

CORRESPONDENCE

Patients With Syncope in a German Emergency Department: Description of Patients and Processes

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Consider European Guidelines for Syncope

Regrettably the authors have made several mistakes relating to the European guidelines for the diagnosis and management of syncope (1), which suggest that the reported results (many additional diagnostic procedures, low diagnostic yield) were achieved by using guideline conform treatment. They claim that the recommended basic diagnostic criteria for the emergency department were carried out for nearly all patients with syncope. Basic diagnostic procedures include a careful medical history, physical examination including blood pressure and pulse measurements taken in a supine position and for a minimum of 3 minutes while standing up (“orthostatic testing”), and a 12-lead ECG. Orthostatic testing was used in only 14.5% of cases. A careful history would have prompted for characteristics preceding the syncope—such as vegetative signs (sweating, sensation of warmth) or circumstances that might act as triggers, such as standing in warm rooms—which reliably enable the conclusion of a vasovagal mechanism. The guidelines include this type of “signposting” information from the medical history, enabling a diagnosis of vasovagal syncope often even without further tests. Taking a thorough history would certainly have diagnosed more than just 10.4% of cases of vasovagal syncope. Furthermore, specific additional diagnostic tests that are indicated in suspected vasovagal syncope without confirmatory basic diagnostic criteria (tilt table test, carotid sinus massage) were not carried out at all (or not mentioned in the article). They would probably have helped clarify further cases of syncope.

The European guidelines list only three categories of syncope: vasovagal syncope (referred to as reflex syncope), orthostatic hypotension, and cardiac syncope. Güldner and colleagues refer to these guidelines, but, without offering any further explanation, they describe two further categories: neurological syncope and psychogenic syncope. This will inevitably cause confusion in those who believe themselves on safe ground, in firm knowledge of the guidelines. Perhaps the authors meant epileptic, cataplectic, or dissociative (psychogenic) attacks. These are, however, by definition not the same as syncope.

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Unanswered Questions

What is necessary? What is superfluous? One in three persons will experience syncope. Other causes of brief loss of consciousness need to be differentiated: brain stem ischemia, epileptic seizures, metabolic causes, dissociative attacks (1). Drop attacks are not a type of syncope either. In English speaking countries, the established term is “transient loss of consciousness.” In neurogenic syncope, distinction is made between neurocardiogenic syncope, orthostatic hypotension, and postural orthostatic tachycardia syndrome (2). Further differentiation is needed for cardiogenic syncope and hyperventilation syncope. The uncritical classification of causes of syncope into “neurological syncope” and “psychogenic syncope” is unsatisfactory for neurologists as well as being erroneous (3). We refer to “cardiogenic”, not “cardiological,” syncope. Terms such as “psychogenic” are of no help. We should demand complete clarity about which terms to use, which enables a diagnostic classification that is based on pathophysiology. Basic diagnostic criteria include a medical history and third-party medical history, physical examination, a 12-lead ECG, and a Schellong test. Simply measuring blood pressure in a supine and standing position is the most helpful test, but in the study it was conducted least often, at 14.5%. The statement “the recommended basic diagnostic criteria for the ED [emergency department] were carried out for nearly all patients” lacks a foundation. Further to a detailed medical history, these simple examination techniques often lead the way. Superfluous diagnostic tests, such as computed tomography scanning (29%) can be omitted altogether. Pathological findings on apparatus-based diagnostic evaluation do not explain the syncope or the occurrence of “end points that appeared within 30 days.”

The authors speculate that more usage of the orthostatic test would be possible only in a specialized “syncope unit.” By contrast, teaching students about

the autonomic nervous system during their university course seems rather more promising.

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In Reply:

Our article (1) has prompted justified and important correspondence, for which we are grateful. We agree with Diehl and Haensch: a medical history based on individual circumstances, physical examination, 12-lead ECG, and orthostatic testing are part of the basic diagnostic criteria, such as stipulated in the guidelines. Our study showed that this is often not adhered to in routine clinical practice. Our analysis showed that many patients with syncope have clinically relevant electrolyte imbalances (for example, hyponatremia) or renal failure. For this reason we think that the basic diagnostic criteria should be extended in the emergency setting to include a standardized laboratory test. A further result of our study was the warning not to regard vasovagal syncope as benign by default, as is suggested in some of the epidemiological literature. Patients with vasovagal syncope often have relevant comorbidities, which in the presence of vasovagal syncope may be associated with negative end points.

If the basic diagnostic criteria did not yield a definite diagnosis then we undertake a tilt table test in our clinical practice. In our analysis of 440 patients (1), seven were examined by using the tilt table. Two patients showed a pathological finding. We did not carry out carotid sinus massage in the extended diagnostic evaluation of syncope because the causal connection between a hypersensitive carotid sinus and an experienced syncope often remains questionable and depends on the patient's age (2). We did not report these two pieces of information owing to space constraints and

the necessary editing down of the manuscript. We wish to point out here that risk stratification of syncope patients in the emergency department should rank more highly in importance and that correct categorization of the type of syncope seems of secondary importance, at least in patients presenting to the emergency department for the first time because of syncope. Risk stratification includes the categorization into syncope that “requires investigation” and “does not require investigation,” with the latter not expected to yield any undesirable end points in the further course. This needs to be done for every patient in an emergency department, independently of the type of syncope.

We thank our correspondent for correcting the categories of syncope that we used in our manuscript, which may have added to the confusion. We used terminology and systems as gleaned from original articles, which have dealt with this topic in heterogeneous ways. Furthermore, the guideline for the investigation of syncope issued by the German Neurological Society (3), which was set out without involvement of cardiologists or emergency physicians, differs in various details from the guideline of the European Society of Cardiology (4). The latter was published only after we had conceived and analyzed the project we presented in our article. Our future studies will be based on the recommendations for the classification of syncope issued by the European Society of Cardiology.

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