



Keeping In Circulation

the official newsletter of the Vascular Disease Foundation

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our mission

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

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A Silent Killer

"I'm going to Iraq." These are words that have caused worry for many families since the war in Iraq began. They certainly were words Melanie Bloom dreaded to hear from her husband, NBC News correspondent, David Bloom, in early 2003. She – along with many other journalist and military families – deeply feared the dangers of war. She feared for David's safety. Yet she was also proud of David's determination to tell the soldiers' stories and to bring the reality of war home to the American people.

An awful event *did* take David's life in the sand-blown heat of war, but the killer was neither an insurgent's bullet nor a mortar shell. When her telephone rang that night in April 2003, she remembers thinking, through a fog of shock and grief, "What? He died of *what*?" She had never heard of deep vein thrombosis (DVT) or pulmonary embolism (PE). Yet, in a strange and far-away land, these unknown, unseen conditions took the life of her husband and the father of her three little girls.

Now, three years since David's death, Melanie Bloom still feels profound loss and grief, especially knowing that her husband's death could have been prevented. David could be living today, had he and she been aware of this danger, this silent killer. Of course, nothing can change what happened to her own family, but Melanie, knowing what she knows now, can help others live. She now devotes time as an emissary to raise public and medical community awareness of David's little-known killer, DVT and PE. She wants to share her story with the readers of *Keeping in Circulation*.

In the year leading up to the war, David shuttled back and forth to Kuwait. He spent weeks with the troops in the desert, then went to the Pentagon for chemical and biological warfare training, then returned to New York to co-anchor the weekend *Today* show. When he ultimately embedded with the 3rd I.D. and began the long push across the Iraqi desert, he managed to stay in close touch with Melanie and his daughters, often through satellite phone or e-mails.

In one e-mail, he wrote to his children that it was hard being away from his family. But, characteristically, he added a word for the troops in Iraq and their families back home: "When you're missing me, as I am missing you, remember to say a prayer for all those other boys and girls who are missing their mommies and daddies too."

With growing apprehension, Melanie watched the nightly news. She observed David as he quickly donned a gas mask while a chemical alert sounded in the background and watched, with thudding heart, when David crouched down and urgently relayed to Tom Brokaw, "We're under fire, Tom!" She smiled as he held glow-sticks up next to his face so that he



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could still be seen during a blinding sandstorm. And she fought back tears when he wished their twin daughters “happy birthday” through the television set as their little faces beamed up at his image.

Through all of those long and dangerous days and nights, David called home nearly every day via satellite phone. His wife explained that one such call came a few days before his death. He was speaking in a whisper. He said his unit had reached the outskirts of Baghdad and he was sleeping outside atop the fender of the M-88 tank in which he had been riding. “We have to be quiet,” he said. “We can’t have lights or any noise because of the possibility of ambush.” Melanie asked, “David, why are you sleeping *outside*? Get back into the tank where it’s safe! But he said he had been confined too long inside too small a space. His legs had been cramping and he couldn’t bear another night with his knees tucked to his chin. He went on to tell me about the stars over Baghdad as he lay there, gazing into the cold, desert night sky. As I look back now, I wish I had recognized the *most* dangerous warning sign of all – those whispered complaints of leg cramps.”

David had at least three key risk factors for DVT. First, he experienced **prolonged immobility** as he worked, ate, and

slept inside a tank. Next, he was **dehydrated**. He and the troops were subsisting on rationed water supplies. And finally, only too late did Melanie learn that David carried an **inherited blood coagulant disorder** called Factor V Leiden, a symptom-free condition that increases the risk of DVT.

This non-discriminatory disease takes its toll on the young and old, male and female, fit and unfit. Risk factors or triggering events include cancer, immobility from an acute illness or surgery, obesity, pregnancy, long-distance travel with little mobility, post-menopausal hormone replacement therapy, and even going on “the pill.” By identifying the symptoms and risk factors, doctors can readily prevent or treat DVT with blood-thinning drugs.

Melanie Bloom never envisioned that she would take center stage on an important public health issue. Melanie’s hope in telling David’s and her story is that she can help raise public awareness of this silent, insidious killer that took her husband’s life so quickly. Melanie is the national spokeswoman for the Coalition to Prevent DVT and participated in a national media campaign for DVT Awareness Month in March.

Melanie Bloom lives with her three children in New York.

For more information on DVT and PE, read the article on page 3 and visit the [Vascular Disease Foundation Web site at www.vdf.org](http://www.vdf.org).

PATIENT PROFILES: If you have vascular disease – send us your story. Send us your tips, what motivates you to fight your disease, and what you have found to help you feel better. We will be selecting several to share on our Web site or in this newsletter. Send to: Editor, *Keeping in Circulation*, Vascular Disease Foundation, 1075 S. Yukon St., Ste. 320, Lakewood, CO 80226.

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Deep Vein Thrombosis: What to Know

Deep vein thrombosis, commonly referred to as DVT, is a condition in which a blood clot, or thrombus, develops within the body, usually in the deep veins of the legs, or higher up in the pelvic area. DVTs can be quite painful, but with treatment the majority are not life-threatening and the blood clots often gradually dissolve. However, they can occasionally cause serious health problems. If a clot breaks free and moves through the vein, it is known as an embolus. When an embolus travels upward and lodges in an artery of the lungs, it is called a pulmonary embolism or PE, which is a potentially fatal condition if it significantly blocks blood flow through the lungs.

