

# HOSPITAL PHYSICIAN®

## FAMILY PRACTICE BOARD REVIEW MANUAL

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## Cardiac Arrhythmias and Syncope

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**Cover Illustration by Christie Grams**

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#### INTRODUCTION

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Syncope is the sudden transient loss of consciousness and postural tone followed by spontaneous recovery of both. Caused by global, reversible reduction of cerebral blood flow, syncope occurs relatively frequently, accounting annually for approximately 3% of visits to emergency departments and 1% to 6% of general hospital admissions in the United States.<sup>1-8</sup> These figures, however, most likely underestimate the incidence of syncope, because many persons who experience a single syncopal event might not seek medical attention. Recurrences are common, involving approximately 30% of cases.

A thorough evaluation, including a detailed review of patient history, a physical examination, and an ap-

propriate diagnostic work-up, is mandatory when syncope is recurrent, is associated with physical injury, occurs in the setting of organic heart disease, or occurs in individuals with high-risk (eg, pilots) or high-profile (eg, competitive athletes) occupations. **Table 1** summarizes possible causes of syncope. Frequently, more than one cause might be responsible for the clinical picture in a given patient. For example, syncope associated with supraventricular tachycardia can also have a neurally mediated reflex vasodilatation component.<sup>9</sup> Similarly, syncope associated with valvular stenosis or hypertrophic cardiomyopathy can result not only from inadequate forward flow but also from concomitant neurally mediated reflex vasodilatation or ventricular arrhythmias, especially in cases of hypertrophic cardiomyopathy.

This manual will discuss the various types of syncope, focusing on the necessary steps in their diagnosis and