

MERCY HEART & VASCULAR INSTITUTE

CARDIAC MONITOR



FOR PHYSICIANS

AHA REVISES GUIDELINES: MORE WOMEN AT RISK FOR CARDIAC DISEASE

In a move that will affect millions of American women, the American Heart Association (AHA) this year made significant changes to its cardiovascular disease prevention guidelines for women (*Circulation*, Feb. 16, 2011). The AHA hopes the revised guidelines will encourage women and their physicians to identify and act on risk factors before intervention becomes necessary.

Among the most significant changes is the lowering of the high-risk threshold. Previously, a woman with a greater than 20% risk of dying from a heart attack in the next 10 years was considered high risk. Now, any woman with a greater than 10% chance of dying from

any cardiovascular event (including stroke) is classified as high risk. “The hope is that by identifying high-risk women sooner, they will address their risk factors with their physicians before medication or other intervention is necessary,” explains Michael Kirchner, MD, Mercy cardiologist. “Drug therapy is not always as successful in real-life applications as it may be in clinical studies, particularly with women. So hopefully more women can avoid drug therapy altogether by tackling their risk factors early.”

Additionally, the revised guidelines recognize that certain conditions should also be factored in when calculating



a woman’s risk. “Conditions that involve chronic inflammation such as lupus and rheumatoid arthritis nearly double cardiovascular risk in women,” says Dr. Kirchner. The guidelines also link pregnancy complications like preeclampsia and gestational diabetes to an increased risk of stroke and heart

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HEART PATIENTS AT RISK FOR DEVELOPING PAD

Gregory Hayes, MD, Mercy Vascular Surgeon

As the baby boomer population ages, vascular surgeons are seeing more and more men and women suffering from Peripheral Arterial Disease (PAD). PAD is a condition that, left untreated, can lead to pain, debilitating sores or even the loss of limb. It affects eight to 12 million Americans. Patients with existing coronary artery disease have a one in three chance of also developing PAD.

PAD happens when the blood vessels outside of the heart narrow, due to atherosclerosis. This in turn reduces or halts blood flow, usually to the legs, causing pain or numbness. If severe enough, blocked blood flow can cause tissue death which, if left untreated, may lead to amputation of the foot or leg. A patient with PAD can also be at increased risk of heart attack, stroke and transient ischemic attack.

PAD may initially present in an asymptomatic patient as a decreased or absent pulse in the lower extremity. The first notable symptom most PAD patients report is intermittent claudication – leg discomfort, pain or heaviness that develops with activity, is relieved with rest, and recurs upon resuming activity. The next phase in the

PAD continuum is critical limb ischemia, which includes: pain in the extremities at night or while resting, a sore or ulcer on the leg that will not heal, or in advanced cases gangrene.

In addition, coronary artery disease risk factors for PAD include smoking, diabetes, high cholesterol, hypertension, family history of PAD and age (over 50). The first line of attack is always to reduce or eliminate any risk factors that are present. Conservative therapy including an exercise program or medication may prove to be sufficient for some patients. Angioplasty, with or without vascular stenting, is one minimally invasive endovascular treatment for PAD. Another endovascular treatment is atherectomy – the mechanical removal of plaque. Both options open up the affected artery and improve blood flow. In more advanced cases, surgery may be necessary to bypass the affected artery altogether. Additionally, some patients can now be treated with a hybrid procedure involving both angioplasty and a surgical bypass.

For patients concerned about PAD, Mercy offers Vascular Health Screens (no referral needed). Patients may schedule an appointment by calling 916.733.6425. ♥

The information included in this newsletter is provided as an educational service. Cardiac Monitor highlights the latest news in cardiac and vascular care and features helpful information about diet and exercise, medication and prescription updates, upcoming educational opportunities and profiles of Mercy services. Distribution of Cardiac Monitor is for patients who are active participants in any of the Mercy Cardiovascular Disease Management programs, or who have had a recent hospitalization for a cardiovascular-related condition. If you wish to be removed from the mailing list, please call 916.733.6966.

ALTERNATIVE ANTICOAGULANT APPROVED FOR SOME PATIENTS

By James Palmieri, PharmD

The ACC/AHA/HRS writing group amended its recently published “focused update” to atrial fibrillation management

guidelines to include dabigatran as an alternative to warfarin for preventing stroke and thromboembolism in most patients. This follows the FDA’s approval of dabigatran for this indication last

October.

