Vascular Disease Foundation
10 YEARS • 1998-2008

Keeping In Circulation

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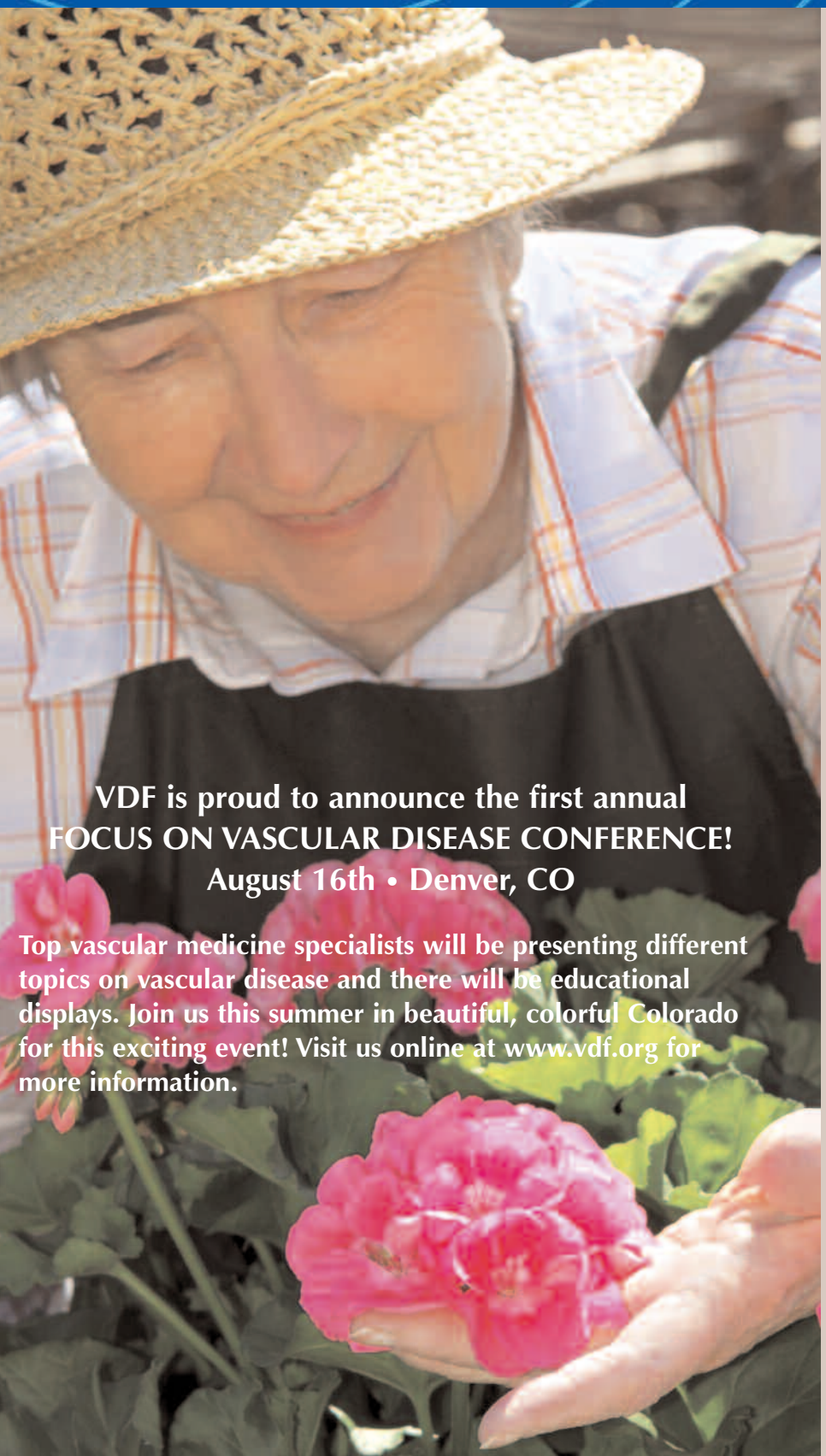

VDF is proud to announce the first annual FOCUS ON VASCULAR DISEASE CONFERENCE!
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Top vascular medicine specialists will be presenting different topics on vascular disease and there will be educational displays. Join us this summer in beautiful, colorful Colorado for this exciting event! Visit us online at www.vdf.org for more information.

FIND OUT ABOUT...

Finding Fibromuscular Dysplasia:

Trying to Diagnose an Illusive *"String of Beads"*

On a hot day at the end of July, 37-year-old Pam Mace woke up with a left-sided headache that intensified as the day progressed. When she noticed that her pupils were unequal and her headache was so severe that she could not pick up her head, she went to the emergency room (ER). It wasn't until two more trips to the ER that she was told that she had a transient ischemic attack (TIA) or mini-stroke.

For many months Pam suffered with an array of symptoms: severe headaches, a "swishing noise" in her ears, dizziness, and a feeling that she was about to faint. She also had trouble regulating her blood pressure, and her pupils were unequal in size. Months later doctors were able to diagnose the cause of her TIA as fibromuscular dysplasia (FMD).

FMD is an unusual blood vessel disease that leads to abnormal cell development in the artery wall that causes narrowing which decreases blood flow through the artery. FMD is most commonly found in the arteries that supply blood to the kidneys (renal arteries), followed by the carotid arteries of the neck that supply blood to the brain. FMD can also affect the arteries in

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Finding Fibromuscular Dysplasia: Continued from Page 1

the abdomen (supplying blood to the liver, spleen and intestines) and extremities (arms and legs). In Pam's case, the arteries in the back of her neck were affected first and she experienced a dissection (a tear or rip) in one of her vertebral arteries, then she had another dissection in her left carotid artery in the front of her neck.

"I had such a bad headache that nothing relieved the pain," said Pam. "I spent over 11 days in the hospital and no one could seem to figure out what was wrong with me. I was very afraid that I was going to have a massive stroke."

