HEART & VASCULAR NEWS

FALL 2010

FROM THE UPSTATE HEART AND VASCULAR INSTITUTE, UPSTATE UNIVERSITY HOSPITAL

CONGRATULATIONS TO UPSTATE'S OPEN HEART SURGERY TEAM!

The report by the NYS Department of Health ranks Upstate's open heart surgery program as the top performer in Central New York and third out of the 40 open heart surgery programs in New York state. Upstate has also earned the national Blue Distinction Center for Cardiac Care* designation from the Blue Cross and Blue Shield Association. Included in this ranking are coronary artery bypass and valve repair and replacement, as well as minimally invasive procedures and da Vinci robotic surgery procedures. The members of the Upstate open heart surgery team have long been highly regarded for their expertise among their peers and grateful patients. They are now also officially recognized by NYS! ■

NYS Open Heart Surgery Report

NEW YORK STATE Department of Health

Designated as a Blue Distinction® Center for Cardiac Care

Excellus BlueCross BlueShield

*Designation as Blue Distinction Centers® means these facilities' overall experience and aggregate data met objective criteria established in collaboration with expert clinicians' and leading professional organizations' recommendations. Individual outcomes may vary. To find out which services are covered under your policy at any facilities, please call your local Blue Cross and/or Blue Shield Plan.

UPSTATE HEART & VASCULAR INSTITUTE

THIS LITTLE GUY SAVED MY LIFE

...WITH A BIG ASSIST FROM THE UPSTATE OPEN-HEART TEAM

In the excitement leading up to his son's birth, 36-year-old Eric almost missed something critical to his son's future: the not-so-classic signs of a heart attack.

While shoveling snow, Eric felt a stabbing pain in his back, followed by shortness of breath, nausea, and sweating. Because the symptoms subsided, Eric just assumed he had the flu.

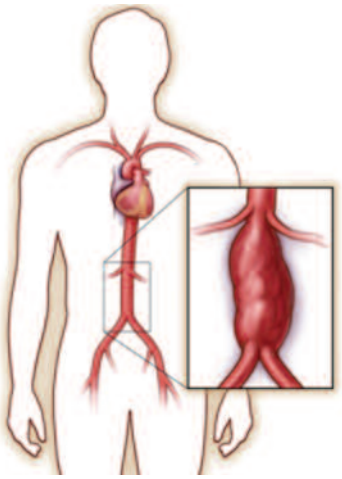
A week later, his son Carter was born. Eric was ecstatic, but, oddly, he was still short of breath, "I'd never really been sick before," he says. "But I owed it to Carter to find out what was going on."

At Upstate University Hospital, Eric learned he'd suffered a major heart attack and — with three blocked arteries — was on a track for a second, possibly fatal, event.

The next day, Upstate cardiothoracic surgeon Charles Lutz MD performed triple bypass surgery. A week later, Eric was back home, on the mend and even more ecstatic about his newborn son.

"If it weren't for Carter — and the Upstate open heart team," Eric says, "I wouldn't be here." ■

SYRACUSE NEW YORK



Abdominal aortic aneurysm

Lewis W. Johnson, MD, FACC, CDE discusses vascular screening results with a participant at a free screening event held this summer at the Dunbar Center and sponsored by Upstate's HealthLInk program.

VASCULAR DISEASE Q & A

Q: What is vascular disease and how serious is it?

A: Everyone's heard of "heart disease" and the most common type is vascular disease of the coronary arteries that supply the heart muscle. Atherosclerosis (or "hardening of the arteries") causes most vascular disease by causing plaque to build in blood vessel walls, blocking blood flow through the artery or weaken the blood vessel wall making it prone to rupture. Vascular disease afflicts millions of people and is the most common cause of death and disability in the U.S.

Q: What's the difference between cardiac and non-cardiac vascular disease?

A: Coronary artery disease (CAD) is the most common and affects only the vessels that supply circulation to the heart muscle. Non-cardiac vascular disease can affect the circulation to the rest of the body, including the blood supply to the arms and legs, brain, kidneys, and intestines – even the fingers and toes may be affected.