More people suffer from DVT annually than from a heart attack or a stroke. According to the American Heart Association, each year up to two million Americans are affected by DVT and up to 200,000 deaths in the United States are caused by PE. Up to 600,000 Americans are hospitalized each year for DVT, and among hospital patients, DVT and PE are the number one cause of unexpected death. Worse, two out of three such deaths could have been prevented, according to the American Public Health Association (APHA). And yet few citizens have ever heard of this killer. A study by APHA showed that nearly three-quarters of Americans have little or no awareness of either DVT or PE.

What are the causes of DVT?

Generally, a DVT is caused by a combination of two out of three underlying conditions:

1. slow or sluggish blood flow through a major vein,
2. a tendency for a person's blood to clot quickly, a condition that sometimes runs in families, i.e., it is inherited, and
3. irritation or inflammation of the lining surface of the vein.

There are a variety of settings in which this clotting process can occur: an injury to a vein, a long surgical procedure, a heart attack or stroke, prolonged periods of inactivity, or bleeding and shock. In some patients, abnormal clotting factors are present and can lead to DVT. Some cancers produce such clotting factors. Other conditions that may play a role include congestive heart failure, obesity, chronic respiratory failure, a history of smoking, high blood pressure, varicose veins, pregnancy, and estrogen treatment. Most of these occasionally contribute indirectly through one of the above three primary mechanisms, but if you are concerned that you may be at risk due to any of these conditions, please consult with your health care provider.

Who is at risk?

DVT occurs in about two million Americans each year and affects men and women, all races, and all social levels. It is seen most often in adults over the age of 40, and more frequently in elderly patients, but it can occur at any age. Women in the later stages of pregnancy or around the time of delivery are at increased risk. See the chart on page 5 for a list of key risk factors.

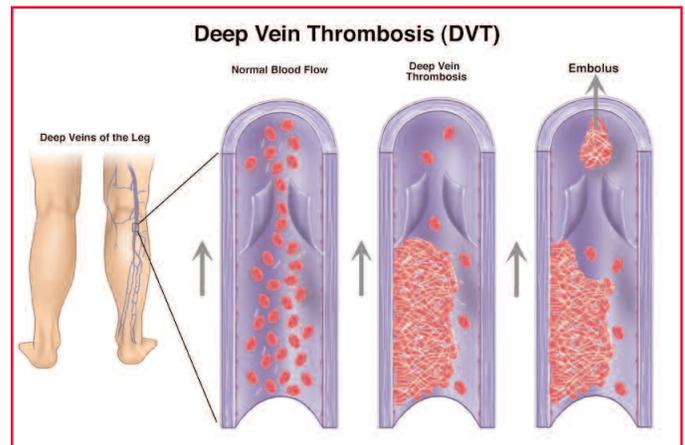


Illustration is used with permission of the Society of Interventional Radiology

What are the symptoms of DVT?

Approximately half of those with a DVT have no recognized symptoms. When symptoms are present, the most common is leg pain and tenderness in the calf muscles, or one may observe swelling or a change in color to purple or blue in one leg. These signs and symptoms may appear suddenly or may steadily develop over a short time. If you observe these signs or symptoms, you should contact your doctor *immediately*.

Symptoms are quite different if the clot breaks loose and travels to the lungs, causing a pulmonary embolism. The symptoms of PE include chest pain, shortness of breath, rapid pulse, or a cough. There may be a feeling of apprehension, sweating, or fainting. These are critical symptoms that demand immediate medical attention.

How is DVT diagnosed?

A suspicion of DVT is raised after a clinical exam and by identifying the associated risk factors, but a definite diagnosis of DVT, enough to guide treatment, cannot be accurately made without additional testing. A duplex ultrasound scan is usually ordered, because it is highly accurate, non-invasive, and painless. With duplex scanning, any blood clots in the

Continued on page 4

DVT continued from page 3

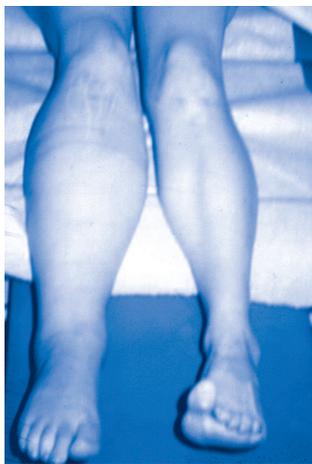
vein are displayed on a monitor. A venogram, a test in which dye is injected into a vein in the foot and an x-ray is taken of the leg, is rarely needed nowadays, other than to guide therapy if removal of the clot is justified, as discussed below.

How is DVT treated?

For most DVTs, physicians recommend wearing elastic stockings, elevating the leg, and taking anticoagulant medications (blood-thinners) to prevent blood clotting. Some may recommend sequential compression devices to promote blood flow. Anticoagulant therapy prevents further clots from forming and diminishes the risk of a pulmonary embolus. It consists of heparin, which may be given intravenously or, more frequently, by subcutaneous injection, followed by warfarin, which can be given orally and continued on an outpatient basis.

The physician may also recommend thrombolysis, using an intravenous agent that dissolves clots. With this procedure, a catheter is threaded up through the vein to the clot, and one of the clot-dissolving drugs is injected to dissolve it. The clot-buster is injected slowly through a catheter with many tiny holes into the area of the DVT, much like a soaker hose.

