

ACA *Areer*

American Certification Agency for Healthcare Professionals



Special Points of interest:

- Reducing the risk of heart disease can be accomplished by more than just pills and procedures.
- When you feel anxiety coming on, identify what it is that you are stressed about and then hold that thought in your mind like you do a freeze-frame of a movie.

Inside this issue:

February is Heart Health Month:

- Integrative Cardiology 1
- Benefits & Risks of Common Heart Medications 2
- Bionic Heart 3

ACA Recertification Packets 3

Hematoma Formation 4

INTEGRATIVE CARDIOLOGY

Alternative Ways to Strengthen Your Heart Muscle

Reducing the risk of heart disease can be accomplished by more than just pills and procedures. There are the well - known benefits of eating well, exercising and watching your weight but there are also some lesser known alternatives that can help the heart.

Acupuncture has long been associated with the Far East as a technique for treating certain painful conditions and for producing regional anesthesia. Acupuncture is now one of the newest weapons in the fight to control high blood pressure. Electroacupuncture, which uses battery-driven needles, is effective with reducing the systolic blood pressure by up to 20 points. This reduction is similar to those achieved with prescription drugs such as ACE inhibitors and calcium channel blockers. The battery driven needles stimulate a few key acupoints located near the elbows and knees. Acupuncture releases neurotransmitters that travel to areas of the brain that regulate cardiovascular system. Electroacupuncture allows for a standardized amount of stimulation as well an adjustable frequency. Acupuncture will not end hypertension but with weekly treatments, blood pressure can be controlled without medication and thus very few side effects or risks.

Stress management through “positive-emotion refocusing” allows one to change the way one reacts to upsetting situations. The Institute of HeartMath has done a study showing that this technique that teaches you to interrupt your typical stress response by redirecting your attention can significantly lower blood pressure in patients after just three months of daily practice. All participants in the study saw a blood pressure drop; 12% were able to reduce their dose of blood pressure medication and one went off medication completely. Stressful situations trigger a cascade of hard-on-your-heart hormones such as cortisol and adrenaline. Positive refocusing sparks a counter flood of energizing feel-good hormones, which short-circuit the stress response. It is very easy to learn the refocusing technique. When you feel anxiety coming on, identify what it is that you are stressed out about and then hold that thought in your mind like you do a freeze-frame of a movie. When doing this, deep breathe for several minutes and focus your attention on your heartbeat. Then identify a positive feeling for someone or something that you love. This refocusing calms your emotions and shifts attention away from negative thoughts. This is something that needs to be practiced daily even just for 10-15 minutes will help.

Tai chi combined with qigong is more than just a gentle way to work out. Tai chi is a Chinese martial art that combined with qigong, Chinese yoga, can reduce stress and effect metabolic syndrome – a cluster of five conditions that ups your risk of heart disease. These slow motion activities burn as many calories as moderate-intensity activities such as walking. Tai chi and qigong can reduce both systolic and diastolic blood pressure while trimming waist size by at least one inch. Tai chi, meditation in motion, research has shown that people find the yoga very relaxing and enjoyable and therefore tend to stick with it.

Reference: PREVENTION – FEBRUARY 2012

BENEFITS & RISKS of COMMON HEART MEDICATIONS

Statins – Brand names include: Zocor and Lipitor

Statins lower bad cholesterol (LDL) by 20 to 50%. They trick the liver into removing more cholesterol from the blood than it would naturally. Many patients are monitored by regular liver function tests because of the possibility of liver damage by the statins. In some instances severe muscle damage can occur and if it is accompanied by tea-colored urine, a physician should be contacted immediately. Mild muscle discomfort can be resolved by switching statins or changing dosing.

Clopidogrel bisulfate – Brand name: Plavix

Clopidogrel is a type of superaspirin used to prevent blood clots. It is used in conjunction with a low dose aspirin in many patients. About 3% of patients experience moderate or severe internal bleeding problems. Some patients do not metabolize this drug well and therefore do not derive much benefit from its use. A physician must monitor to see how a patient responds to its use.

Warfarin sodium – Brand name: Coumadin

Warfarin is used to treat and prevent blood clots but acts differently than aspirin or Plavix. Warfarin thins the blood by blocking vitamin K – a nutrient used by the liver to produce proteins that can cause the blood to clot. This drug must be monitored with frequent blood tests. Changes in diet can alter the effects of warfarin especially eating foods rich in vitamin K such as green, leafy vegetables.

Beta-blockers – Brand names include Toprol-XL and Coreg CR

Beta-blockers decrease the heart rate and the strength of heart muscle contraction. These drugs are used post heart attack, to treat chest pain, unstable heart rhythms and in patients diagnosed with CHF. They are no longer used to treat patients with high blood pressure. Beta-blockers can lower heart rate too much resulting in dizziness or low blood pressure. They can also cross the blood-brain barrier and in some patients can cause nightmares and even depression. Patients with chronic respiratory conditions, such as asthma, cannot take beta-blockers because these drugs can constrict the lungs' airways.