Q: What's the purpose of the vascular screening program?

A: Few people are aware of the seriousness of non-cardiac vascular disease. A national screening program has been developed to allow early detection of the major non-cardiac vascular problems such as peripheral arterial disease (PAD), which can cause serious circulation problems in the legs; abdominal aortic aneurysms (AAA), which can rupture and cause death; and carotid artery disease, which can cause stroke. In addition to testing, screenings educates the public about diagnosis and prevention of vascular diseases.

Q: Does early detection help?

A: Yes! Vascular disease can often be "cured" when detected early. Treatments can eliminate a problem, prevent it from getting worse, and markedly reduce the chance of subsequent death or disability for those our afflicted with a vascular disease.

Q: What are the screening tests?

A: There are three: a carotid duplex scan, an ultrasound aortic scan, and a Doppler test for peripheral artery disease. After the tests, participants meet with a clinician who explains results and provides a vascular report card for their primary health care provider. The tests are simple, painless, risk-free and take less than 10 minutes.

Q: What is a carotid duplex scan?

A: Ultrasound measurement of flow is performed in the carotid arteries in the neck to detect the presence of blockages in the circulation to the brain. The carotid scan can measure the severity of that blockage and determine the risk of stroke.

Q: What is an aortic ultrasound scan?

A: Ultrasound imaging is used to measure the diameter of the aorta (the main artery to the body) to detect an aneurysm. An aneurysm is an enlargement or ballooning of the aorta that may lead to fatal rupture of the vessel.

Q: What is a Doppler test?

A: The Doppler examination measures circulation to both legs to detect peripheral artery disease (PAD). PAD can lead to serious problems like difficulty walking, leg ulcers, or gangrene. Even when PAD is mild, patients have higher risks of heart attack and stroke.

Q: Who conducts the tests?

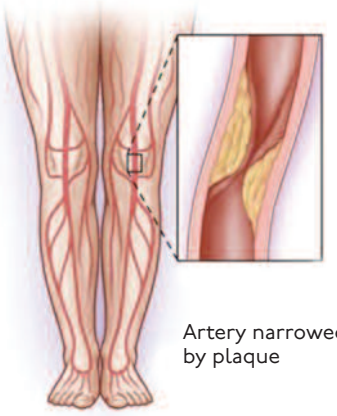
A: A multidisciplinary team of doctors, nurses, and technologists; specialists in vascular problems.

Q: Are the tests free?

A: The screening program is a free, public service program comprised of tests that are routinely performed in most hospitals and used to examine patients with known or suspected vascular disorders. We hope this program will encourage patients to seek advice from their doctors about their risks for vascular disease.

Q: Who should be screened?

A: Anyone who is over 60 and smokes; and/or has high blood pressure, high cholesterol, diabetes, heart disease or other cardiovascular conditions should be tested. ■



Artery narrowed by plaque

In July, Upstate Medical University and the Dunbar Center in Syracuse co-hosted a free, open to the public vascular screening program which proved invaluable. Of the 175 people who were screened, 27 were found to have peripheral arterial disease (poor circulation); nine had carotid artery stenosis (risk for stroke), and two had abdominal aortic aneurysms (risk of rupture).

While the diagnosis of vascular diseases is serious, many of the crippling and lethal complications can be prevented and cured with early detection, diagnosis, and treatment.

Michael Costanza, MD, FACS
Assistant Professor of Surgery, Vascular Surgery Division, talking with a volunteer at the Dunbar Center.

M. ASAD KHAN MD

M. Asad Khan MD, assistant professor of surgery, has joined the Division of Vascular Surgery and Endovascular Services at Upstate Medical University. Dr. Khan sees patients at Upstate University Hospital in Syracuse, at Upstate's Ithaca Office, and at the Veteran's Administration Hospital.

Dr. Khan received his medical degree from the Aga Khan University in Pakistan and served his residency in surgery at Upstate Medical University. He completed his fellowship in vascular surgery at Rush University Medical Center in Chicago.