An angiogram of a right internal carotid FMD with the "string of beads" shown. Image use courtesy of Cheryl Bailey

Many people with FMD do not have symptoms that can be detected during a general physical exam. The signs or symptoms that a person exhibits depend on which arteries are affected, and the degree of narrowing within them. Some patients with FMD have no symptoms at all.

FMD can be diagnosed through a number of methods including CT scan, MRI, ultrasound and angiogram. In the most common forms of FMD, a characteristic "string of beads" appearance is seen in images of the renal arteries that supply blood to the kidneys. This is caused by changes in the cellular tissue of the artery wall that causes the arteries to alternatively become narrow and dilate, or expand. In more aggressive forms of FMD, the vessel will narrow without the "string of beads" appearing.

It was the "string of beads" that led to Pam's diagnosis of FMD. After a series of tests and many trips to the ER, she still had headaches that were so painful she couldn't work. In a follow-up MRI, a radiologist noticed that she had a carotid aneurysm. After a second opinion, it was determined that Pam had suffered two aneurysms and had three arterial dissections or tears in the arteries of her neck. Renal FMD was also discovered.

"As an ER nurse, I knew something was wrong, but it was so frustrating that the doctors couldn't figure out what was causing my symptoms," Pam said. "When the doctor saw the classic "string of beads" in my renal arteries during my angiogram, he indicated that I had FMD. I finally started to feel like I knew what was causing all of my problems."

There is no cure for FMD nor is there a set protocol for treating it. Depending which arteries are affected will determine the kind of treatment used. A procedure called angioplasty is the treatment most commonly used for severe narrowing due to FMD. Angioplasty is often performed at the same time as an arteriogram during which the radiologist, vascular surgeon, or cardiologist inserts a wire into or near the affected artery and injects contrast material or dye

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After suffering for months through an array of symptoms, Pam Mace (pictured above) was finally diagnosed with fibromuscular dysplasia or "FMD". Image use courtesy of Pam Mace.

Our Mission

To reduce death and disability from vascular diseases and improve vascular health for all Americans

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that can be detected by X-ray. If an angioplasty is performed, a catheter is extended into the affected artery and a small balloon is inflated that "stretches" open the artery. A metal stent is typically not required to keep the vessel open for patients with FMD.

"Right now, there is a great need for more research on FMD to determine which patients are at risk and the optimal treatment. The care of patients with FMD focuses on determining which blood vessels are involved and whether or not a procedure needs to be done to treat severe symptoms due to this disorder," said Dr. Heather Gornik, a specialist in FMD at the Cleveland Clinic. "I also treat patients with carotid FMD with antiplatelet therapy, usually aspirin, and I work on controlling all other risk factors for vascular disease, such as smoking, cholesterol, body weight, and exercise. There is a great need to learn more about FMD, and the FMDSA will soon be sponsoring a national research study to learn more about this disorder."

In Pam's case, she had two experimental stents placed in her arteries within a two-year period, which helped to minimize the swishing noise in her ears and her headaches. She currently takes several medications, including a diuretic, blood pressure medication, and aspirin.

Today, Pam continues to work as an ER nurse and remains active. She also watches her diet and does what her doctors tell her. She currently serves as executive director of the Fibromuscular Dysplasia Society of America, Inc. (FMDSA) and has made it her mission to help others afflicted with FMD.

"My biggest frustration when I went through all of this was that I felt so alone and like no one was listening to me," she said. "It was also difficult that it took so long to find the FMD, but I'm glad at least now I know what I'm dealing with and am grateful that I have an opportunity to help others affected by FMD."

For more information about FMDSA, visit www.fmdsa.org.

The Vascular Disease Foundation would like to thank FMDSA for contributing medical information to this article.

Wanted: Nominations for Jacobson Award for Physician Excellence

Nominations for the 2009 Julius H. Jacobson II, MD Award for Physician Excellence are now being accepted. This prestigious annual award recognizes outstanding contributions to physician education, leadership, or patient care in vascular disease. Nominees for the 2009 award are being accepted through Friday, November 30th, 2008. For complete criteria, please contact VDF at **info@vdf.org** or **888.VDF.4INFO.**

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"Right now, there is a great need for more research on FMD to determine which patients are at risk and the optimal treatment."—**Dr. Heather Gornik, Cleveland Clinic**

Nutrition and Vascular Disease

Peripheral arterial disease (PAD) is a common form of vascular disease (disease of the blood vessels). PAD is the result of a buildup of fatty material (plaque) in the vessel walls, resulting in narrowing or blockage of the artery(ies). This process is called atherosclerosis. Following a healthy diet may prevent or treat the complications of vascular disease, as well as high blood pressure, elevated cholesterol, diabetes, and obesity. Listed below are some of the risk factors for vascular disease that you can control by eating a healthy diet:

High Blood Pressure

High blood pressure or hypertension is a persistent increase in the pressure in your arteries. Eventually, this increased pressure can cause your arteries to become scarred, thickened, hardened, and less elastic, restricting blood flow.

High Lipid Levels

This is the amount of cholesterol and triglycerides in your blood. Having high total cholesterol is a major risk factor for vascular disease, and can lead to a build-up of fatty deposits called plaque in the arteries. This can lead to atherosclerosis.

Diabetes

Having diabetes puts you at increased risk for vascular disease. It causes your blood sugar to get too high. Over time, high blood sugars damage the lining of the arteries. This may also cause a build-up of plaque and lead to kidney disease, blindness, and nerve damage.

Excess weight can lead to high blood pressure, diabetes, and high cholesterol. Eating a healthy diet can help you achieve a healthy weight while reducing harmful fats in your blood stream. It lowers high blood pressure, and, if you are diabetic helps you control your blood sugars. It is important that you learn about foods and what they contain by making a concerted effort to read labels containing facts about nutrition. They are on almost all foods.

You can reduce your risks for developing vascular disease and atherosclerosis of blood vessels by making changes in:

- How active you are
- What and how much you eat

Regular Exercise. Build up to 150 minutes of moderate activity each week (30 minutes of exercise, five days/week)

Choose Whole-Grain Products. Foods made with whole grains have more fiber and other nutrients than foods made with refined grains such as white rice and white flour. You should aim for three ounces per day.

