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- Deep Vein Thrombosis
- Foot Care for PAD
- Stopping Clots from Traveling
- HDL Cholesterol
- Kicking the Smoking Habit

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new look!*

A Mother's Journey with DVT

On November 17, 2003 when seven-pound newborn Caitlyn Lei¹ Lana Ruffin was placed in her mother's arms, 31-year-old Le Keisha Ruffin was overcome with an instant feeling of gratitude and love at becoming a mother. She had no idea that her harrowing experiences over the next several weeks would overshadow her feelings of joy.

Le Keisha was home from the hospital only a short time when she started to feel extremely ill. Her husband Craig made several trips to the emergency room with her, only for her to be sent home after being told she was having pain as a complication from her Cesarean section. As her pain increased, she began to experience stabbing sensations in her chest and side. Her husband took her back to the emergency room, but once again, Le Keisha was sent home.

On January 9th, her pain intensified to the point where she was having difficulty walking. In an attempt to console her, Craig ran a bath for her. As soon as she got in the bathtub, Le Keisha was overcome by dizziness and wanted to get out immediately. Craig tried to convince her to stay

Continued on Page 2



A Mother's Journey with DVT

Continued from Page 1



Pictured left to right: PE survivor Le Keisha Ruffin with her now four-year-old daughter, Caitlyn Lei' Lanai and her husband Craig.

Our Mission

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

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in the water, but Le Keisha insisted that she get out; once she did, she passed out in his arms. It was then that Craig noticed that his wife's leg had swelled to over three or four times its normal size and she was in excruciating pain.

Once she was examined at the hospital, the ER doctor suspected what had taken place and ordered several tests, including an x-ray of her chest, EKG, CT-scan, venous Doppler ultrasound, and others. Her results showed that she had a blood clot or deep vein thrombosis (DVT) in her lower right leg that stretched from her calf to her abdomen. The reason Le Keisha was experiencing so much pain was because the clot had broken loose and had traveled through

her heart into her lungs, causing a pulmonary embolism (PE).

"The ER doctor then informed me that, if I had not come into the hospital when I did, I would not have lived through the rest of the night," said Le Keisha. "She said I was the miracle patient because this clot had probably been parading around in my lungs for weeks!"

Le Keisha was admitted to the hospital, where she was confined to her bed because she was too weak to walk; she was placed on a heparin drip, which is an intravenous blood thinner. When the pain increased, she was rushed back to ICU. The DVT in her right leg was continuing to break off in pieces, so the doctors inserted a Greenfield filter to trap the clots before they reached her heart and lungs. *A Greenfield filter is an IVC filter, a device that is placed in the inferior vena cava (IVC), which is the main vein in the abdomen. (For more information about the IVC filter, see the article on page 8.)

After the filter was inserted, Le Keisha remained in the hospital for a short time because the doctors were having a hard time regulating her blood thinners. She consulted hematologist Howard Terebelo, MD, who discovered that her resistance to warfarin or Coumadin® (see sidebar for information about warfarin resistance) was causing the difficulty with her blood. Dr. Terebelo prescribed enoxaparin (Lovenox®), or low-molecular-weight heparin that she self-administered at home by subcutaneous injection, which resulted in clot resolution and relieved her pain and symptoms.

"Women with no underlying risk factors for blood clots have a 1.2% chance of having a blood clot while pregnant, while women at risk for DVT (such as those with an inherited predisposition) will have a 7.7% chance of having clots during pregnancy," said Dr. Terebelo. "Le Keisha did have a family history of DVT, but she had no other risk factors. In women who have blood clots during pregnancy, the majority of the clots appear in the left leg because of the

position of the uterus, although an underlying May-Thurner Syndrome must be considered as well. Le Keisha's clot occurred on her right side, which was odd."

Le Keisha was finally released from the hospital without medication with the exception of a prescription for a four-six month course of enoxaparin (Lovenox®). Now clot-free, Le Keisha says that she's getting stronger every day and feels very grateful to be alive and able to walk.

"I am so blessed that I'm doing as well as I am," said Le Keisha. "Recently my father, who is only 55 years old, was also admitted to the hospital with a PE in both of his lungs. Initially he didn't want to go to the hospital, but thankfully my mother called the ambulance. I cannot stress the importance of making sure you go to the doctor right away if something isn't right; it can make all the difference."

