Treatment of Neurally Mediated Reflex Syncope

Juan C. Guzman, MD, MSc, FRCPC^a, Luciana V. Armaganijan, MD^b, Carlos A. Morillo, MD, FRCPC, FESC, FHRS^{a,c,*}

KEYWORDS

Syncope • Vasovagal • Neurally mediated • Pharmacology

KEY POINTS

- Vasovagal syncope (VVS) is the most frequent cause of recurrent syncope.
- WS has a benign course, but quality of life can be impaired by recurrent episodes of syncope.
- Nonpharmacologic measures are simple and usually safe and should be tried as first-line therapy in patients with frequent syncope and no obvious contraindications.
- Pharmacologic therapy is recommended in patients refractory to nonpharmacologic interventions.
 No specific guidelines are available to decide which pharmacologic treatment should be initiated; however, midodrine seems to be the most promising agent in practice, and β-blockade may have a role in older patients.

INTRODUCTION

Neurally mediated reflex syncope, more commonly known as vasovagal syncope (WS), is the most common cause of transient loss of consciousness in adults. It affects at least 20% of individuals at some time in their lives. 1 Despite its benign course, recurrent reflex syncope may be highly symptomatic in about a third of patients, leading to significant deterioration of quality of life with psychological, driving, employment, and financial implications. 1 Several nonpharmacologic therapies have been developed, which include counterpressure maneuvers (CPMs), orthostatic training, and salt and fluid intake. These simple interventions, in addition to counseling and education of patients, are usually successful in reducing the frequency and recurrence of syncope. The initial therapeutic approach should always include counseling and avoidance of potential triggers of VVS. Simple measures, based

on scarce evidence, such as increased water and NaCl intake, should be routinely implemented as first-line therapy. Education geared to improving patients' understanding of the early onset of prodromal symptoms is essential to improve response to therapy.

A clear and reproducible prodromal symptom complex is essential for the successful implementation of CPMs. Younger patients tend to have typical prodromal symptoms that are easy to identify and that provide the basis for the successful interventions that can markedly reduce recurrence of syncope. Multiple pharmacologic interventions and electrical therapy with pacemakers have been tested in small trials, with conflicting results. This article reviews the bulk of evidence available on the different types of therapeutic strategies currently available for the management of VVS. The role of pacemakers is reviewed in the by Moya and colleagues elsewhere in this issue.

^a Department of Medicine, McMaster University, 237 Barton Street East, Hamilton, Ontario L8L 2X2, Canada;

b Arrhythmia Service, Dante Pazzanese Institute of Cardiology, Sao Paulo, Brazil Vila Mariana CEP 04012–909;

Cardiology Division, Department of Medicine, Syncope & Autonomic Disorder Unit, David Braley CVSRI, Room C-3-120, 237 Barton Street East, Hamilton, Ontario, Canada

^{*} Corresponding author. Cardiology Division, Department of Medicine, Director Syncope & Autonomic Disorder Unit, David Braley CVSRI, Room C-3-120, 237 Barton Street East, Hamilton, Ontario, Canada. E-mail addresses: morillo@hhsc.ca; carlos.morillo@phri.ca