Simple Self-Help Maneuvers Are Effective in Aborting Vasovagal Syncope

To the Editor:

The recent article by Lu et al. 1 reminded us of the frequency of vasovagal syncope (neurally mediated syncope) in the general population—22%. Although effective therapy, both pharmacologically and with a pacemaker, is now available, 2 prevention is still the best recourse. Because vasovagal syncope is preceded by prodromal symptoms in two thirds of cases, 3 there should be time to apply preventive measures.

Recently, it has been shown that such simple self-help maneuvers as isometric arm contraction 4 and leg crossing and muscle tensing, 5 all of which work by increasing systemic blood pressures, could either postpone or prevent vasovagal syncope. Additionally, water ingestion, as reported by Lu et al. 1 increases peripheral vascular resistance. The knowledge that such simple self-help maneuvers are readily available and could be lifesaving should prove valuable and helpful in everyday life. These self-help maneuvers are particularly relevant in preventing automobile accidents resulting from vasovagal syncope. 6 As the saying goes, an ounce of prevention is worth a pound of cure.

Tsung O. Cheng, MD
Professor of Medicine
George Washington University
Washington, DC


Response

Dr Cheng is quite right in his comments on our article 1 about the value of simple measures in syncope. It is remarkable how simple lifestyle changes can elicit such dramatic effects in autonomic disorders and especially in autonomic failure. 2 Standing may lower blood pressure more than 50 mm Hg in such patients, whereas lying down may take a patient’s blood pressure up into the hypertensive range. The ingestion of food may lower blood pressure 30 mm Hg while the ingestion of 16 ounces of tap water may raise blood pressure by 40 mm Hg. 3 Hyperventilation may lower blood pressure by 30 mm Hg, whereas hypoventilation may raise pressure 25 mm Hg. 4 Exercise and straining, such as the Valsalva maneuver, significantly lower blood pressure, whereas immersion in water and the use of abdominal binding are pressor. 5 Another remarkable effect is that conditions that elicit fever in normal individuals may more prominently lower blood pressure in autonomic failure patients and have less effect on temperature elevation. These observations indicate that patients with autonomic disorders have a large armamentarium of therapeutic maneuvers at their disposal. Careful application of these maneuvers can greatly enhance their ability to tolerate their illness.

Chih-Cherng Lu, MD
Che-Se Tung, MD, PhD
National Defense Medical Center
Taipei, Taiwan, ROC
André Diedrich, MD, PhD
Sachin Y. Paranjape, BS
Paul A. Harris, PhD
Daniel W. Byrne, MS
David Robertson, MD
Vanderbilt University School of Medicine
Nashville, Tenn
Jens Jordan, MD
Franz-Volhard Clinical Research Center
Medical Faculty of the Charité
Humboldt-University
Berlin, Germany

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