Good choices include:

- Bread (1 slice) and crackers made with whole wheat or other whole grains
- Brown rice (1/2 cup cooked)
- Whole-wheat pasta (1/2 cup cooked)
- Whole-grain cereals, such as oat meal (1/2 cup cooked)
- Lentils, dried peas. and beans (good sources of fiber)

Vary Your Vegetables. Eat at least two cups (at least five servings) of vegetables every day. These are a rich source of nutrients with virtually no fat. You should have 1/2 cup of cooked vegetables or one cup if raw.

- Dark green vegetables
- Orange vegetables

Focus on fruits. Eat at least two cups of fruit each day. Choose:

- Fresh (1 medium piece)
- Frozen
- Canned (1/2 cup unsweetened)
- Dried fruit

Choice of Dairy Products. Select fat-free or low-fat dairy products. This is a good way to reduce fat and cholesterol in your diet.

Go Lean with Protein. When choosing foods with protein, select those that are low in fat and cholesterol. About three ounces of meat, fish, or poultry is one serving, which is about the size of a deck of cards.

Foods high in omega-3 fatty acids include:

1. Bass, bluefish, herring, mackerel, salmon, sardines, shark, trout, and tuna
2. Plant foods with protein include:
   -Beans
   -Peas
   -Nuts and seeds

Enjoy Sweets and High-Fat Foods in Small Amounts. Go easy on sweets and high-fat foods such as cookies, candies, salad dressings, and snack chips. These foods can be high in calories but do not contain many healthy nutrients.

Know Your Limitations for Salt. Sodium is a mineral that attracts and holds water and is found in many foods. In the right amount, it helps maintain the correct balance of fluids in the body. Most people consume more salt than is necessary. Manufacturers may add sodium to process foods or it can come from the salt shaker. About 75% of the salt which the average American eats comes

from sodium added during the processing of foods. A high-salt diet is a major risk factor for high blood pressure.

Understanding Fats. Cholesterol is a fat-like substance found in your body and in food from animal sources (such as meat). Too much cholesterol in your blood can raise your risk for developing vascular disease. Eating foods with cholesterol can raise blood cholesterol in some people. Limit the cholesterol you eat to 300 milligrams (mg) or less daily. The type of fat you eat can be just as important as the amount of fat you eat:

- Choose unsaturated fats more often than saturated fats (also called monounsaturated and polyunsaturated fats).
- Nuts, seeds, fish, and some vegetables contain unsaturated fats.
- Limit or avoid saturated fat. You should obtain less than 10% of your daily calories from saturated fats.
- Butter, whole milk, and fatty meats contain saturated fats.
- Use margarine substitutes containing stanols and sterols.
- Choose monounsaturated oils such as canola, olive, or peanut oil.
- Avoid Trans fats, which can raise your blood choles terol. They also increase your risk for developing vascular disease. Eat as little Trans fats as possible.
- Some margarines, fried foods, and baked goods contain Trans fats.
- Foods with partially hydrogenated oil, hydrogenated oil, or shortening have Trans fats and should be avoided.

Sugars. Some healthy foods naturally contain sugars. Foods such as dairy products, grains, fruits, and vegetables all have natural sugars. When sugars are added to food, you get lots of calories but few healthy nutrients. Added sugars can be found by looking for words on labels such as "sucrose," "sugar," or "syrup."

When it comes to controlling your weight and your intake of fat and cholesterol, knowledge is the key. Knowing about the foods you eat makes it easier to control your intake of calories, fat, and cholesterol. Reading the labels on all packaged foods and looking for nutritious foods (sometimes labeled in menus) in restaurants can help you make healthy choices and lifestyle changes that can reduce your risk of vascular disease.

About the Author: ***Cindy Felty, MSN, RN, CNP, FCCWS,*** *is the director of vascular ulcer/wound healing clinic at the Gonda Vascular Center. She is also an assistant professor of medicine at the Mayo Clinic College of Medicine in Rochester, MN.*

About Sodium

Sodium can raise your risk for, or worsen your high blood pressure. High blood pressure is also a risk factor for vascular diseases such as abdominal aortic aneurysm (AAA) or PAD. Everyone should aim for less than one teaspoon of salt per day. This is about 2,300 milligrams of sodium per day. If you already have high blood pressure, you should eat even less. The best rule of thumb is to avoid adding salt to foods during cooking or at the table.

When reading food labels for sodium, look for "unsalted," "no salt added," or "without added salt."

Avoid foods high in sodium:

- Canned, frozen, and pre-packaged foods
- Meat, fish, and poultry canned with added salt or smoked
- Luncheon meats, chipped beef, corned beef, sausages, and jerky
- Processed cheese and cheese spreads
- Pickled foods
- Salted soy nuts, nuts
- Commercial salad dressings, gravies, spreads, and sauces
- Commercially cultured buttermilk
- Snack chips, commercially canned soups, dried soup mixes, broth, and bouillon

Look for foods with no or low sodium:

- Fresh fruits and vegetables
- Fresh or frozen chicken, turkey, fish, beef, pork, lamb, veal, and wild game
- Tofu (unsalted)
- Skim milk (1% or 2% butterfat) and yogurt
- Potatoes, rice, and pasta
- No-salt-added canned tomato products
- Herbs, spices, salt-free herb/spice mixes (Mrs. Dash), garlic powder, onion powder, no-salt-added ketchup, and lemon juice

Running Shoes vs. Walking Shoes

Research has shown that a walking program is the number-one treatment recommended to improve symptoms in people with peripheral arterial disease. When buying shoes to begin their exercise program, most people assume that walking shoes would be the best choice. However, a running shoe may be an even better choice.

