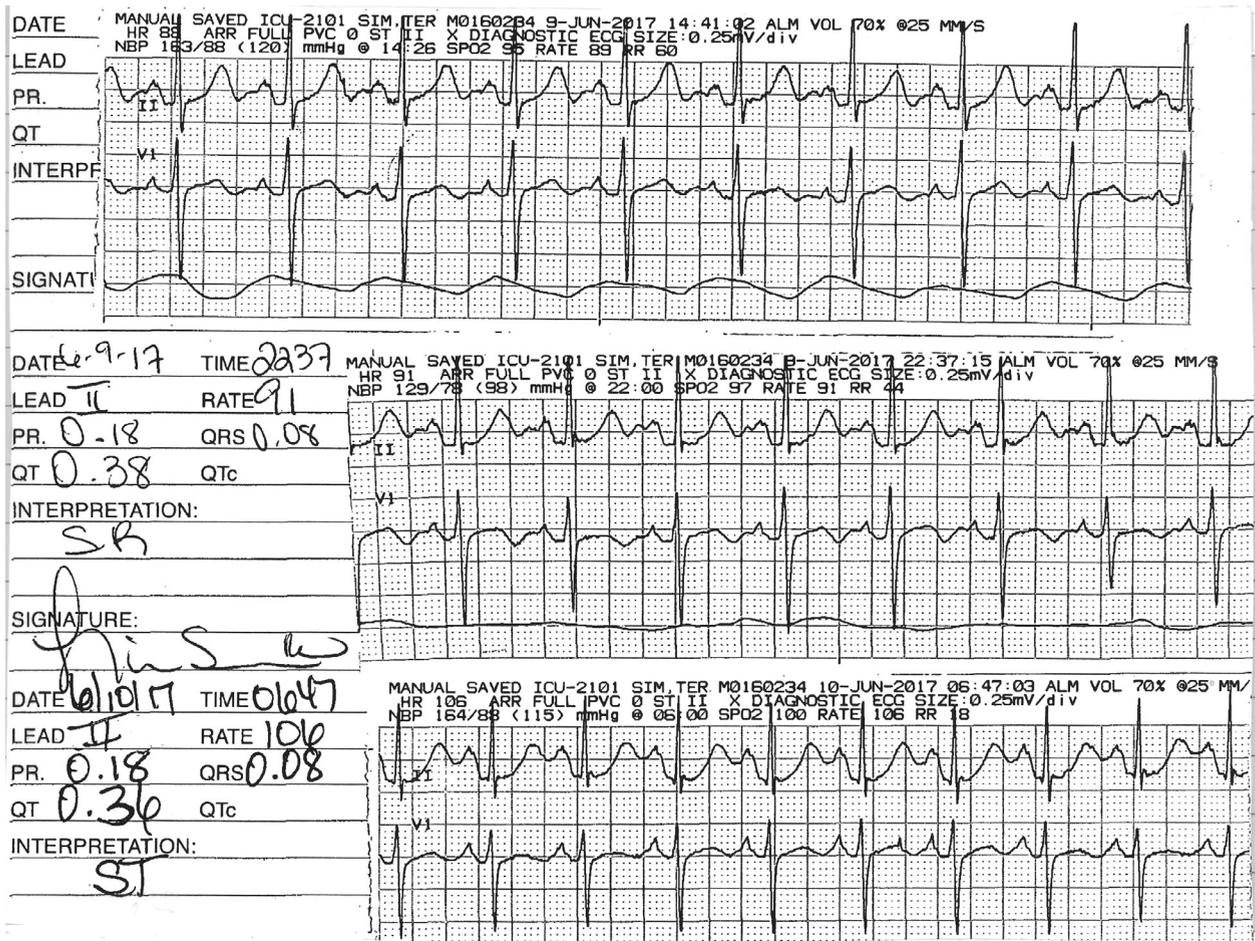


Figure 1. Rhythm strips: When the patient is not vomiting, the cardiac rhythm is normal sinus rhythm or sinus tachycardia.

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echocardiogram showed left ventricular hypertrophy and normal left ventricular systolic function.

Not all atrioventricular block is due to heart disease. Increased parasympathetic tone may cause atrioventricular block,^{1,2} and nausea and vomiting are not rare causes of this kind of increase in parasympathetic tone. Also, highly conditioned runners and swimmers often have increased parasympathetic tone at rest which may result in sinus



Figure 2. Rhythm strips: When the patient is vomiting, there are varying degrees of atrioventricular block, some of it high grade A-V block.

bradycardia, sinus pauses, or atrioventricular block.^{3,4} Treatment of the causes of the nausea and vomiting cures that form of A-V block, and physical activity increases the trained athlete's heart rate.⁵ None of these folks needs a pacemaker.

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