Sometimes a tiny vacuum cleaner is used to suck out the soft-



ened clot. Once the clot is gone, balloon angioplasty or stenting may be necessary to open the narrowed vein, but this is common only in the iliac veins, located in the pelvic area. With this approach, the patient will also need anticoagulant medication (heparin) to prevent new blood-clot formation while the existing clot is being dissolved. For a few patients who have valid reasons for clot

removal but for whom clot-dissolving drugs cannot be used, extraction of the clot, through a small incision at the groin, may be recommended. Both approaches are designed to remove the clot and restore the venous system to normal, but they involve additional risk and expense and therefore are applied selectively by the appropriate vascular specialist. Clot removal, by either technique, is usually recommended only for major clots higher up in the leg, and particularly in active, healthy patients without any serious associated diseases. It can significantly reduce the serious late after-effects of DVT, such as chronic leg swelling, discoloration, and, ultimately, ankle ulcers, but they do so at an increased risk of serious bleeding.

What are the late effects of DVTs?

Although smaller blood clots in the leg veins often dissolve without serious late after-effects, larger and more extensive blood clots, located in the upper thigh and pelvic areas, are not only of greater danger in terms of PEs, but can also lead to significant, disabling problems in the leg veins afterwards. Following a blood clot, the leg veins can remain obstructed, or, even if the clot dissolves and the vein opens

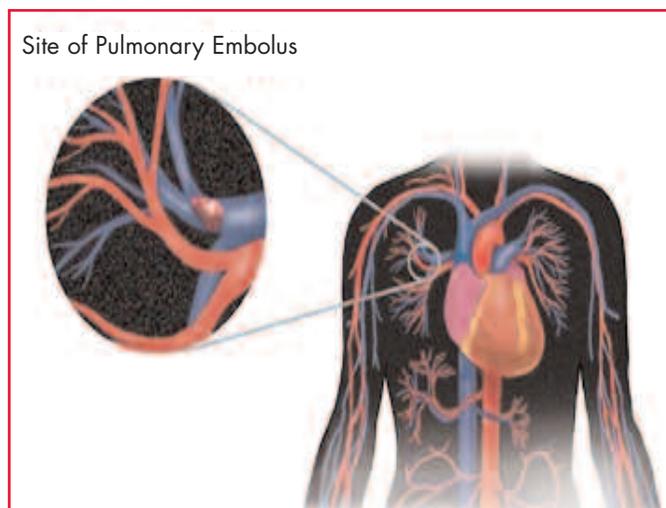


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up, the valves in the vein may be damaged and not function properly. This may result in chronic swelling, skin discoloration, and ultimately, if unchecked, chronic leg or ankle ulcers. These problems can be offset if one will faithfully wear elastic stockings and elevate the legs periodically during the day. Anticoagulant therapy will reduce the risk of PEs, and the likelihood of reoccurring DVTs, but it will not prevent these after-effects, commonly called the Post Thrombotic Syndrome (PTS). The techniques of early clot removal described above are primarily intended to control these late problems.

Can DVTs be prevented?

Regular exercise will decrease the risk of DVT. Persons who undergo major surgery are at risk to develop DVT; therefore, exercising the calf and leg before surgery and resuming physical activity as soon as possible after surgery will decrease the risk for DVT. Preventing DVT is the major reason why hospitals have patients up and walking as soon as possible after surgery. Regular stretching and leg movement are important for individuals who sit at a desk all day or are traveling in a confined space on long trips; such as in air travel. Other recommendations are to refrain from smoking cigarettes and to avoid wearing tight garments that produce constrictions below the waist.

Are You at Risk for Deep Vein Thrombosis?

Certain individuals may be at increased risk for developing DVT; however, DVT can occur in almost anyone. Read about the risks, causes, symptoms, and treatments for DVT, and how to prevent DVT, inside this issue.

Risk Factors or Triggering Events for DVT:

- Cancer
- Certain heart or respiratory diseases
- Prior DVT
- Advanced age
- Acute medical illness with restricted mobility
- Inherited or acquired predisposition to clotting
- Obesity
- Stroke
- Hospitalization
- Patients undergoing major surgery, such as joint replacements, who remain immobilized in bed after an operation
- Pregnancy
- Restricted mobility caused by long-distance travel
- Use of birth control pills
- Postmenopausal hormone replacement therapy
- Trauma

Type of Disease in the U.S	Annual Deaths
Pulmonary embolism	Up to 200,000
AIDS	14,809
Breast cancer	40,200

Source: Coalition to Prevent DVT

What do you Know about PAD?—The Quiz

Keeping in Circulation has provided a lot of information about PAD. Now it's your turn – to find out how much you know. Answers are on page 10.

1. "PAD" stands for what? _____
2. PAD affects which blood vessels?
____arteries ____veins ____both
3. PAD is caused by a build-up of _____ on the inside of the blood vessel.
4. True/False: If I don't have pain in my legs when walking, then I don't have PAD. ____
5. True/False: Your risk for dying from breast cancer is greater than from PAD ____

Remember Mother's Day & Father's Day



Remember and honor your mother and father this year with a donation to VDF. Our Web site will list all contributions

on our "Special Mothers" and "Special Fathers" page. Please send us your mother's or your father's name, a statement you wish to make, and the names of those requesting this honor along with a contribution of \$25 or more. A special card will be sent to your mother and/or father if you also send us his or her address. Please contact us at 1-888-VDF-4INFO, e-mail us at info@vdf.org, or mail to: VDF, 1075 S. Yukon St., Ste. 320, Lakewood, CO 80226. You can also do this on-line using the Donor link on our Web page at www.vdf.org.