If you hold a walking shoe in one hand and a running shoe in the other, the first thing you notice is the weight. A running shoe is much lighter, which is a big plus. Secondly, running shoes are naturally more padded to withstand the impact of running, often using air pockets in the sole for added bounce. Running shoes also have a nice padded cuff around the heel to prevent slipping. Third, many adults have painful foot problems such as bunions, hammer toes, or diabetic neuropathy, to name a few. These problems can make walking even more painful if their shoes don't fit properly. Running shoes usually have a soft upper made of flexible materials or mesh. This allows more room to accommodate minor deformities, to prevent rubbing, and to allow the feet to breathe. Many running shoes have an innersole that can be pulled out and a custom insole can be inserted if needed.

It isn't necessary to spend outrageous sums on your running shoes. Try them on with thick cotton athletic socks and walk around. Test several brands and models to determine which one is right for you.

This article appears courtesy of the Providence Surgical Group, Inc., located in Providence, RI.

Buying Shoes that Fit

1. Buy shoes late in the day when your feet may be slightly larger from swelling.
2. There should be 3/8 to 1/2 inch of space between the end of your longest toe and the tip of your shoe when you are standing up.
3. Soles should flex under the ball of the foot, not under the arch.
4. Shoe uppers should be constructed of soft, flexible material such as supple leather or mesh.
5. Don't choose shoes by the size marked inside. Try on several models and walk around.
6. Measure both feet. If one is larger, buy shoes to fit the larger foot.
7. The shoes should fit snugly around the heels.
8. Make sure you have enough room over the instep and across the balls of your feet, and that the toe box is wide enough so that your toes do not get cramped together when you are walking.
9. If you wear orthotics to correct plantar fasciitis or other foot problems, make sure they will fit easily into your new shoes.

IN THE NEWS

Marjorie King Joins the VDF Board

Welcome to Marjorie L. King, MD, FACC, from New York-Presbyterian Hospital, as VDF's newest member of the Board of Directors. She will be representing the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR). Welcome, Dr. King!

NEW! Hospital Compare

This new Web site was created through the efforts of the Centers for Medicare and Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (DHHS), along with the Hospital Quality Alliance (HQA). The site can be used by any adult needing hospital care, and allows patients to compare the quality of care at different hospitals. Visit them online at: www.hospitalcompare.hhs.gov

New Guide to Coumadin®/ Warfarin Therapy

The U.S. Department of Health and Human Services (HHS) Agency for Healthcare Research and Quality (AHRQ) recently released a new consumer publication, *Your Guide to Coumadin®/Warfarin Therapy*. This 20-page, easy-to-read patient brochure explains what patients should expect and watch out for while undergoing Coumadin®/Warfarin therapy. For more information visit, **www.ahrq.gov/news/press/pr2008/warfarinpr.htm** or call **800.358.9295**.

New Pamphlets from VDF

VDF has two new educational pamphlets available for the public and health-provider offices: ***"Focus on Ischemia,"*** which tells you what you need to know about symptoms, risk factors, and treatment, and ***"Focus on the ABI,"*** which offers what you need to know about the ankle-brachial index (ABI) exam for PAD. Contact the office to get your free copies today at **888.VDF.4INFO (888.833.4463) or info@vdf.org.**

UPCOMING EVENTS

Focus on Vascular Disease

NEW! Join us for VDF's "Focus on Vascular Disease" one-day conference on August 16th in Denver, CO. Visit us online at **www.vdf.org** for information or to register.

Annual AARP Life@50+

Join us in Washington, D.C., for the annual AARP Life@50+ convention, September 4-6! We'll have a booth there with lots of information.

Free Vascular Screenings

The annual Legs for Life© screenings will be conducted across the country during September. Most locations provide free screenings for peripheral arterial disease, abdominal aortic aneurysms, and carotid and venous disease. Screening locations will be posted in August at www.vdf.org or at www.legsforlife.org

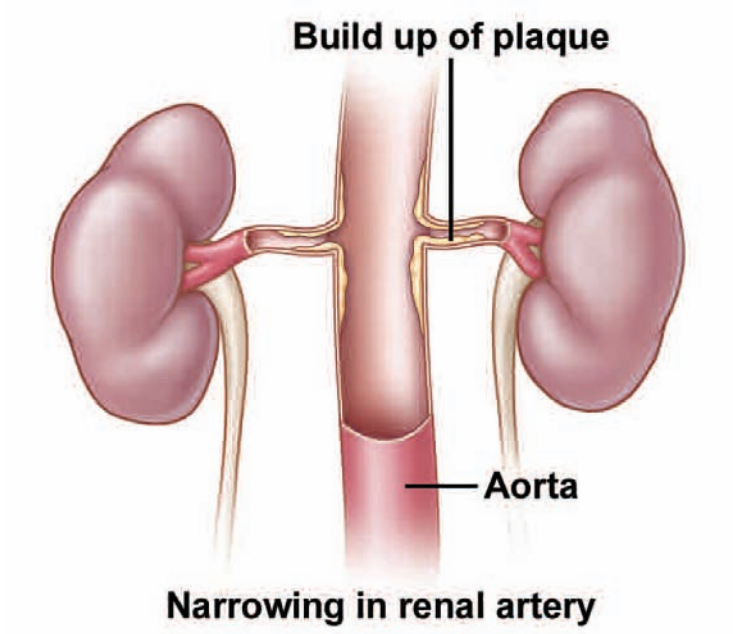
September is National PAD Awareness Month

In Partnership with
Stay in Circulation
Take Steps to Learn About P.A.D.

The P.A.D. Coalition will promote awareness through its national campaign, ***"Stay in Circulation: Take Steps to Learn about PAD."*** For more information visit **www.aboutpad.org**

Renal Artery Stenosis

Renal artery stenosis (RAS) is a common cause of high blood pressure that is difficult to control, and it may also be a cause of progressive loss of kidney function. Stenosis means narrowing, or partial blockage, of the blood vessels that carries blood to the kidney. The cause of renovascular hypertension in older patients is usually atherosclerosis (hardening of the arteries). Atherosclerosis is the most common cause of RAS. RAS may also occur in younger (commonly female) patients, due to abnormal development of the artery wall known as fibromuscular dysplasia (see article beginning on page 1 for information about FMD).