Today Le Keisha hopes more people will learn about DVT and PE and learn to recognize the warning signs and symptoms; from her past experience, she now realizes how important it is to get immediate care and hopes that others will do the same. (For more information about DVT see article on page 4, or for information about blood clots and medications for pregnancy see FAQ's on page 11.)

While rare, warfarin resistance exists. Some possible causes are:

- o interactions with other medications that decrease the International Normalized Ratio (INR);
- o extreme diets with large amounts of vitamin K;
- o malabsorption, leading to lack of absorption of warfarin (this may occur in patients with gastrointestinal disease);
- o non-compliance with taking warfarin;
- o inherited metabolic reasons.

Source: Stephan Moll, MD, UNC, Chapel Hill, NC—
<http://www.fvleiden.org/ask/28.html>

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"The ER doctor said I was the miracle patient because this clot had probably been parading around in my lungs for weeks! I am so blessed that I'm doing as well as I am." —Le Keisha Ruffin

Deep Vein Thrombosis

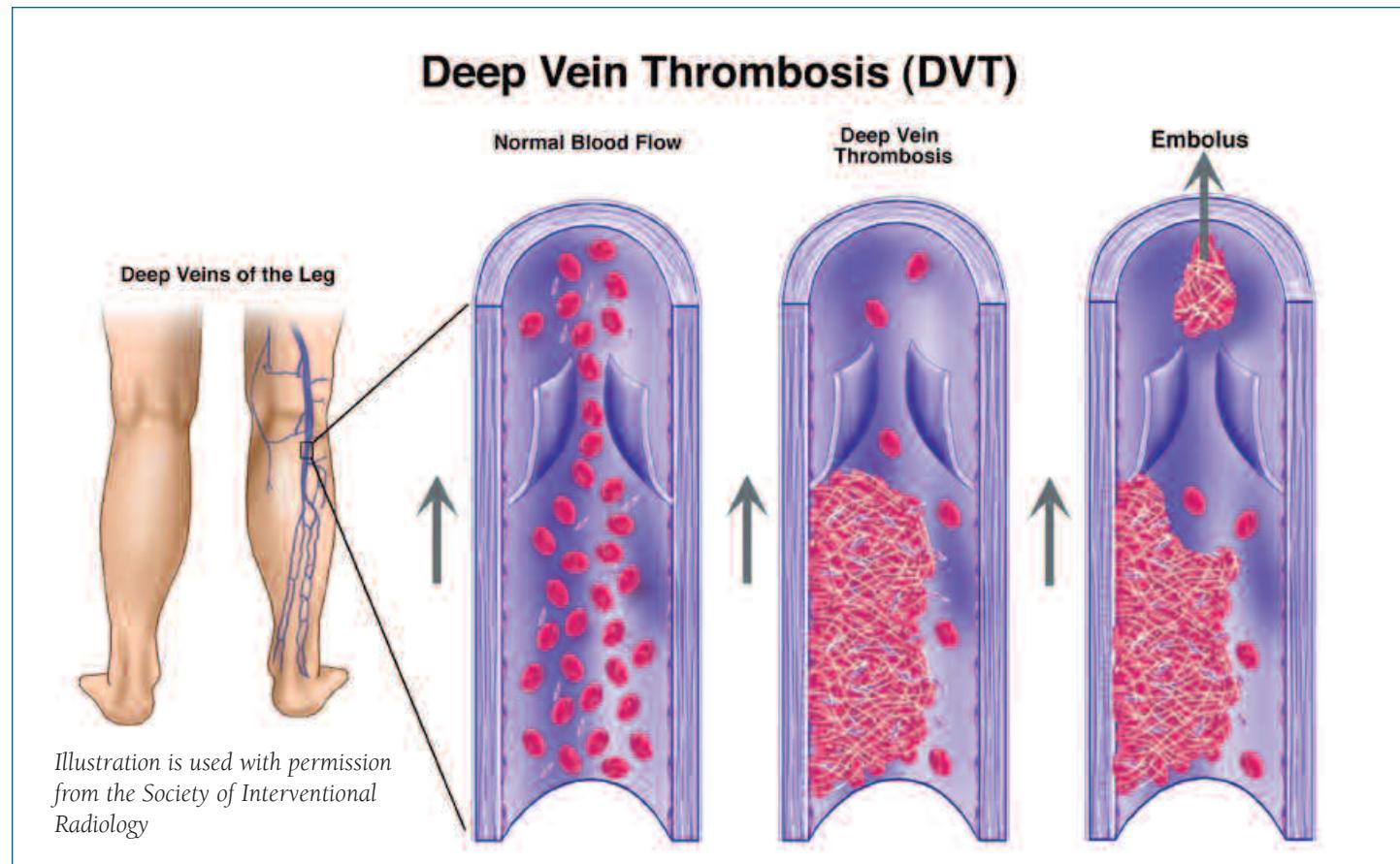


Illustration is used with permission from the Society of Interventional Radiology

Veins carry blood from your feet and legs back to the heart. The deep veins carry 90% of the blood back to your heart. If a deep vein in your leg is damaged, your circulation back to the heart may be reduced. When blood moves slowly in the deep vein of the leg, it may become sticky and gather in the vein wall to form a blood clot. This is called a deep vein thrombosis (DVT). The blood clot may increase in size to completely block the leg vein, and a DVT can damage the vein and cause the leg to ache, swell, change color, and develop leg sores, known as venous stasis ulcers.

DVT can cause serious and long-lasting health problems. If a piece of a clot in the leg breaks off, it can travel through the heart and into the lungs and cause serious health problems which may be life-threatening. When the clot breaks loose and travels through the bloodstream

to the lungs, it is called a pulmonary embolism (PE). Serious vein problems can be treated with proper medical care.

RISK FACTORS

Major risk factors for DVT are prolonged bed rest greater than three days, surgery, major injury such as paralysis from a spinal cord injury, cancer and cancer treatment, or having a central venous catheter while in a hospital. There are also certain inherited or familial risk factors for DVT. **Minor risk factors for DVT** include taking a long airplane flight or car trip, being over 40 years of age, smoking, having a heart attack, heart failure, stroke, being overweight, taking hormones (including birth control pills and hormone-replacement therapy), and having varicose veins. These risk factors may become more significant in combination.