Ace Inhibitors – Brand names include: Accupril and Prinivil

These drugs prevent the body from producing angiotensin, a hormone that causes the arteries to constrict. Originally ace inhibitors were intended to lower blood pressure but today they are used to prevent further heart damage in patients who have recently had a heart attack or who have been diagnosed with CHF. Many times these drugs are combined with a diuretic in treating hypertension. Patients should be monitored for lowered kidney function, increased blood potassium levels or a condition called angioedema. Angioedema is characterized by swollen lips and can result in obstructed airways.

REFERENCE: PREVENTION - FEBRUARY 2012



“Beta-blockers decrease the heart rate and the strength of heart muscle contraction.”

THE BIONIC HEART

The LVAD – left ventricular assist device- is a new medical intervention is basically a scaled down version of a jet engine. The LVAD was originally intended to keep alive those patients waiting for a heart transplant. The pump is about the size of a D battery with two flexible tubes, one which attaches to the aorta and the other to the left ventricle. Once implanted, the pump takes over the function of the left ventricle – pushing the blood out through the aorta to the rest of the body. The device is powered by special batteries connected to a controller, which attaches to a power cord that extends from the LVAD through a permanent incision in the patient's abdomen. Unlike the heart that you were born with, the LVAD moves the blood continuously, but not with a pumping rhythm. These patients will have NO PULSE and therefore must wear a medical alert tag at all times so as not to be presumed dead should they happen to become unconscious for some reason.

FYI: former vice president Dick Cheney, a survivor of five heart attacks, had a LVAD implanted in 2010.

There are many legal and ethical questions still without answers. Should a heart pump patient have a stroke or another condition that could cause multiple organ failure or brain damage, the patient will not die because the LVAD keeps working. There must be a decision about disconnecting the pump and when. Currently end-of-life instructions do not mention LVADs. Many physicians feel that LVADs should be treated like any other life-extending apparatus, such as a breathing tube. Many physicians ask patients to make all decisions and document them prior to LVAD implantation.

REFERENCE: PREVENTION – NOVEMBER 2011

ACA RECERTIFICATION PACKETS

If your ACA certification expires on June 30, 2012, you will receive a packet of information on how to recertify by mid May. If you have not received your packet by the end of May, please contact the ACA office by phone or email. You will not receive a packet if your certification does not expire till June 30, 2013.

What to submit to ACA as proof of continuing education:

- Certificates of attendance or completion from CE events
- Copies of transcripts from classes taken
- Official printouts of CE activities from place of employment
- List of CE activities verified by supervisor or manager signature

The documentation must include:

- date(s) of attendance
- title of the activity
- the number of CE credits assigned or amount of time spent, and
- signature of person issuing or verifying the activity.

NEW ACA RECERTIFICATION FEES EFFECTIVE JANUARY 2011

One Category or Specialty 2 year renewal \$ 80.00

Two Categories 2 year renewal \$ 100.00

Three Categories 2 year renewal \$ 120.00

Instructor- per category 1 year renewal \$ 80.00

Any recertification postmarked after June 30, 2012 must include an additional \$15.00 late fee.

The recertification application form can also be downloaded from: www.acacert.com



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HEMATOMA FORMATION

A hematoma is one of the most common but preventable complications associated with venipuncture. A hematoma is a swelling or mass of blood, often clotted, which forms when blood leaks from a blood vessel during or after a venipuncture. A hematoma can be very painful to the patient and can also cause a compression injury to nerves and lead to lawsuits. The blood draw must be stopped if a hematoma is forming and direct pressure should be applied to the site for 2-5 minutes to allow the surrounding tissue the opportunity it absorb the excess blood before it can clot. Continuing to draw blood during hematoma formation can result in a specimen contaminated with tissue fluid . It may also cause the specimen to be hemolyzed.

TIPS FOR HALTING HEMATOMAS

adapted from PHLEBOTOMY TODAY, Volume 13, Issue 2; Center for Phlebotomy Education, Inc. 2012

- Select the vein carefully; give preference to the median cubital vein
- choose the right equipment; make sure the needle is not too large for the vein or the size of the vacuum tube is too great for the vein.
- properly position the entire bevel of the needle within the lumen of the vein; this prevents blood from leaking into the surrounding tissues.
- Keep the needle stabilized during the switching of tubes; this minimizes the risk of blood escaping from around the needle during collection.
- if a hematoma forms during collection, terminate the draw immediately.
- Release the tourniquet before removing the needle; this reduces the pressure to the vein and reduces the risk of hematoma formation.
- Ensure adequate pressure is applied after the needle is withdrawn; check the nailbeds of the person applying pressure – if the nailbeds are white, then adequate pressure is being applied.
- Do not use cotton balls to apply pressure; fibers become embedded in the platelet plug that is being form and when the cotton ball is removed, the puncture site will reopen.
- Do not substitute a pressure bandage for direct pressure.
- Provide post puncture instructions to the patient; the bandage should be left on for at least 15 minutes; out patients should be told to avoid lifting heavy objects with that arm.