Provided by The Society for Vascular Surgery

RAS is often found in patients with vascular disease in other areas, such as in the coronary, carotid, abdominal aortic and peripheral arteries. In patients with atherosclerosis elsewhere, the likelihood of finding significant RAS is between 30-50%. In approximately 15% of the cases, patients with coronary artery disease will have atherosclerotic narrowing in the renal arteries. RAS may be asymptomatic, but it can be associated with several serious medical conditions, including increased high blood pressure (a predictor of heart attack, stroke, kidney failure, and premature death), kidney failure, and congestive heart failure.

Hypertension (high blood pressure) represents the most common reason for health-care office visits in the United States. It is estimated that over 50 million Americans and over one billion people worldwide have hypertension. Recently, the seventh report of the Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of Hypertension changed the definition of hypertension to >120/80 mmHg. This will increase the number of Americans who are candidates for aggressive risk-factor intervention and drug treatment for newly diagnosed hypertension. RAS is the most common cause of "correctable" hypertension and may be present in up to one million Americans.

The vast majority of patients with hypertension have primary hypertension—there is no underlying medical reason for hypertension—they just have high blood pressure. Approximately 10% of patients have secondary hypertension; that is, there is an underlying reason which, if identified and treated, would cure or lower high blood pressure. The most common causes of secondary hypertension include chronic kidney disease; obesity; medications, for example: non-steroidal anti-inflammatory drugs (ibuprofen, etc); sympathomimetics (decongestants, anti-histamines); oral contraceptives; anabolic steroids; illicit substances (cocaine); and over-the-counter dietary supplements (ephedra).

RAS is due to progressive atherosclerosis and may result in narrowing of the kidney artery(ies). RAS is associated with certain clinical clues which, if recognized by physicians, may result in earlier diagnosis. Some of these clues include:

- Worsening blood pressure control in someone whose blood pressure had previously been well-controlled

- The need for more than three medications at maximal doses for blood pressure control
- Severe high blood pressure with a symptom (heart attack, stroke, aortic dissection or rupture) or sign (abnormal sound heard with a stethoscope over the abdomen, changes on eye exams, swelling in the ankles, or evidence of an enlarged heart)
- Development of renal failure when taking certain medications
- High blood pressure and artery disease in the coronary, carotid, or lower-extremity arteries, associated with an abdominal aortic aneurysm
- Major difference in kidney size from one side to the other
- Repeated episodes of sudden severe heart failure, especially if the heart-squeezing function is normal
- Kidney failure without an obvious cause

There are several excellent non-invasive tests which are commonly used for the diagnosis of RAS, including ultrasound, nuclear imaging tests, magnetic resonance arteriography, and "spiral" computed tomography (CT) scanning. All have their advantages and disadvantages, yet all have high degrees of accuracy.

Treatment of RAS generally falls into three categories:

1. Medical treatment

- Drug therapy of high blood pressure
- Antiplatelet therapy (for example: aspirin, clopidogrel)
- Cholesterol-lowering medications
- Stop smoking
- Managing your blood sugar if you have diabetes
- Follow-up of RAS to make sure that it is not getting worse

2. Open surgery

- Endarterectomy—the plaque that causes renal artery stenosis is removed from the artery (rarely performed any more)
- Renal bypass—the blocked artery is replaced by a new artery, using a vein from the leg or a synthetic artery

3. Endovascular therapy

- Balloon angioplasty or percutaneous transluminal renal angioplasty (PTRA)—a catheter is inserted through the artery at the groin and a balloon is inflated to open up the blocked kidney artery. This technique is most effective in patients with fibromuscular dysplasia (see article on pages 1-3)
- Stent—a metal screen (scaffold) is placed in the artery to prevent it from collapsing after PTRA. This technique is usually used in patients with hardening of the arteries.

The federal government, after evaluating published scientific literature in the field of RAS and treatment, has recently concluded that the data supporting invasive therapy are not strong enough to recommend it over optimizing contemporary medical treatment. The Cardiovascular Outcomes in Renal Artery Lesions—(CORAL) trial is a federally-funded study which will, when completed, represent the largest trial ever performed to evaluate the benefits of renal artery stents in patients with RAS and high blood pressure.

The decision regarding the best treatment option is made by consulting with vascular experts, who take into consideration the level of high blood pressure; the degree of kidney-function problems; the overall health of the patient; the risk of the chosen procedure; and the likelihood of improvement. One thing is certain: Patients with RAS are at increased risk for atherosclerosis-related events, such as heart attack, stroke, aortic aneurysms, and even death, and they should be closely followed to assess their risk of such complications.

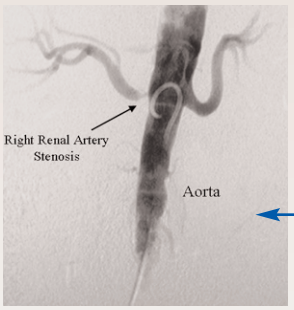


Image of renal artery stenosis provided by The Society for Vascular Surgery

About the Author: ***Michael R. Jaff, DO, FACP, FACC,*** *is the Medical Director of the Vascular Center and the vascular ultrasound core laboratory at Massachusetts General Hospital in Boston. He is a past-president of the Society for Vascular Medicine, and is a noted national and international lecturer and educator.*

About... the Ankle-Brachial Index (ABI)

The ankle-brachial index (ABI) is a simple and reliable means for diagnosing PAD. Blood pressure measurements are taken at the arms and ankles using a pencil-shaped ultrasound device called a Doppler (an instrument that produces sound waves, not x-rays) or other specialized measuring instrument. These are considered non-invasive because they do not require the use of needles or catheters. The ABI test is simple enough to be performed in any doctor's office or vascular laboratory. Not only is the ABI one of the most reliable tests for PAD, it is also the least expensive.