The drug’s dosing is 150mg twice daily. The twice daily dosing and greater non-hemorrhagic side effects profile compared to warfarin may make a switch to dabigatran of little value to those patients already well-controlled on warfarin. The FDA chose not to approve a 110mg twice daily regimen. While evidence shows that major bleeding episodes are less with the lower dose of dabigatran compared to warfarin, the higher dose was found to be superior to both the lower dose and to warfarin for the primary endpoint of both stroke and thromboembolism. This is cited by the FDA as the reason for approving only the higher dose.

Dabigatran may be of
little value to those
well-controlled on Warfarin.

The guideline recommendations for dabigatran exclude patients with prosthetic valves, hemodynamically significant valve disease, severe renal failure, and/or advanced liver disease. An independent cost analysis of switching from warfarin to dabigatran found that the dabigatran drug cost still outweighs the avoided monitoring costs for warfarin by about four times, making dabigatran an expensive warfarin alternative. ♥

MERCY OFFERS PACEMAKER SYSTEM APPROVED FOR USE IN MRI

With an estimated 1.5 million pacemaker patients in the U.S., approximately 75% of whom will need an MRI-conditional test at some point in time, Mercy General Hospital’s recent addition of an MRI-conditional pacemaker now will allow pacemaker patients who need MRIs to be scanned.

It is estimated that every year more than 200,000 American patients with pacemakers may require an MRI, but are advised not to have one because an MRI’s magnetic and radiofrequency field can disrupt the pacemaker setting or cause wires to overheat, resulting in interference with pacemaker operation, damage to system components, lead or pacemaker dislodgement, tissue damage, heating of the lead tips, unintended cardiac stimulation or death.

“MRI is critical in the diagnosis of many serious conditions; however, patients with current pacemakers most often do not have access to this vital technology,” said Dr. Gearoid O’Neill, Medical Director of Electrophysiology Services. “This new pacemaker provides us with a solution to address an important unmet patient need.”

Revo MRI pacemaker system was designed to address safety concerns around MRI procedures for patients who have implanted pacemakers. The pacemaker includes hardware modifications designed to reduce or eliminate several hazards produced by the MRI environment. In addition, since MRI scanners may cause traditional pacemakers to misinterpret MRI-generated electrical noise and withhold pacing therapy or deliver unnecessary pacing therapy, this new pacemaker includes a new SureScan feature that sets the device into an appropriate mode for the MRI environment.

The device and leads also contain radiopaque markers, viewable via X-ray, to indicate that the device is MR-Conditional. MR-Conditional is a term used to indicate that a device may be used in the MRI environment under certain conditions, such as a particular type of MRI scanner and scanner settings.

The U.S. Food and Drug Administration (FDA) approved the Revo MRI SureScan pacing system in March 2011. Mercy General Hospital began implanting the pacemaker into eligible patients in April 2011. ♥

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MERCY REMAINS LEADER AND INNOVATOR

Mercy General Hospital continues to be in the top 5% of California hospitals when it comes to Coronary Artery Bypass Graft (CABG) surgeries, performing more CABG procedures than any other California hospital with a lower death rate than the state average – 0.69% compared to 2.24% statewide. Mercy San Juan Medical Center's CABG mortality rate at 0.94% is also lower than the statewide average.¹

Both Mercy hospitals continue to move into the “New Era in Cardiovascular Care,” opening advanced hybrid surgical suites in Nov. 2010 to accommodate the increasing number and complexity of minimally invasive approaches for cardiovascular conditions. These conditions include complex aortic procedures (thoracic and abdominal aortic aneurysms), laser lead extractions and peripheral vascular procedures. Mercy General remains the only Northern California site with specialty-trained cardiac surgeons and cardiac operative team² performing robotic-assisted mitral valve replacements with the daVinci™ surgical system. In addition, Mercy electrophysiologists are using robotic-assisted techniques for treatment of complex heart rhythm disturbances. Previously, some patients had to travel out of the area for such cutting-edge treatment. ♥

1 California Report on Coronary Artery Bypass Surgery (CCORP), published June, 2011.

2 International College of Robotic Surgeons mini-fellowship affiliated with St. Joseph's Hospital, Atlanta, GA

NEW PHYSICIANS JOIN MHVI

Mercy Heart & Vascular Institute is proud to welcome two new physicians: Ryan Smith, MD (left), has joined Sierra Nevada Medical Group, affiliated with Sierra Nevada Memorial Hospital and serving Grass Valley and Nevada County. Dr. Smith attended medical school at University of California-Irvine and had his cardiology fellowship at UCLA and has a focus in cardiac imaging and echocardiography.