Put on Your Running (or Walking) Shoes and Help VDF

We're excited to share news about some great events that are planned for this fall and that will benefit VDF. You can help by participating in the event, making contributions to a participant, volunteering to help at the events, and by letting your friends and relatives know about these fun events. By helping, you will benefit the thousands who derive help from our newsletters, Web site, and other informational materials as we strive to fight vascular disease.

Vegas Fun Run and Walk – Wednesday, September 27, 2006

Do you live in or near Las Vegas? Or do you want to visit? Are you planning to attend the VIVA06 meeting? Join us for the First Annual VDF/VIVA Fun Run and Walk to help VDF fight vascular disease and improve vascular health and awareness. The 5K event is scheduled for Wednesday, September 27, 2006. Visit the Upcoming Events page on the VDF Web site at www.vdf.org for more information.



Virginia Grove Memorial Walk for Vascular Disease – Saturday, October 7, 2006

The Virginia Grove Memorial Walk to benefit VDF will be held on Saturday, October 7, 2006, in Queen Anne's County, Maryland near Annapolis. The walk will follow the Cross Island Trail beginning at Terrapin Park and ending at Narrows Outlet Center. The weather should be beautiful and the fall colors will be in full force. If you are interested in helping or walking, contact the VDF office at 1-888-VDF-4INFO or visit the Upcoming Events page on our Web site at www.vdf.org/events.php.



2006 LaSalle Bank Chicago Marathon – Sunday, October 22, 2006

Ready...Set...Go...! VDF has been selected as an official Associated Charity of the 2006 LaSalle Bank Chicago Marathon and we're challenging you to join Team VDF as a runner or sponsor. This is our first year to participate in this marathon and we want to start with a BANG! Our goal is to raise \$50,000 and have 50 runners on Team VDF. If you know someone who runs marathons, be sure to let him or her know that he or she can run the marathon in Chicago and support the mission of the VDF. Are you a marathon runner? Please join our team and ask your family, friends, employer, and coworkers to sponsor your run and support VDF. Please note that registration must be completed by early July.

For more information on the many ways you can be a part of Team VDF, visit www.vdf.org and click on The LaSalle Bank Chicago Marathon link or give us a call at 1-888-VDF-4INFO. You'll also be able to see who has joined Team VDF and learn about ways to help team members achieve their goals.

"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 can 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 1-888-VDF-4INFO, e-mail us at info@vdf.org, or complete this coupon and return it to: VDF, 1075 S. Yukon Street, Suite 320, Lakewood, CO 80226.

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Arteritis

When thinking about blood vessel problems, most people think about blood clots and hardening of the arteries. These are the most common causes of blood vessel “blockage.” The medical term for hardening of the arteries, atherosclerosis, represents the most common reason why Americans die as they get older. Risk factors for atherosclerosis, including high blood pressure, diabetes, high cholesterol, and tobacco use, commonly play major roles in the development of artery blockage. Although much less common, there are artery problems that develop without atherosclerosis as the cause. One of these is known as “arteritis.” Just by reading the name, you might be able to tell what it is: The arteries are inflamed (the “itis” in arteritis)!

DID YOU KNOW?

Have you heard the term, “vasculitis”? It is a term related to arteritis. In fact, vasculitis is a broader term describing many diseases, including arteritis. Vasculitis is the inflammation of any blood vessel—artery, vein, or capillary—causing a narrowing of the blood vessel or the formation of clots and blockages that leads to ischemia, or lack of oxygen getting to the tissue or organ and causing pain or tissue decay.

Because arteritis is far less common compared to atherosclerosis, many doctors don’t even consider this class of artery problems until it becomes quite advanced. Additionally, the cause of arteritis is generally unknown. So, patients with artery problems, particularly if they don’t have the classic risk factors for atherosclerosis, need to be aware of the signs and symptoms of arteritis.

Besides being less common, the big challenge with arteritis is that arteries are found EVERYWHERE in the body—the heart, lungs, liver, kidneys, brain, arms, legs—you name it, wherever there is body tissue, there are arteries present. So, if you have a disorder that causes or results in inflammation of the arteries, any organ system in the body can have a problem.

Therefore, patients may visit the doctor with a broad array of problems—from skin rashes to joint and muscle pain, from headaches and seizures to high blood pressure, blood in the urine, asthma, and even jaundice. It is easy to see the challenges that doctors face, or why they might not think about artery inflammation when someone shows up with asthma! The diagnosis of arteritis can be

made only if the doctor suspects this as a possibility. So, if someone visits the doctor with multiple problems involving different organ systems, and infection is not the cause, arteritis should be considered.

