Syncope Statement Puts Cardiac Evaluation First

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Contributing Writer

A new scientific statement from the cardiology community on the evaluation of syncope could either win nods of acceptance or raise eyebrows with its support for echocardiograms and stress tests and its caution against tilt table testing.

The American Heart Association/American College of Cardiology Foundation Scientific Statement on the Evaluation of Syncope—the first such statement on syncope issued by the organizations—reiterates some well-established findings, chiefly that most cases of the often-vexing problem have a cardiovascular cause. It emphasizes the importance of promptly ruling out structural heart disease and ischemia, as well as less common causes associated with sudden death.

The statement lays out a diminished role, however, for tilt table testing, saying that "serious questions about the sensitivity, specificity, diagnostic yield, and day-to-day reproducibility of tilt table testing exist."

The statement emphasizes promptly ruling out structural heart disease and ischemia, as well as less common causes of syncope linked to sudden death.

Tilt table testing has traditionally been used as an aid in establishing the diagnosis of neurocardiogenic syncope, and according to lead author Dr. S. Adam Strickberger, "some … may feel the tilt table test was devalued" in the new statement.

"But in general, I think there are a lot fewer tilt table tests ordered by electrophysiologists today … and it's fair to say there is a smaller role for the tests than there would have been 10-15 years ago," Dr. Strickberger said in an interview.

The 11-page statement, which the AHA and ACC Foundation issued in collaboration with the Heart Rhythm Society and which was endorsed by the American Autonomic Society, was published in February (J. Am. Coll. Cardiol. 2006;47:473-84).

Although the document does not offer guidelines per se, it features a simple flowchart for the "diagnostic approach" to patients with syncope and comments on the role of various tests.

Its creation was driven by the recognition that syncope "can herald life-threatening diseases" and that "there are patients who are not managed appropriately," said Dr. Strickberger, director of arrhythmia research and professor of medicine at Georgetown University, Washington. "We wanted a practical document."

Most important, the statement says, the evaluation of syncope should include a front-line assessment for structural heart disease and ischemia. Less common causes that are associated with sudden death, including Wolff-Parkinson-White syndrome and inherited cardiac ion channel abnormalities, should be excluded early. "The primary purpose of the evaluation … is to determine whether the patient is at increased risk for death," the statement says.

In most patients, the cause of syncope can be determined "with great accuracy" from a careful history, physical exam, and ECG. Echocardiograms, exercise tests, and ischemic evaluations fall on the next tier.

The statement says that "an echocardiogram is a helpful screening test if the history, physical examination, and ECG do not provide a diagnosis or if underlying heart disease is suspected."

"Most of the people on the writing group have a fairly low threshold for the echocardiogram and stress test, which may represent some shift (in thinking)," Dr. Strickberger said.

The statement includes a section on the elderly, mentioning that up to 30% of falls in this population may be due to syncope, and that orthostatic hypotension is the cause of falls in up to a third of elderly patients.

Carotid sinus hypersensitivity is an underrecognized cause of syncope in the elderly, the statement says, and "neurally mediated causes remain a frequent mechanism of syncope in the elderly and may be underestimated because of an atypical presentation."

The statement says that "particular emphasis (in the elderly) should be given to

the impact of polypharmacy, orthostatic intolerance, autonomic dysfunction, and carotid sinus hypersensitivity."

The greatest challenges with syncope evaluation can lie with the patient, of any age, who has a normal general workup and cardiac examination. Here, Dr. Strickberger said, the key lies in determining the "malignancy" of the episode and adjusting the intensity of the evaluation accordingly.

Episodes that occur with little or no warning and that result in a significant injury may warrant other tests, such as electrophysiologic testing—which has a low yield and is not routinely recommended—and the tilt table test, Dr. Strickberger said.

In general, however, the tilt table test provides little useful information, the statement points out. In patients who have no evidence of ischemia and a structurally normal heart, "the pretest probability that the diagnosis is neurocardiogenic syncope is high, so heads-up tilt table testing contributes little to establishing the diagnosis."

In a patient who has an otherwise normal evaluation, the statement explains, "the most likely diagnosis" after a negative tilt table test "is still neurocardiogenic syncope." ■

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