Vascular Surgeon Gregory Hayes, MD (right), joined Mercy in Sacramento in 2010. Dr. Hayes attended medical school at McMaster University in Ontario, Canada, and attended his vascular surgery fellowship at University of Toronto. ♥

American Heart Association Guidelines

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disease during the five to 15 years after pregnancy. “These complications are akin to a failed stress test,” explains Dr. Kirchner. “This is information that physicians may not have known to include in a patient’s medical history later in life, but we now know how important it is.”

In addition, researchers hope the revised guidelines will encourage a dialogue between women and their doctors. Among the questions physicians are encouraged to ask are:

- Is the patient taking all prescribed medications regularly?
- Is she having any side effects from medications?
- If she is following recommended lifestyle behaviors?

In response to this growing understanding of heart disease in women, the Mercy Heart & Vascular Institute has created the Women’s Heart Health Center. The center is designed to help women reduce their risk of cardiovascular disease through a preventive approach, providing risk assessment

MHVI STUDIES HEART DISEASE IN YOUNG WOMEN

Despite perceptions that young women are protected from heart disease, it is one of the leading causes of death in women 55 years and younger, accounting for more than 8,000 deaths in that age group annually in the United States. Young women with heart attacks have about twice the risk of dying in the hospital than similarly aged men. Among those who survive, their subsequent risk of death is about 50% higher than men. Unfortunately, little research effort has been directed toward understanding heart disease in this group.

Mercy Heart & Vascular Institute’s research department is currently enrolling patients in the VIRGO study, funded by the National Heart, Lung, and Blood Institute of the National Institutes of Health. This is a study of 2,000 young women with heart attacks (and 1,000 men as a comparison group). It will examine predictors of a broad range of early and one-year outcomes including demographic, lifestyle, psychosocial, clinical, physical, biochemical and hormonal characteristics as well as genetic risk factors and processes of care.

The VIRGO study will address many questions including how outcomes differ for men and women; what factors contribute to premature heart disease in women; how delays in treatment affect the outcome for women; and whether women get the same quality care as men. ♥

of heart disease that is specific to the unique needs of females.

“Cardiovascular disease is the number one killer of American women,” says Dr. Kirchner. “And yet it is still under-recognized and under-treated in women. This will hopefully help us better identify and treat women at risk for cardiovascular disease.” To help your female patients better understand their cardiac risk, encourage them to contact the Women’s Heart Health Center (916.733.6425), where they can get a complete heart health risk assessment. ♥

PHYSICIAN EDUCATION AT SIERRA NEVADA MEMORIAL HOSPITAL

In late February, Drs. Allen Morris, MD, and Frank Slachman, MD, presented a physician education lecture at Sierra Nevada Memorial Hospital entitled “State of the Art Mitral Valve Surgery” highlighting daVinci™ mitral valve repair performed at Mercy General Hospital. Pictured are Katy Ellis, Manager, SN Cardiopulmonary Rehab, Dr. Slachman, Ryan Smith, MD,

John Mallory, MD, Dr. Morris, and Debbie Plass, VP Sierra Nevada Memorial Hospital (left to right). ♥



SAVE THE DATE: MERCY CARDIOLOGY & ELECTROPHYSIOLOGY SYMPOSIUM 2011

- Hyatt Regency Sacramento
- 7 am to 4pm, Oct. 8, 2011
- 1209 L Street, Sacramento
- For more info, call 916.733.6966

AMERICAN HEART ASSN. HEART WALK: SEPT. 17 IN WILLIAM LAND PARK

Call 916.733.6966 for more info ♥

REFERRAL RESOURCES

The following Mercy programs are available for physicians to refer their patients for help managing heart and vascular disease.

Heart Smart and CHAMP®:
916.564.2880

Cardiac Conditioning:

Mercy General Hospital	916.453.4521
Mercy San Juan	916.537.5296

Pulmonary Rehabilitation:

Mercy General Hospital	916.453.4268
Mercy San Juan	916.537.5299
Pulmonary Rehab	
Smoking Cessation	916.453.4927

ICD Support Group 916.733.6966

Vascular HealthScreen 916.733.6245

Cardiac HealthScreen 916.733.6245

**Women’s Heart
Health Center** 916.733.6245

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