Treatments for DVT and PE begin right away to prevent the blood clots in the leg from growing larger or breaking loose and traveling to the lungs. Treatment starts with blood-thinner medications such as heparin, low-molecular-weight heparins (enoxaparin, dalteparin, innohep) or fondaparinux (Arixtra). Heparin can be given intravenously (IV) in the hospital or as an injection. Low-molecular-weight heparins and fondaparinux are given only as an injection, which includes self-injection at home. Treatments will depend upon the patient's condition.

Other treatment options include the use of thrombolytic agents such as tissue plasminogen activator (rt-PA) or streptokinase and mechanical thrombectomy. This is particularly true in the case of a persistent DVT that extends into the iliofemoral

Deep Vein Thrombosis

Continued from Page 4

(hip vein) or iliac (pelvic) veins as well as a clot accompanied by a large amount of leg swelling. With thrombolytic therapy, a small catheter is threaded to the area of the clot and "clot-busting" drugs dissolve the clot. With mechanical thrombectomy, a catheter is used to remove the clot from the legs or pelvis. Pulmonary embolectomy (surgical removal of the emboli) is used for people with a large PE who cannot be treated with thrombolytic therapy.

Warfarin is a pill that is started at the same time as heparin but takes several days to become effective. When warfarin becomes effective (usually about five days of combined therapy), the heparin is stopped. Warfarin may be taken for at least three and up to six months or longer to prevent the existing clot from growing. Warfarin must be monitored by frequent blood tests to see how well the medication is working to thin the blood. Too much medication can cause bleeding of the gums, excessive bruising, or even more serious bleeding requiring transfusion; too little warfarin can increase the risk of developing a new clot. Other medications, such as antibiotics, diet, and daily lifestyle habits can affect how well the warfarin is working to thin the blood.

If a person cannot take blood thinners, a filter may be placed in the patient's vena cava (the big vein returning blood to the heart) to prevent blood clots from reaching the lungs. The filter is inserted through a catheter placed in a vein in the neck or groin.