Dr. Khan is board certified in surgery and vascular surgery. His clinical interests include open and endovascular repair of thoracic and abdominal aortic aneurysms, carotid artery disease, renovascular disease, dialysis access and lower extremity arterial and venous disorders. His research interests focus on vascular ultrasound, vascular screening and 3D duplex imaging. ■

CAROTID ARTERY OCCLUSIVE DISEASE: A COMMON PREDICTOR AND CAUSE OF STROKE

By M. Asad Khan, MD

The carotid arteries are two blood vessels, one on each side of the neck, that carry blood from the heart to the brain. Narrowing or blockage (hence the term "occlusive') of the carotid arteries can cause a stroke by decreasing blood flow to the brain or, more commonly, by causing blood clots to form and travel into the brain. These blockages and narrowings are caused by atherosclerosis. Commonly known as "hardening of the arteries," atherosclerosis results from a build-up of cholesterol and calcium deposits on the inside walls of the blood vessels. These deposits are called plaques and can become so thick they completely block the flow of blood. Smoking, diabetes, high cholesterol, high blood pressure, and/or a strong family history of stroke are major risk factors.

Symptoms

Most people with blocked or narrowed carotid arteries have no symptoms. Some people have transient ischemic attacks (TIAs) which are also known as "mini-strokes." Symptoms can include slurred speech, weakness of the arm or leg, vision loss, a droop on one side of the face, an unsteady gait, or loss of coordination. These symptoms are usually very brief in duration and completely resolve within a few minutes. These episodes should be considered "warning strokes" because they are associated with an increased risk for a major stroke. People experiencing TIAs or similar symptoms should seek urgent medical attention. See sidebar on Upstate's NYS Designated Stroke Center.

Diagnosis

Carotid artery occlusive disease cannot be detected with a regular physical exam. Patients with increased risk or symptoms are usually evaluated with a painless ultrasound exam. Other imaging tests include a CT angiogram (CTA) and magnetic resonance angiogram (MRA). All are non-invasive and painless.

Treatment

Carotid artery occlusive disease is a permanent but correctable condition. Treatment prevents disease progression and decreases the risk of stroke. If there is mild to moderate narrowing but you have no symptoms, your treatment may consist of medication combined with periodic ultrasound exams. Your health care provider may prescribe medication that thins the blood or prevents the blood cells from forming clots. (You may have heard of aspirin, clopidogrel (Plavix), or warfarin (Coumadin) which are commonly used blood thinners.) If the narrowing is very severe or causing symptoms, surgery may decrease the risk of stroke by removing the plaque from the artery through a small incision on the neck. Patients whose medical condition rules out surgery can be treated with balloon angioplasty and stenting of the carotid artery. In this procedure a tiny balloon and stent (a flexible metallic tube) are guided into the carotid artery with x-ray or magnetic guidance. This procedure opens the area of narrowing by flattening the plaque against the wall of the artery and then positioning the stent to keep the plaque there.

Prevention

In almost all cases, atherosclerosis is the cause of carotid artery disease. It almost goes without saying...you can prevent or minimize atherosclerosis by eating a healthy diet, exercising regularly, reaching and maintaining a normal weight, and controlling your blood pressure and blood sugar. If you smoke, stop! If you have diabetes, monitor your condition closely and follow all diet and medication instructions. Stress reduction is also beneficial.