Diagnosis. The first tests ordered are often blood tests. These blood tests may demonstrate not only the presence of inflammation, but also underlying diseases that result in arteritis (such as systemic lupus erythematosus, scleroderma, and allergic reactions). Imaging tests, such as angiograms, which actually show pictures of the arteries, may be helpful. Sometimes small biopsies are performed, allowing the doctors to look at the artery walls under a powerful microscope to actually see the inflamed artery walls. Doctors classify arteritis depending on the size of arteries involved, and they often use different terms to identify the arteries involved or the disease process. Types of arteritis include polyarteritis nodosa, giant cell arteritis, cerebral arteritis, and Takayasu disease. Different-sized arteries can be affected—small, medium, and large. For example, Takayasu’s disease typically affects large arteries such as the aorta and its major branches. Polyarteritis nodosa affects small arteries in the kidney, liver, and bowel. The treatment may differ depending on the size of the arteries involved and the underlying disease process.

Treatment is often with strong anti-inflammatory medications that shut down the inflammatory process. When used under the close supervision of an arteritis specialist (rheumatologist, vascular medicine specialist), these powerful medications can cure the problem. Unfortunately, many of these medications have serious side-effects. Your doctor will tell you about the risks and benefits of the proposed treatments.

All in all, the key is for the physician and patient to have a hunch about arteritis. Once the suspicion is made, the diagnosis and potential treatment may be right around the corner.



About the author: *Michael R. Jaff, DO, FACP, FACC, is the director of the vascular diagnostic laboratory and vascular ultrasound core laboratory at Massachusetts General Hospital in Boston. He is past-president of the Society for Vascular Medicine and Biology and is a noted national speaker. He serves on the Board of Directors for the Vascular Disease Foundation.*

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Arteritis continued from page 7

Common Arteritis Symptoms:

(Symptoms that cannot be explained by a recent activity, and which linger for days or weeks)

- Chronic aching or pain
- Stiffness
- Fever
- Headaches
- Abnormally increased blood pressure
- Ballooning (aneurysm) of an artery
- Formation of blood clots
- Obstruction of blood supply to certain tissues that is not atherosclerosis
- Skin rashes



RESEARCH REVIEWS

This section provides information about scientific studies on vascular disease. By listing these studies, the Vascular Disease Foundation and any sponsors are not endorsing the studies, the study center, the study sponsor, or the treatments and disclaim, either explicitly or implicitly, that the drug, biologic or device listed here is safe or effective for the purposes under investigation, or that the test article is known to be equivalent or superior to any other drug, biologic, or device. Additionally, no claims are made regarding the scientific utility and conduct of clinical trials or research studies listed. For more information about trials, visit www.vdf.org and click on "Clinical Trial," or contact us at 1-888-VDF-4INFO.

Leg Hurt Study. Research Study Seeking Participants Who Experience Painful Walking *"My legs are killing me!"*

You may think this is only an expression, but if you have leg pain that feels like an ache, burning, cramping, or tiredness, you may be experiencing claudication, one of the primary symptoms of peripheral arterial disease (PAD). And PAD increases your risk of heart attack, stroke, and death.

Current treatments for PAD and claudication include surgery, angioplasty, and exercise. Only two medications are currently available to reduce claudication, and these do not always provide pain-free walking.

Three recent studies have shown that cholesterol-modifying medications may diminish claudication symptoms. However, there is still too little information available to prove that this is a reliable and safe new treatment. A national research study is underway to determine if using this type of medicine can safely and effectively treat claudication.

For all research studies, the patient and his or her physician should discuss the benefits and risks of participation. For this study, only people 40 years or older with claudication symptoms from PAD for at least six months may qualify to participate. Participation involves study-related medical screening and provides investigational study medication and study-related exams at no cost. The national contact number for this study is 1-866-LEG-HURT, or prospective subjects can visit the study Web site at www.leghurt.com.

Stocking Up on Varicose Vein Prevention

For most women over the age of 30, the idea of wearing “support hose” is not a new concept. Girls have long been raised to dread the appearance of varicose veins in their legs. They were told by their mothers and grandmothers that varicose veins could be prevented by not standing still for long periods of time, by not crossing legs when sitting, and by wearing tight-fitting leg socks or hosiery. Well, our grandmother’s did (and do!) know what they were talking about. Both exercise and wearing support hose are key ingredients in the prevention of varicose veins. In addition, although women may be more self-conscious of varicose veins, men also develop varicosities; in fact, it is estimated that up to 60 percent of all adults will develop varicose veins at some point in their life.

Varicose veins are engorged gnarled veins. “Varicose” comes from the Latin word *varix*-, which means twisted. Any vein in the body can become varicosed, but the veins in the legs and feet are most frequently affected because of the increased pressure in the lower extremities when standing and walking. Veins compress when the muscles around them flex, which stimulates blood movement and prevents blood pooling. Standing in one place for a long period of time, without leg muscle movement and flexion, increases the risk for development of varicose veins. Furthermore, deliberate external compression of the legs, such as from an elastic wrap or a compression stocking, also prevents pooling of blood and can prevent and treat varicose veins. While varicose veins are not life-threatening, they can cause significant discomfort in the legs, and to many people they are also cosmetically unappealing. You should consider wearing support stockings if you find that your varicose veins prevent you from wearing the clothes you would like to wear, or if the aching discomfort in your legs disrupts your daily activities. Support-hose technology is much improved and more effective than ever before.