Other treatments for DVT include rest, leg elevation, heat and frequent walks to reduce the ongoing pain and leg swelling that may occur in a patient with DVT. After their leg swelling goes down, patients are fitted with elastic support stockings. The elastic support stockings are put on first thing in the morning. They may be removed before taking a shower or going to bed. A new pair of support stockings must be purchased when the original stockings are worn out, after about six months. These elastic sup-

port stockings are very important as they prevent the swelling that could cause serious tissue damage in the lower leg.

PREVENTING DVT

DVT preventative measures are used before and after procedures that may decrease the risk of DVT. Intermittent compression devices are used to prevent deep vein thrombosis from occurring in the leg. The device inflates and deflates knee-high sleeves on the legs, which result in decreasing the stagnant blood flow in the legs while the convalescing patient is confined to bed rest. Other measures include the use of heparin, low-molecular-weight heparin, or fondaparinux in lower doses in order to help prevent clots from forming. Early ambulation after surgery is very important.

When people find themselves on a long flight or car trip, it is recommended that they walk up and down the aisle every hour, flex and point their toes every 20 minutes when sitting, drink plenty of water, and avoid alcohol and caffeinated beverages. Leg elevation can improve blood flow whenever the leg feels swollen or heavy.

People who have had a DVT may be at increased risk for future blood clots. Recurrence is most common in people who have cancer or an inherited blood-clotting problem. Special tests of the blood may screen for inherited blood clotting abnormalities in the patient and for immediate family members who have had a blood clot. Recurrence is lowest in people who have had a DVT related to temporary inactivity or surgery.

Individuals at risk should discuss their past medical history, concerns, and procedures with their primary health-care provider.

About the Author: Victoria Gilpin, MSN, FNP-BC is a nurse practitioner for the Vascular Surgery Division at the University of Missouri Health Care System in Columbia, MO.

About Compression Stockings

Compression stockings are specifically designed for patients who are able to walk. These are often confused with anti-embolism stockings that are used for patients in a nursing home and post-surgically in the hospital.

You will find graduated compression therapy stockings at most medical supply shops, home health stores, women's specialty boutiques, and select pharmacies. There are different levels of support available:

Support (over-the-counter or OTC)—OTC stockings and socks provide a lighter compression and are fitted according to shoe size, or height and weight. The compression range is between 12-20mmHg. Styles include knee-high, thigh-high, and pantyhose.

Medical Compression Stockings—These stockings use a stronger compression under the guidance of a medical professional. A professional fitter will take measurements of your leg or arm to determine the proper size and style. Graduated compression stockings are designed with 100% pressure at the ankle and decreasing pressure towards the thigh.



Image courtesy of Juzo

Foot Care for PAD



Peripheral arterial disease (PAD) is commonly known as hardening of the arteries. It occurs when arteries in the legs become clogged with fatty deposits. When leg arteries are clogged, blood flow to the legs is reduced. Some people call this poor circulation.

If PAD becomes severe, the foot does not receive enough blood and can become ischemic, meaning that there is a lack of oxygen to the tissues. This can happen if an artery suddenly becomes blocked or, over time, if PAD progresses to the point that blood is no longer able to carry enough oxygen to the foot. The condition in which the foot becomes ischemic or does not have enough blood is called critical limb ischemia (CLI). Approximately 5-10% of people with PAD develop CLI and, of those, approximately 5% will require an amputation. Major risk factors for critical limb ischemia include smoking, diabetes, age greater than 40, hypertension, having abnormal blood cholesterol levels, and being male.

When a foot becomes ischemic, the skin often becomes thin and the hair disappears (however, these events are not always caused by ischemia). The toes may become slightly blue tinged when the foot is hanging down. The foot may become white (elevation pallor) when elevated and red when dependent (dependent rubor). The foot may be cool to the touch and the nails may become thick. The heel, toes, and other pressure areas on the foot may develop fissures (or cracks) that are painful. The skin may break down between the toes (kissing ulcers) and become very painful. In critical limb ischemia, the blood reaching the foot is so limited or slow that ulcers and gangrene can develop.

When diabetes is present, it is not uncommon for the foot to lose feeling and develop changes in the structure of the foot. This increases the risk of developing sores on the feet. When PAD and diabetes are both present, it becomes very difficult to heal sores.