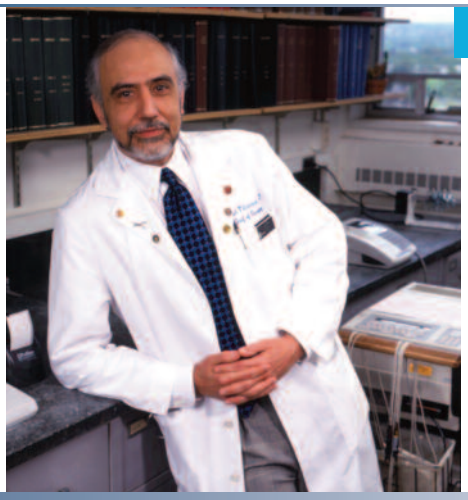
Summary

Narrowing or blockage in the carotid arteries is one of the leading causes of stroke. Fortunately, this condition is preventable and treatable. The first step in reducing the risk of stroke is being aware of the risk factors, symptoms, and diagnostic and treatment options available to you. ■

(Note: Atherosclerosis is a form of arteriosclerosis which is a term referring to all thickening and hardening conditions of the arteries.)

TIMOTHY D. FORD MD

Cardiologist Timothy D. Ford MD has been named associate professor of Medicine at Upstate Medical University. Dr. Ford received his medical degree at Upstate, where he also served as an intern, resident and fellow in cardiovascular medicine. Dr. Ford also completed a fellowship in interventional cardiology at Tufts-New England Medical Center in Boston. He is board certified in internal medicine, medical examiners and cardiovascular disease, and has specialty expertise in interventional cardiology.Dr. Ford is a member of the Onondaga County Medical Society and The American College of Cardiology. ■



Daniel Villarreal MD, chief of Cardiology

UPSTATE HEART FAILURE CARE RECOGNIZED BY AMERICAN HEART ASSOCIATION

Last summer, Upstate's Heart Failure program was recognized for its excellence in implementing and maintaining the heart failure guidelines over the first three-months of the program. A continued high level of performance will result in the Silver designation (one full year) and finally the Gold (two full years).

Upstate University Hospital is the only hospital that has made this high level of commitment to dramatically reducing the incidence of heart failure in Central New York. And it is the only one to earn the Bronze designation from the American Heart's Get With The Guidelines program. ■

THE ENORMOUS CHALLENGE OF HEART FAILURE

Many medical articles on heart failure emphasize the need to respond aggressively to the alarming increase in heart failure (HF) rates throughout the world. Identifying and preventing the illnesses that lead to heart failure, including high blood pressure (hypertension) and coronary heart disease, are key to preventing heart failure, as are following care and treatment protocols that are proven and evidence-based.

Cardiologist Robert Carhart MD

According to the American Heart Association, 5.7 million people suffer from heart failure. Statistics also show that each year more than 292,200 people will die of heart failure. "That's an intolerable and in many cases completely preventable set of statistics," says Cardiologist Robert Carhart MD in Upstate's Division of Cardiology.

Patients who deserve special attention include the elderly, women, and ethnic/racial minorities. And it's increasingly understood that research needs to focus on the genetics of heart failure, both the risk factors for developing heart failure and identifying genetic markers that will guide prevention strategies.

Get With the Guidelines!

Upstate University Hospital has made a commitment of staff, time, quality improvement processes and day-to-day practice to aggressively reduce the devastating impact of heart failure. It made a further commitment to partner with the American Heart Association and implement the association's Get With The Guidelines (GWTG) program. This quality improvement initiative helps partner hospitals implement proven, evidence-based guidelines and procedures in caring for heart failure patients which ultimately prevents hospitalizations and prolongs lives. The GWTG protocols require that heart failure patients are started on aggressive risk reduction therapies such as cholesterol-lowering drugs, beta-blockers, ACE inhibitors, aspirin, diuretics, and anticoagulants in the hospital. They also counsel are to receive alcohol/drug use and thyroid management as well as referrals for cardiac rehabilitation. Says Daniel Villarreal MD, chief of the Division of Cardiology, "full implementation of "Get With The Guidelines" care is a critical step in preventing recurrent hospitalizations and prolonging the lives of heart failure patients." ■

HERBAL PREPARATIONS AND THE CARDIAC PATIENT

Patients taking herbal products along with some commonly used cardiac mediation may be at risk. There are very few studies on the effectiveness and safety of herbal remedies. Some supplements are known to cause interactions with commonly used cardiac medications. Serious, even fatal, interactions have been reported between cardiac medicines and some supplements.