Support stockings work by exerting a certain amount of pressure external to the veins. Historically, support stockings were offered at one level of pressure (and in one color). Today, support stockings are available at four levels of pressure (and in any color!). The four levels are: mild, moderate, firm, and extra firm. Mild support is recommended for those with tired achy legs and mild varicose veins. Although labeled “mild,” these hose still offer more than twice the support of regular department store support stockings! Moderate compression is for those who are limited in their regular activities due to tired achy legs. Firm compression is for those with severe varicose veins and foot and leg swelling. Extra firm compression is usually reserved for those who have found that lower levels of support do not work. In order for compression stocking to be most effective, they must fit properly. Depending on the pre-



ferred style of compression stockings (knee-high, thigh-high, or pantyhose), measurements must be taken at the smallest part of the ankle, the largest part of the calf, and the fullest part of the thigh. In addition, the



Photos courtesy of
Juzo, USA

height of the calf and the entire leg must be measured. Measurements should be taken early in the morning before swelling builds up in the leg.

Today’s support stockings are designed to provide gradient pressure to the calf and thigh. This means that they are tightest at the ankle, and slowly decrease in pressure toward the top of the stocking. As a result, the stocking will not restrict blood flow, particularly if they fit correctly. If your doctor has recommended that you wear support stockings, he/she will give you a recommendation on how long to wear them each day. In addition, if you want your insurance to cover the cost of the stocking, your physician can give you a prescription. Not all health insurance policies cover stockings. However, support stockings have been approved for over-the-counter sales, so you can purchase them without a prescription. Those who purchase compression stockings should plan to wear them whenever they are out of bed (usually about 16 hours/day), and they should be replaced every six months. For more information regarding varicose veins, visit our Web site at www.vdf.org.



About the author: *Sharon K. Christman, RN, is an Associate Professor of Nursing at Cedarville University located in Cedarville, Ohio.*



Excellence in Care Award

Breno Pessanha, MD



Dr. Pessanha was nominated for VDF's Excellence in Care Award by Al Watt of Peoria, Illinois, for his outstanding approach to patient care. In his nomination letter, Mr. Watt notes that Dr. Pessanha has a courteous,

respectful, and friendly manner that creates a trusting relationship between the patient and the doctor. Additionally, Mr. Watt finds Dr. Pessanha to be receptive to questions about a variety of medical issues, he treats his patients from a holistic perspective (which looks beyond only the symptom or disease), and he doesn't make his patients feel that they need to rush through their appointment.

Dr. Pessanha is a noninvasive cardiologist with Methodist Medical Group Cardiology at the Methodist Heart, Lung, and Vascular Institute in Peoria, Illinois.

To nominate a health care professional for VDF's Excellence in Care Award, simply send a note or e-mail with your tax-deductible donation stating whom you are honoring and why this person deserves the recognition. Checks or credit card charges of \$50 or more are accepted. Be sure to identify the honoree's name, address, and phone number so we can let the award recipient know of this honor. Include your name and address so we can thank you as well. Find out more by contacting the VDF toll-free at 1-888-VDF-4INFO. Excellence in Care Award recipients are featured on VDF's Web site at www.vdf.org; click on "Donate" and then "Excellence in Care."

What do you Know about PAD? – The Answers

(The Quiz is on page 5. See how many questions you can answer.)

1. PAD stands for peripheral arterial disease.
2. PAD affects the arteries outside of the heart. This includes the arteries to the brain, arms, aorta, kidneys and gut, as well as the legs. It often is used to describe the most common manifestation, which is atherosclerotic disease of the arteries to the legs.
3. The most common cause of PAD is atherosclerosis, a build-up of plaque on the inside wall of the arteries. This plaque narrows the artery making it difficult for oxygenated blood to flow as it should.
4. False. The most common symptom of PAD is a discomfort, fatigue, or pain in leg muscles that occurs with walking and quickly goes away when you stop. This symptom is called claudication. However, most individuals with PAD do not have this symptom, which occurs in 1 to 3 out of 10 individuals with PAD. In other words, most people with PAD do not have recognizable discomfort in their legs when walking. You are at risk for PAD if you have claudication, smoke or used to smoke, have diabetes, have high cholesterol, have high blood pressure, are over 50 years old, and have a family history of heart or vascular disease. So, if you are at risk for PAD, you should ask your doctor for a test to find out if you have it.
5. False. Someone with PAD has a 28 percent risk of dying in 5 years. Someone with breast cancer has a 15 percent risk. PAD is serious. Again, if you are at risk for PAD, find out. And if you have PAD, be sure you are getting treatment.

How did you do? Did you know the answers? If so, congratulations! If not, find out more today. Visit our Web site at www.vdf.org.

Anatomy of . . . Clots

When a person has a cut or injury that results in bleeding, the bleeding stops because blood coagulates – it forms a clot of blood cells and fibrin strands. If blood didn't clot, even minor cuts could become serious medical issues. Clots are necessary, but clots can also cause damage. A clot that forms in a blood vessel or in the heart can cause damage or even death. The medical term for a clot is a **thrombus**. A thrombus that forms in a blood vessel and travels to another part of the body is called an **embolus**. If a thrombus or embolus blocks the healthy flow of blood and oxygen, it can be life-threatening and cause a heart attack, stroke, damage to other vital organs (such as kidneys and lungs), or injury to limbs. For example, a thrombus that develops in a leg vein can float with blood flow through the veins and the heart into the lungs, causing a more serious complication called pulmonary embolism.

