

Walter Reed Cardiovascular Center



A Monthly Newsletter of the Cardiology Division of Walter Reed Army Medical Center

Commentary

Marina Vernalis, DO FACC

We anticipate having ECHO and Cardiac Cath reports available under the CHCS Radiology Menu in the near future. This should enable improved immediate and long-term access to important patient data. More to follow.

Any and all patients will be accommodated here. **Just call 202-782-3832/3833 and ask to speak with the “E-DOC” or page 202-356-1111 x107-3311.** We remain available for e-mail, phone or page consultations for all of our primary care providers throughout the NCA/NARMC. Utilize the provided contact information for patient diagnostic or treatment questions.

Cardiovascular Update

Daniel E. Simpson, MD FACC

*Effects of Ranolazine With Atenolol, Amlodipine, or Diltiazem on Exercise Tolerance and Angina Frequency in Patients With Severe Chronic Angina**

Background: Chronic angina despite medical therapy and revascularization affects millions of patients. B-blockers, calcium blockers and nitrates reduce myocardial demand by decreasing cardiac work. Fatty acid oxidation inhibition reduces angina by increasing glucose oxidation and generating more ATP for each molecule of oxygen consumed. This may decrease the myocardial oxygen supply needed to support a given level of cardiac work.

Methods: Double blind, 3-group parallel trial of standard anti-anginal therapy with placebo or ranolazine (either 750 mg bid or 1000 mg bid) in 823 patients with chronic, symptomatic angina on atenolol, amlodipine or diltiazem. The primary endpoint was treadmill exercise duration at trough ranolazine levels at 12 weeks.

Results: Trough exercise duration was 24 seconds longer on ranolazine (pooled dose data – $p = 0.01$). Angina attacks and nitroglycerin use were reduced by about 1 per week on active therapy ($p < 0.02$).

Conclusion: Ranolazine increased exercise capacity and reduced angina in patients already on atenolol, amlodipine or diltiazem.

Comments: Positive but modest changes with the fatty acid oxidation inhibitor, ranolazine, were on top of only single agent anti-anginal therapy. Its role now is likely limited to patients who are intolerant of other anti-anginals or continue to have symptoms despite max therapy with b-blockers, ca^{++} blockers and nitrates.

*JAMA. 2004;291:309-316

www.jama.com

Guideline Review

Daniel E. Simpson, MD FACC

*Endocarditis Prophylaxis**

Recommended

High Risk Conditions:

- Prosthetic valves
- Previous bacterial endocarditis
- Complex cyanotic congenital heart disease (single ventricle, transposition, tetralogy of Fallot)
- Surgically constructed systemic pulmonary shunts or conduits

Moderate Risk Conditions:

- Most other congenital heart disease
- Hypertrophic cardiomyopathy
- Mitral valve prolapse with regurgitation

Not Recommended (negligible risk)

- Atrial septal defect or repaired ASD/VSD, or PDA (beyond 6 months)
- Previous CABG
- Mitral valve prolapse without regurgitation
- Physiologic, functional or innocent heart murmurs
- Previous Kawasaki or rheumatic fever without valve dysfunction
- Cardiac pacemakers (all) and implanted defibrillators

** Note that coronary stents are not mentioned and do not require prophylaxis

* The Sanford Guide to Antimicrobial Therapy 2003

www.sanfordguide.com

Cardiovascular Trials at WRAMC

CARDIASTAR

PFO closure device versus standard anti-coagulation therapy with coumadin in patients with an embolic TIA/CVA and no other etiology

Questions/Referrals: Please contact Daniel Simpson

OPTIMIZE-HF

Assessment of inpatients with CHF and/or LV dysfunction to determine if guideline treatment is appropriately implemented

Questions/Referrals: Please contact Stephen Welka

WARCEF

Randomized, double-blind comparison of coumadin versus aspirin for the reduction of death and stroke in heart failure patients (EF < 30% and in sinus rhythm)

Questions/Referrals: Please contact Stephen Welka

RESCUE

Randomized, open label comparison of unfractionated heparin versus low molecular weight heparin in the treatment of high-risk non-ST elevation acute coronary syndromes

Questions/Referrals: Please contact Daniel Simpson