The ABI exam can be used to assess whether PAD is getting worse and to establish the severity of an individual's atherosclerosis (build-up of plaque) as well as to ascertain the risk of leg problems, such as development of leg-rest pain, poor healing of foot wounds, the need for bypass surgery, or amputation. It can also predict the risk of future problems from atherosclerosis such as heart attack and stroke.

For the exam, you will be asked to lie on your back while standard blood pressure cuffs are placed around your ankles and arms. Blood pressure measurements are taken and recorded, and a ratio is calculated for each leg. The ABI range that is generally considered normal is .95 to 1.3.

The ABI is extremely reliable, but may not be accurate in all patients. Some patients with long-standing diabetes, kidney disease, and some elderly patients may have stiff blood vessels. In these patients the ABI reading may be falsely elevated, thus additional testing is needed.

For more information or to receive a free copy of VDF's new "Focus on the ABI" educational pamphlet, please contact us at **888.VDF.4INFO (888.833.4463)** or you may download a copy online at **www.vdf.org.**

In Memory of and In Honor of Envelopes Available

VDF has created a preprinted envelope in response to requests from supporters who have contributed "In Memory of" and "In Honor of" a loved one. This will simplify and expedite your desire to memorialize or honor a special person through a donation to VDF. If you would like to receive these special envelopes, call us at 888.VDF.4INFO or contact us by e-mail at info@vdf.org.

NEW! The P.A.D. Coalition's Web site has a new look! We've updated the P.A.D. Coalition's Web site (www.PADCoalition.org) to make it easier to use and access the information. There is a new "About PAD" section with extensive information about peripheral arterial disease (PAD) as well as a resources section broken out for patients and health professionals. You may also access information about how to join the PAD Education Network for health professionals as well as download materials to support the Stay in Circulation Campaign. Visit our new site today at www.PADCoalition.org

Frequently Asked Questions

Excerpted from recent VDF's Live "Ask the Doctor" Chat with Drs. Rathbun and Cherry, Transcripts of all chats may be found online at www.vdf.org.

Question: How common is it for a stent to close up? If it starts to close up, can it be cleaned out or do the doctors have to put in another stent? How do they get rid of the old one?

Answer: Stents are commonly used for treating PAD. They are great for getting vessels open but may not last forever. In short, stents in the larger vessels tend to last a very long time while stents in smaller vessels tend not to last so long. If your stent is in your pelvis in the iliac artery, it is very likely to stay open for many years. If it is in the thigh or knee region in the femoral artery or popliteal artery, then about 80% remain open after one year. When they do start to close down, we have lots of tools to get them open again.

If someone has a stent that becomes severely narrowed, we usually start with balloon angioplasty. If that doesn't work or if we don't think that is going to work, we have sometimes tried laser therapy, or we use a device that scraps the lining of a vessel in a procedure called an "atherectomy," and sometimes we place another stent (sometimes within the existing stent). It just depends on what your doctor sees on your arterial studies. In some cases, another solution to a narrowed stent is a bypass operation.

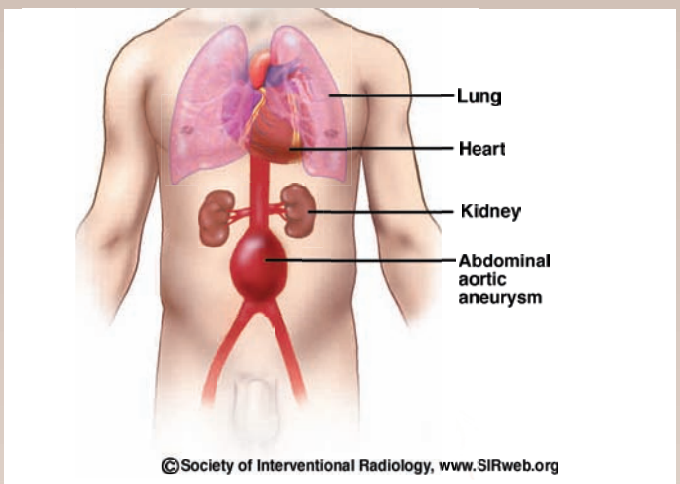
Question: Are there any drugs available to dissolve blockages?

Answer: It depends on the type of blockage. If someone gets a blood clot in his or her leg vessels, it can cause sudden pain. For blood clots, we have drugs known as thrombolytics to dissolve the blockage. There is no specific drug for dissolving clogged arteries due to atherosclerosis (plaque). Atherosclerosis causes fibrous-fatty plaques that grow over months to years. These blocked arteries may be tough to manage. We do know that correcting high cholesterol will slow down the growth of these atherosclerotic plaques and in rare cases can even lead to shrinkage (or regression) over time. However, for the time being, we generally use stents or bypasses to manage arterial blockages.

Question: Why does DVT seem to be so common during pregnancy?

Answer: There are a number of reasons why pregnancy increases the risk of DVT. First, female hormone levels change drastically during pregnancy, and these hormones can increase the risk of clotting. Secondly, the weight of the baby often presses upon the veins in the pelvis, slowing blood flow and making them more prone to clot. Finally, after delivery and/or cesarean section, women are often on bed rest, and immobility can promote clot formation.

Aneurysms



An aneurysm (AN-u-rism) is caused by progressive weakening of the aortic wall that causes a "ballooning" of the vessel. The bulge or "ballooning" of the vessel will grow larger and eventually rupture if it is not diagnosed and treated. The most common place to have an aneurysm is in the aorta (the artery that goes from your heart down to the arteries which supply blood to your legs). Other common locations where aneurysms can occur are the arteries of the abdomen (iliac), groin (femoral), leg (popliteal) and, less frequently, in the arteries of the intestines, spleen, and brain. *A ruptured aneurysm is an emergency and procedures must take place immediately to save one's life and avoid serious complications.*

It is not known what causes an aneurysm. Atherosclerosis (build-up of plaque) is associated with having an aneurysm, and other risk factors include smoking, high blood pressure, high cholesterol, obesity, and family history of aneurysms or cardiovascular disease. Your risk will increase as you grow older, although some aneurysms are present at birth. Rarely, aneurysms are caused by infection or injury.

