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(r)Alpha Lipoic Acid Is a Safe, Effective Pharmacologic Therapy of Chronic Orthostatic Hypotension Associated with Low Sympathetic Tone

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Chronic orthostatic hypotension (OH), affecting 10 to 30% of the elderly, is associated with falls, and increased morbidity and mortality. Current pharmacologic therapy can cause or worsen hypertension and fluid retention. (r) α lipoic acid (ALA), a powerful natural antioxidant, avoids those complications and may assist management of chronic neurogenic orthostatic hypotension (NOH). The purpose of this study is to demonstrate improvement in the symptoms of orthostatic dysfunction with r-ALA, including improved sympathetic (S) and blood pressure (BP) responses to head-up postural change (standing). A cohort of 109 patients with low S tone upon standing was detected using the ANX -3.0, Autonomic Monitor, ANSAR Medical Technologies, Inc., Philadelphia, PA. From the cohort, 29 patients demonstrated NOH (change in (Δ) standing BP \geq -20/-10 mm Hg); 60 patients demonstrated orthostatic intolerance (OI, Δ standing systolic BP between -6 and -19 mm Hg). These 89 were given ALA orally: either 590 to 788 mg (r)ALA or 867 to 1,500 mg of the less expensive 50 to 50% mixture (r)ALA and inactive (s)ALA. Changes in their S and parasympathetic (P) tone, and BPs, were compared with 20 control patients during mean follow-up of 2.28 years. Nineteen of 29 (66%) NOH patients responded with a Δ standing BP from -28/-6 mm Hg to 0/+2 mm Hg. Forty of 60 (67%) of patients with OI responded with a Δ standing BP of -9/+1 mm Hg to +6/+2 mm Hg. Although all patients treated with ALA increased S tone, the Δ BP depended upon the pretreatment of S tone. Those with the lowest S tone responded the least well. The only treatment side effects were nausea, intolerable in only 5%. Nausea improved with routine gastrointestinal medications. Glucose levels improved in the 28% of patients who were diabetic. Also, resting hypertension improved. Control patients had no Δ BP and no increase in S tone. (r)ALA improves S-, and BP, responses to head-up postural change, and thereby NOH/OI, in a majority of patients without causing harmful side effects.