

CoVid-19 Cardiac Complications: Is an Easy, Safe Treatment Strategy Right Under Our Noses?

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Abstract

Background: Many chronic conditions, as diabetes (DM) and cardiovascular Diseases, suffer Major Adverse Cardiac Events (MACE): i myocarditis, congestive heart failure (CHF), Ventricular Tachycardia (VT), Ventricular Fibrillation (VF), Acute Coronary Syndromes [ACSs], and Sudden Cardiac Death (SCD) Acute infections, like COVID-19,also involve oxidative stress, leading to increased Sympathetic tone (S) and decreased Parasympathetic tone (P), increasing Sympathovagal Balance (SB) and MACE.The antioxidant (r)alpha lipoic acid(ALA) improves SB. The anti-anginal Ranolazine (RAN), also an antioxidant,.is an anti-arrhythmic. Our studies of their effects on MACE, in DM, and non-DM patients with CHF, ventricular arrhythmias and SCD are reviewed herein, as our findings may apply to acute diseases, such as COVID-19.

Methods: (1) In a case-control study, 109 CHF patients, 54 were given adjunctive off-label RAN added to ACC/AHA Guideline therapy (RANCHF).MACE and SB were compared with 55 NORANCHF patients; mean f/u 23.7 mo.

(2) 59 adults with triggered premature ventricular contractions (PVCs), bigeminy, and VT were given off-label RAN. Pre- and post-RAN Holters were compared; mean f/u 3.1 mo.

(3) 133 DM II with cardiac diabetic autonomic neuropathy were offered (r)ALA; 83 accepted; 50 refused. P&S were followed a mean of 6.31 yrs, and SCDs recorded.

Results: (1) 70% of RANCHF patients increased LVEF 11.3 EFUs ($p \leq 0.003$), SCD reduced 56%; VT/VF therapies decreased 53%.

(2) 95% of patients responded: VT decreased 91% ($p < 0.001$).

(3) SCD was reduced 43% in DM II patients taking (r)ALA ($p = 0.0076$).

Conclusions: RAN, (r)ALA treat CHF, VT, and prevent SCD. Trials in COVID-19 are needed.These instructions give

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Keywords— Key words: ranolazine, (r) Alpha Lipoic Acid, sudden cardiac death, congestive heart failure, CoVid-19 *Four key words or phrases in alphabetical order, separated by commas*

Biography:

Gary L. Murray MD, FACC,FICA is Research Director, The Heart and Vascular Institute, Germantown, TN,USA, and Co-Chairman Membership Committee, International Collage of Angiology. After Tulane School of Medicine and The University of TN Center of Health Sciences, he has managed to co-invent the Schaad- Murray RNA CAD and IPPA Myocardial Viability Tests, and publish several articles regarding new methods of CAD,CHF,HBP,AODM and CV autonomic assessment/management, despite a full-time private practice



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