Symptoms depend on where the aneurysm is found and sometimes there may be no symptoms at all. Aneurysms near the surface of the body may appear as a pulsating swelling. Those deep in the body may not be felt. With abdominal aortic aneurysms (AAA), lower abdominal or lower back pain may be present. With iliac, femoral, or popliteal aneurysms, a person may experience severe pain, coldness or splotchiness of the leg. If an aneurysm breaks (ruptures), you may have a fall in your blood pressure, pass out, have a high pulse rate, or eventually die if not promptly diagnosed, and attended to.

In order to find out if you have an aneurysm, your health-care provider will ask for your personal medical history and will perform a physical examination and ask about any symptoms. If an aneurysm is suspected, an ultrasound, CT scan, or MRI may be performed. In some cases, an angiogram (dye test) may be necessary, particularly if surgery is planned.

If an aneurysm is found, treatment depends upon the size, location, symptoms, your general state of health, and whether or not, the aneurysm is completely blocked with clots or plaque. If the aneurysm is small, it may be followed closely by your health-care provider and you will be given instructions to watch your blood pressure. An AAA is seldom repaired until it is about the size of a lemon. If you have a popliteal aneurysm, you will be told not to squat.

Treatment in some cases may include surgery or endovascular stenting. With surgery, an artificial tube is inserted and sutured or sewn into place. In endovascular surgery, the graft is delivered through a catheter or tube inserted into an artery. X-ray guidance is then used to accurately position the graft within the aneurysm. The graft is then expanded inside the aneurysm and held in place with metallic hooks rather than sutures. Hospital stays for endovascular surgery are shorter than those for open surgery, but patients undergoing endovascular stenting need more frequent follow-up tests. The decision regarding whether surgery or endovascular stenting is performed depends on a number of factors.

It is important to talk to your health-care provider if you have a family history of aneurysms of any kind. If you are found to have an aneurysm, you should contact your provider if you discover a new lump. You should always maintain a normal blood pressure and stop smoking (if you do).

VDF HealthCasts Continue

The Vascular Disease Foundation is proud to continue its audio HealthCasts that cover all aspects of vascular disease. Our guests are the leading scientific and clinical experts in their respective fields.

HealthCasts are hosted by Dr. David Meyerson and produced by Dr. Kerry Stewart. Dr. Meyerson is a cardiologist at Johns Hopkins and a scientific advisor to VDF. Dr. Stewart is a Professor of Medicine at Johns Hopkins and a member of VDF's Scientific Advisory Board.

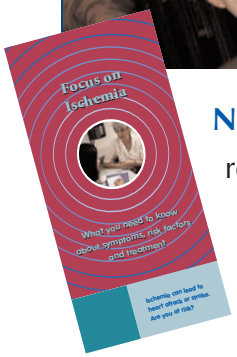
Here are the latest HealthCasts episodes and topics:

Episode 24: Back to Basics: Ischemia *Drs. Meyerson and Stewart discuss what you need to know about the causes, symptoms, and treatment of Ischemia.*

Episode 25: Focus on Blood Clots *Drs. Meyerson and Stewart discuss venous thromboembolism (VTE), a serious condition in which blood clots form in the deep veins, mainly in the legs.*

HealthCast Hosts Dr. David Meyerson (left) and Dr. Kerry Stewart (right)

Listen to HealthCasts at www.vdf.org



NEW! VDF now has a new educational pamphlet, Focus on Ischemia. You may also request a copy of VDF's "Focus on Blood Clots" educational pamphlet. You may download both online at www.vdf.org or contact us to receive your free copies at **888.VDF.4INFO (888.833.4463)** or **info@vdf.org.**

New Spanish Resources Debut on www.padcoalition.org. With a grant from the Medtronic's Patient Link Foundation, the P.A.D. Coalition recently adapted its "Lifesaving Tips" series of reproducible patient education tools into the Spanish language. Written at the sixth-grade reading level and complying with the federal government's "Plain Language" recommendations, these educational tools were developed by a multidisciplinary team of medical educators and are available on the P.A.D. Coalition's Web site. Medical practices and hospitals may access these patient resources at no charge for use in their patient-education efforts. Topics covered include ***"About PAD," "Smoking and P.A.D.," "Walking and P.A.D.," "Managing High Blood Pressure," "Control Your Cholesterol," "Foot Care and P.A.D.," "Diabetes and P.A.D.," "Prevent Blood Clots,"*** and ***"Special Treatments for P.A.D."*** The Coalition will work to promote these new tools for use in community health clinics, hospitals, health plans, and medical practices in concert with our Coalition member, the National Hispanic Council on Aging.

P.A.D. COALITION

Salvando vidas y extremidades

Para más información sobre la COALICIÓN P.A.D., llame al 1-866-PADINFO (1-866-723-4636) ó visite PADCoalition.org

Consejos para caminar más que pueden salvarle la vida a las personas con enfermedad arterial periférica

¿Por qué caminar?

Caminar puede influir bastante en las personas con enfermedad arterial periférica conocida en inglés como PAD. Estudios recientes demuestran que para muchas personas con esta enfermedad un programa estructurado de caminatas es uno de los mejores tratamientos para reducir los dolores en las piernas o los calambres (claudicación) al caminar. De hecho, los estudios indican que, con el paso del tiempo, un programa estructurado de caminatas es casi siempre más efectivo y puede funcionar mejor que los medicamentos o la cirugía para ayudar a que las personas que tienen esta enfermedad caminen más tiempo y distancias más largas sin que el dolor los detenga.

Un programa regular de caminatas le permitirá:

- Mantenerse más activo.
- Reducir el estrés y ayudar a relajarse.
- Controlar la glucosa en su sangre, la presión arterial, el colesterol y el peso corporal.
- Mejorar el tono muscular.
- Reducir las probabilidades de sufrir un ataque al corazón o al cerebro.
- Estar tranquilo porque está cuidando de su salud.