Recent estimates indicate that more than 15 million Americans use herbal remedies or high-dose vitamins. Unlike prescription medication, herbal supplements are not subject to scientific studies to prove safety, efficacy or mechanism of action. Many supplements contain ingredients or contaminants that may lead to adverse effects or interactions.

Common herbal products have known adverse effects on the cardiovascular system, including: St. John's Wort, ginseng, gingko biloba, garlic and saw palmetto to name a few. Interactions range from the supplement raising the blood pressure when taken with certain cardiac medicines, to causing increased bleeding risk in patients taken Coumadin (Warfarin) a medicine used to keep blood from clotting. Many herbals also interfere with drug metabolism or breakdown (causing either increases or decreases) which can lead to undesired effects.

Devastating effects can occur due to a lack of understanding about herbal-drug interactions. Also, many people do not attribute untoward effects to supplements which lead to a lack of reporting issues related to supplements.

Many patients do not disclose the use of herbal supplements to their doctors, and physicians may not routinely ask about their use. It is important the patients tell their doctors about any herbals they may be taking. ■

Reference: Tachjian A, Maria V, Jahangir A. Use of Herbal Products and Potential Interactions in Patients with Cardiovascular Diseases. Journal of the American College of Cardiology; 2010;55: 515-525.

ADVERSE CARDIAC EFFECTS OF HERBAL 'REMEDIES'

HERB	CARDIAC ADVERSE EFFECTS
Garlic	Increases bleeding risk with warfarin
Ginger	Increased bleeding risk with warfarin/plavix
Ginkgo	Increased bleeding risk with warfarin, ASA, or cox-2 inhibitors
Ginseng	Increase blood pressure, hypoglycemia, Decreases effects of warfarin
Hawthorn	Potentiates effects of cardiac glycoside, Increased risk of bleeding with Warfarin/plavix
Licorice	Increased blood pressure, Hypokalemia, May potentiate dig toxicity
Lily of the Valley	Increases effects of beta-blockers, CCB, digitalis, steroids
Saw Palmetto	Increased bleeding with warfarin
St John's Wort	Increases heart rate and blood pressure, Decreases digoxin concentration, Decreases concetrations of statin medications

UPSTATE
MEDICAL UNIVERSITY
750 East Adams Street
Syracuse, NY 13210

Vascular Care at Upstate

Quick Facts About Vascular Disease

1. Vascular disease can cause lethal aneurysms of the aorta, the largest blood vessel in the body. Aortic aneurysms are the 10th leading cause of death in men over the age of 50; more than 10,000 people die each year in this country from rupture of an aortic aneurysm.

Michael Constanza MD discusses the quick and painless screening test for carotid artery disease, and its life-saving importance.

2. Vascular disease can block the carotid arteries to the brain and cause strokes. Stroke remains the third leading cause of death in the U.S. Most strokes are caused by cerebrovascular disease in the carotid arteries.

3. Vascular disease impairs leg circulation and can lead to serious disability. Peripheral arterial disease (PAD) often makes it difficult to walk normally, may cause leg ulcers, or result in gangrene and require an amputation. Individuals with PAD are three times more likely to die of heart attacks and strokes.

Vascular Surgery Opens Watertown Office

Upstate's Vascular Surgery and Endovascular Services opened an outpatient office at 1571 Washington Street, Watertown, NY last summer. Staffed by vascular surgeon Michael Costanza MD (pictured at left), the service offers comprehensive vascular care including the evaluation and treatment of peripheral arterial disease, aortic aneurysms, carotid stenosis, varicose veins, and dialysis access. Appointments can be made by calling 315.464.6264. ■

Newsletter Staff

Editors:

Karen A. Gibbs NP, RNC, MSN

Amy Tetrault RN, Head Nurse, Cardiac Catheterization Lab

Melanie Rich, Marketing & University Communications

Designed by Upstate Marketing and University Communications

Knowing changes everything.™

www.upstate.edu

10.01603105.9mansunlsk