A thrombus can develop in the arterial system where blood with oxygen is pumped under high pressure from the heart to all of the organs and tissues in the body. More commonly, thrombi develop in the venous system where blood is flowing slowly from the organs back to the heart and lungs. Risk factors for development of thrombi in the arteries include atherosclerosis, immune disease such as lupus, genetic disorders such as sickle cell anemia, and trauma. Risk factors for development of thrombi in veins include physical inactivity (especially prolonged bed rest due to sickness or disability), smoking, pregnancy, varicose veins, obesity, trauma, and genetic or autoimmune diseases.



The risks and causes of thrombi include atherosclerosis (plaque build-up on the veins), injury or trauma to the blood vessel due to accident, surgery, fracture, burn, varicose veins or other vascular diseases, pregnancy, contraceptive use, high blood pressure, bed rest or long periods of inactivity, tobacco use, being overweight, and lack of exercise.

Surgery is also a risk factor for development of venous thrombi. If you're scheduled for surgery, discuss your risks for thrombi with your surgeon, who may prescribe medication to help prevent blood clots or recommend pre-surgical exercise. Be up and about as soon as possible after your surgery. If surgery isn't in your future, the best way to prevent thrombi – and you've heard this before – is to not use tobacco products, maintain a healthy weight, and get regular exercise.

May is National Stroke Awareness Month

Every 45 seconds an American suffers a stroke! That's over 700,000 each year who are stricken and, of those, over 150,000 will die from stroke, according to the American Stroke Association. The National Stroke Council states that more than half of the strokes in the United States occurs because of carotid artery disease. Carotid artery disease is a vascular disease caused by the narrowing or blockage of the arteries located on each side of the neck. The process that blocks these arteries (atherosclerosis) is basically the same as that which causes both coronary artery disease and peripheral arterial disease. Noninvasive tests can determine if your carotid arteries have narrowed, and National Stroke Awareness Month is the perfect time to find out. Many clinics and doctors across the country are screening for carotid artery disease and other vascular disorders during the month of May. To see if there is a screening clinic near you, call 1-877-282-2010, or go to www.vdf.org and follow the link for Upcoming Events.

According to the National Stroke Association, 80 percent of all strokes are preventable. To find how you can prevent stroke go to www.stroke.org or www.strokeassociation.org, or call 1-800-STROKES.

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Frequently Asked Questions

- Q.** I have been taking Pletal® for my intermittent claudication for awhile, but recently the prescription was changed to cilostazol. Are these drugs exactly the same?
- A.** One should not expect any difference in either the effectiveness or safety in the generic form (cilostazol) versus the brand name (Pletal).
- Q.** I have been prescribed Plavix® for my PAD. What does it do?
- A.** Plavix is a medication that keeps the platelets in the blood from sticking together. This helps prevent clots from forming, which can cause arteries to narrow or become blocked, which in turn can lead to a heart attack or stroke.
- Q.** I am 58 and currently in an exercise program at a health club. I feel very good immediately after the workout and have no soreness or pain. However, after an hour or so my legs get stiff and it is sometimes hard to get going again, even if I'm just sitting around for a while. Could this be PAD?
- A.** What you describe does not sound like PAD. In most cases, pain from PAD occurs during exercise and goes away at rest. What you describe sounds like common stiffness from exercising. For most people it is normal to experience aching muscles the day or two following exercise. Stretching before and after may lessen the stiffness.

Additional information is available from the Vascular Disease Foundation, or can be seen on its Web site at www.vdf.org.

Do You Have a Favorite Activity? Use it to help VDF. Start planning summer events now!



We need your help to keep our circulation growing. Now is the perfect time to plan summer events that could help VDF. It doesn't have to be big. Organize your club or friends to do something fun while raising money for the Foundation. For example, host a bingo or bunco party, or a golf or bridge tournament where everyone pays an entry fee. Part of the fee can pay for prizes, and you can donate the rest to VDF. Have a bake sale, a golf "mulligans for VDF" or a walk or potluck dinner to raise money.

We can supply newsletters and information, and we will post your event on our Web site! Contact us to find out how to obtain door prizes and thank you gifts. We'll recognize all such events in a future newsletter and use pictures that you send in. So, have fun in your own way and help VDF and you'll be helping thousands with vascular disease too!

PAD COALITION



The PAD Coalition continues to build momentum in anticipation of the national PAD awareness campaign, which will kickoff on September 19, 2006, in Washington, DC. The newly formed PAD Coalition now has a logo and Web site. To visit the Web site and keep up to date on the activities of the PAD Coalition, go to www.padcoalition.org. Another initiative currently underway is a telephone survey, conducted in the United States and Canada, to measure what the public knows about PAD. The information from the survey will help in understanding how public knowledge of PAD has grown as a result of the national awareness campaign. Two new organizations recently joined the PAD Coalition, which now has a total membership of 43 health organizations, medical societies, and government agencies.

HOPE!



“You gave me hope.” Those were words left on our answering machine recently. The caller has suffered for years from vascular disease and wanted to tell us that she is grateful for our newsletter as it has “helped me keep my chin up and given me some new-found hope.” There IS hope. There are many treatment options for vascular disease today that didn’t exist a decade ago, and many more are on the horizon. I’ve heard from people who were glad to know finally that their symptoms were real and were related to a disease that has a name. One of the many priorities for VDF is to help people learn about the risk factors for vascular disease, recognize symptoms,

and discuss these issues with their health care providers. Knowledge is power, power that enables sufferers to ask questions and seek answers that offer hope for a treatment or cure. We can accomplish this only with your support. We hope that this issue of **Keeping in Circulation** will provide you with more information about DVT, arteritis, and compression stockings. We hope this information offers you hope, too.

