

## Sudden cardiac death in the general population: Can we prevent a majority?

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### Abstract

Fifteen-20% of deaths worldwide are sudden (within 1 hr of symptom onset). Our ability to predict and – prevent sudden cardiac death (SCD) in the general population, in which 85% have no known organic heart disease (OHD) or stable OHD with left ventricular ejection fraction (LVEF) >40%, is limited to poor. The purpose of this commentary is to suggest a new approach to SCD in this population. Oxidative stress is a common thread in development and progression of the major cardiac diseases associated with SCD. It has a profound adverse effect upon Heart Rate Variability (HRV), Sympathetic tone (S), and parasympathetic tone (P). Recently developed technology finally has allowed accurate measures of S and P. Using this technique, the general population can be screened, those at risk for SCD can be identified with a higher degree of success, and preventative measures instituted. For example, in 133 geriatric type 2 diabetics (DM II) with S and/or P abnormalities upon screening, the potent, natural antioxidant (r)alpha lipoic acid (ALA) reduced SCD (relative risk reduction [RRR]) 43% ( $p=0.0076$ ), mean follow-up (f/u) 6.31 yrs. DM patients have high glycemic oxidative stress. Addressing oxidative-stress S and P abnormalities can reduce SCD. S and P screening of the general population will be discussed.



### Biography:

I'm a Phi Beta Kappa Rhodes College graduate, attended Tulane School of Medicine (1974), am board certified in Internal Medicine and Cardiology, did postgraduate training @ UTCHS, Memphis, co-created the Schaad-Murray RNA exercise test used world-wide for diagnosing CAD, and am 1st author of several articles, all written while in private practice, regarding my self-funded research. I received the Meritorious Service Award while Chief of Medicine Nellis AFB Hospital. I

am Co-Chair Membership Committee International College of Angiology, and on the editorial boards of several publications.

### Speaker Publications:

1. Re-print: Ranolazine may be the Best and Safest Pharmacologic Therapy for Congestive Heart Failure, and Safe, Effective for Ventricular and Atrial Arrhythmias
2. Twenty-First Century Cardiology Practice Can and Should Minimize Oxidative Stress and Optimize Heart Rate Variability
3. Sudden Cardiac Death in the General Population: Can We Prevent a Majority ?
4. COVID-19 Cardiac Complications: Is an Easy, Safe treatment Strategy Right Under Our Noses?
5. Non-Cardiac Thoracic Surgical and Endovascular Perioperative MACE: Quick, Easy Prediction and Mitigation Strategy

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