¿Cómo empiezo un programa de caminatas?

La mejor forma de empezar es con un programa especial supervisado de caminatas diseñado para personas con enfermedad arterial periférica. En este tipo de programas, trabajará de cerca con profesionales en salud que conocen la personas con enfermedad arterial periférica y que diseñarán para usted una rutina o un programa supervisado de caminatas. Su proveedor de servicios de salud puede ayudarle a encontrar un programa estructurado de caminatas para personas con enfermedad arterial periférica en un hospital local, en un centro de rehabilitación cardiaca o un centro clínico de ejercicios.

Si no puede asistir a un programa supervisado de caminatas para personas con enfermedad arterial periférica puede hacerlo usted mismo usando la guía del programa que aparece más adelante. Puede utilizar una máquina de caminar en casa o en un gimnasio. También, puede caminar en un centro comercial o en lugares seguros al aire libre. Antes de comenzar, hable con su proveedor de servicios de salud para definir un programa que se ajuste a sus necesidades.

¿Qué necesito saber antes de empezar?

Ya sea que asista a un programa especial supervisado de caminatas para personas con enfermedad arterial periférica o lo haga por sí mismo, mantenga estos puntos en mente:

- **Haga tiempo en su horario para caminar al menos de 3 a 5 veces por semana.**
- **Defina su primera meta en 35 minutos de tiempo total de caminata,** sin contar el tiempo que toma para descansar cuando comienza a sentir dolor en sus piernas.
- **Aumente lentamente hasta alcanzar la meta final de 50 minutos de caminata.** Este proceso puede tomar unos cuantos meses.
- **A medida que mejore y sienta menos dolor, trate de aumentar 5 minutos de caminata por semana.** La mayoría de personas comienza a ver cambios reales a partir de los dos o tres meses, pero podría tomar más tiempo.
- **Sea constante en su programa** para que pueda mantener las mejoras que ha logrado al caminar más tiempo y más lejos con menos dolor.
- **Trate de no abandonar el programa por más de dos días** entre sesiones para que sus músculos se mantengan trabajando.
- **Tómese su tiempo.** Aunque al principio puede ser doloroso, al acostumbrarse podrá caminar más tiempo con menos dolor.

continúa en la próxima página

Farewell and Thanks

The Vascular Disease Foundation continues to have the expertise, contributions, and dedication of so many wonderful board members who volunteer their time and energy to the foundation. Two board members terms have expired; Bob Albertson of Copper, Jones McLeland, Ltd., and Kerry Stewart, EdD, Johns Hopkins Bayview Medical Center. We extend our thanks to both for their service to VDF. We would like to offer special thanks to Dr. Stewart for his service in helping produce and co-host VDF's HealthCast series. We are grateful to him. He will continue to help produce future episodes.

Dr. Kerry Stewart (pictured left) at VDF's last Board of Directors meeting in Boston this past spring receiving a plaque of recognition from Dr. Mark Creager, president, VDF Board of Directors.

EXCELLENCE IN CARE: If you know of a health-care provider or medical professional who has shown you or your family special kindness or care that you feel deserves recognition, nominate him or her for VDF's Excellence in Care Award! Tell us whom you'd like to nominate and why you feel he or she deserves recognition. We'll acknowledge the deserving individuals in a future issue of Keeping in Circulation and on VDF's Web site. Just drop us a note with a tax-deductible donation of $50 or more to VDF Excellence in Care, 1075 S. Yukon Street, Ste. 320, Lakewood, CO 80226.

GET YOUR TENTH ANNIVERSARY COMMEMORATIVE PIN: To celebrate our tenth anniversary, VDF has produced a limited quantity of tenth-anniversary commemorative pins. These pins have an attractive gold finish and proudly display the VDF logo and anniversary banner. We request a $10 tax deductible donation to cover our shipping and handling costs. To get your pin, please contact us at **info@vdf.org.** Thank you for helping us celebrate ten years!

P.A.D. Coalition and African Methodist Episcopal Church Form Unique Partnership to Increase Awareness of Peripheral Arterial Disease

PAD is more common in African Americans than any other racial or ethnic group. To inform African Americans about PAD, the Coalition has formed a partnership with the African Methodist Episcopal Church (AMEC). The AMEC is one of the nation's largest African American congregations with approximately 2,500 churches and 1.2 million members throughout the Northeast, Midwest, and the South. In April 2008, the Coalition met with church leaders at their Annual Ministries in Christian Education Training/Planning Meeting in Columbus, Ohio. At this meeting, the Church officially announced that it would like to adopt PAD as a major health focus for nationwide congregations.

The Coalition will conduct a workshop for AMEC's regional health ministers and bishops at their annual meeting this July in St. Louis, Missouri. Coalition representatives will address the problem of PAD, the Stay in Circulation campaign, and resources available to educate church members about PAD.

Working with the AMEC, the Coalition is producing special resources—including a church bulletin insert and fan—for distribution to church congregations nationwide.

These new resources will debut in time for September's PAD Awareness Month.

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KEEPING IN CIRCULATION:
Focus on Vascular Disease One-Day Conference

Saturday, August 16, 2008 • 9am-3pm

Four Points Sheraton • 6363 Hampden Ave., Denver, CO

The Focus on Vascular Disease one-day conference is a must-attend event for patients and caregivers who want current information about vascular disease. Don't miss this day of educational sessions from vascular medicine specialists, lively discussions, and networking opportunities with others in the vascular community. Session topics include the latest advances in vascular disease research and treatments, vascular disease connection with heart disease, stroke, high blood pressure, cholesterol, and diabetes, daily coping, exercise, diet, and improving your quality of life. This information will help people who have PAD, carotid disease, DVT, or an aneurysm.

Conference registration is $25 ($30 after Aug. 1) and includes the complete conference program, lunch and one refreshment break.

To register online by credit card or check, visit us online at www.vdf.org.

This event is made possible by, and with our thanks, to AstraZeneca, Humana MarketPOINT, Life Line Screening and the University of Colorado Health Sciences Center.