A handwritten signature in black ink that reads "Sheryl Benjamin".

Sheryl Benjamin
Executive Director

IN THE NEWS

SAAAVE Act. President Bush signed S.1932, the Deficit Reduction Act of 2005, also known as the Budget Reconciliation, into law on February 8, 2006. The Act contains the Screening Abdominal Aortic Aneurysms Very Efficiently (SAAAVE) Act, which provides a one-time screening for abdominal aortic aneurysm (AAA), a preventable condition that claims the lives of about 15,000 Americans each year. The screening will be covered by Medicare, beginning January 1, 2007, as part of the “Welcome to Medicare” physical for males who smoke or have ever smoked and those with a family history of AAA. Thanks to all who wrote to their senators and representatives to support the bill.

May is National Stroke Month. Read about strokes on page 11. For more information on strokes, go to www.stroke.org or www.strokeassociation.org, or call 1-800-STROKES.

March is DVT Awareness Month and VDF has been actively promoting awareness with radio announcements, an article appearing in newspapers across the country, and a press release. Being aware of DVT risk factors and symptoms could save your life. Be sure to read the articles in this issue.

Free Screening for AAA, PAD, and Carotid Disease. The American Vascular Association, the foundation of the Society for Vascular Surgery, will provide free screenings in many cities during May. Find out if there is a screening site near you by calling 1-877-282-2010, or go to www.vdf.org and follow the links for Upcoming Events.

Upcoming Conferences and Workshops. VDF representatives will attend several national medical professional conferences, with a goal of reaching groups that are not familiar with VDF and its resources. Upcoming conferences include those sponsored by the Preventive Cardiovascular Nurses Association, the American Venous Forum, the Annual Vascular Meeting, and the American Geriatrics Society. VDF has been invited once again to conduct training workshops on “Ankle-Brachial Index and the Diagnosis of PAD” at the 2006 Annual Session of the American College of Physicians (ACP). Additionally, VDF is slated to conduct five ABI workshops at regional primary care meetings across the country from April to June.

In May, VDF will also participate in the Surgeon General’s Workshop on Deep Vein Thrombosis (DVT), cosponsored by the National Heart, Lung, and Blood Institute. This workshop is an important effort to identify challenges and promote public health in relation to the serious health affects due to deep vein thrombosis.

5 Minutes of Your Time

The Vascular Disease Foundation is constantly working to be sure that *Keeping In Circulation* is relevant to our readers. Please take a few minutes to help us help you – fill out this questionnaire and send it to us as soon as possible. We **thank you** for your help!

What do you like about *Keeping in Circulation*?

(Rank 1 as your favorite, 2 next favorite, 3 next, etc.)

- _____ Personal stories
- _____ In-depth disease information
- _____ Prevention
- _____ Treatment information
- _____ Risk factor information
- _____ Lifestyle tips/ caring for the disease
- _____ Current news affecting vascular disease
- _____ Research and future treatments
- _____ Other _____

How could it be improved? _____

Is there a particular topic you would like to see addressed? _____

Which article in this issue did you like best? _____

How did you learn about the Vascular Disease Foundation?

- Friend/family
- Doctor/other caregiver
- Community health screening
- Internet
- Television public service announcement
- News article
- Other _____

How often do you visit our Web site?

- Daily
- Weekly
- Monthly
- Occasionally
- Never visit (skip next two questions)

What do you like about our Web site?

- Disease information
- Links for resources
- Download information
- Easy to access
- Trustworthy/non-biased
- Easy to understand
- Other _____

What would you change? _____

How many people read your copy of *Keeping in Circulation*?

- Just me
- One other person
- 3-4 people
- 5 or more

Do you or a family member have vascular disease?

- Yes
- No

What information is most valuable to you? (Rank 1 as most important, 2 next important, 3 next, etc.)

- _____ PAD (peripheral arterial disease)
- _____ Intermittent Claudication
- _____ Critical Limb Ischemia
- _____ Carotid artery disease and stroke
- _____ Aneurysms
- _____ Varicose veins
- _____ DVT (deep vein thrombosis)/ PE
- _____ Chronic venous disease
- _____ Affect on vascular disease of blood pressure, cholesterol, diabetes, etc.
- _____ Other _____

- I am: Female Male
- Age: Under 40 40 – 50
- 51 – 60 61 – 70
- 71 – 80 Over 80

Send To: The Vascular Disease Foundation • ATTENTION: KIC Survey
1075 S. Yukon St., Ste. 320 • Lakewood, CO 80226

Contact the Vascular Disease Foundation at 1-888-VDF-4INFO or www.vdf.org



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Stroke Prevention Guidelines

Guidelines to help you learn how you may be able to lower your risk for a first stroke:

1. Know your blood pressure.
2. Find out if you have atrial fibrillation.
3. If you smoke, stop.
4. If you drink alcohol, do so in moderation.
5. Find out if you have a high cholesterol level.
6. If you have diabetes, follow your doctor's advice to control it.
7. Exercise on a regular basis.
8. Enjoy a lower-sodium (salt), lower-fat diet.
9. Find out if you have circulation problems.
10. Know the symptoms of stroke.

Adapted from the National Stroke Association

Read more about stroke, arteritis, deep vein thrombosis and more inside!

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