Continued on Page 7

Foot Protection

Protection of one's feet is very important to decrease the risk of amputation when an individual has severe PAD. Below are a few important things to remember:

- o Never walk barefooted inside or outside the house.
- o Check your feet every day for sores. Look carefully between your toes using a mirror if you have trouble seeing some areas. Ask a family member or friend to help if you have any difficulty seeing.
- o Avoid soaking your feet. This dries out the skin and may increase the risk of developing skin breakdown.
- o Wash your feet with mild soap and water. Pat them dry, making sure that you dry between your toes.
- o Be sure the water is not too hot. Remember that if you have diabetes you may not be able to tell the temperature of the water by putting your foot in first.
- o Apply moisturizing cream to your feet *except* between the toes.
- o Do not use over-the-counter callus or corn removing agents.
- o Never attempt to clip or cut your toenails or cut on areas of your foot at home in "bathroom surgery." Get professional help.
- o Be sure that your shoes fit well and are not applying undue pressure to any parts of your foot.
- o Avoid cutting holes in your shoes, because this can make them slide around, causing pressure to other areas of your foot.
- o Check your shoes by shaking them before you put them on, in order to remove anything that might have fallen inside.
- o If you find that you are waking up at night with pain in your toes, in the ball of your foot, or in your heel that will feel better only if you get out of bed, see your doctor right away. This is a sign that your foot is not getting enough blood.
- o If your foot should suddenly become cold, painful, numb, or if you have difficulty moving your toes, contact your health-care professional or go to an urgent-care facility right away. This could mean that your foot is at risk and quick action is very important.

Excellence in Care



Congratulations to Dr. Alain Drooz of Fairfax Radiological Consultants, Vascular & Interventional Associates in Fairfax, VA, winner of VDF's Excellence in Care Award.

Dr. Drooz was nominated by the Hale and White families for caring for Maggie and Wanda Hale. Wanda sent in this nomination in regards to care received by her mother Maggie: "Dr. Drooz was highly professional, proficient, and informative. He faced numerous difficulties during my mother's procedures. While his surgical intervention capabilities were unquestionable, what distinguished him most was his truly caring and compassionate nature as a physician, an absolute credit to the entire medical profession. During my mother's last illness, which resulted in her death, he gave strength to our entire family. My mother thought he was the "best" doctor she had ever had—and she had a number of doctors during

her 80 years. He was always there for us and our mom, over holidays, weekends, and late at night; he is everything a doctor should be—dedicated, caring, knowledgeable, talented, and proficient. For all these reasons, we nominate him for the Excellence in Care Award."

If you would like to nominate someone for the **Excellence in Care Award**, please send us a note or e-mail with a tax-deductible donation of \$50 or more telling us who you are honoring and why he or she deserves the recognition. Nominees can be any medical professional who has helped you or your family or has shown special kindness which you feel deserves recognition.

Foot Care for PAD *Continued from Page 6*

It is important that you take care of yourself and eat healthy, balanced meals. Nutrition is an important factor for healing in both people with and without diabetes. If you smoke, ask for assistance in stopping. Smoking increases the progression of PAD. If you have diabetes, keep your blood sugar well controlled. Take all your medications that have been prescribed for you. If you think that you need to stop one of your medications, be sure that you discuss this with your health-care provider. Try to continue regular exercise even if you are able to walk only three to five minutes at a time. It will not

make your PAD worse and will enable more blood to reach your foot. Do not wait for a scheduled appointment with your health-care professional if you think that your feet are becoming worse. Call for an appointment or go to an urgent care facility. Be sure that your feet are examined at each visit.

About the Author: Carolyn Robinson RN MSN NP is a nurse practitioner in vascular surgery at the VA Medical Center in Minneapolis. Carolyn has a special fondness for veterans and the aging population. She has spent the last 14 years working with patients with lower extremity wounds and is committed to the early identification of critical limb ischemia and aggressive limb salvage.

Stopping Clots from Traveling

Deep vein thrombosis (DVT) occurs when a blood clot, or thrombus, develops in the large veins of the legs, arms, or pelvic area. There are numerous settings which increase the risk for clots: trauma, cancer, hospitalization or prolonged bed rest, recent pregnancy, use of birth control pills, or history of a previous DVT. With prompt diagnosis and treatment, the majority of DVTs are not life-threatening. However, a blood clot that forms in the invisible "deep veins" can be an immediate threat to one's life, as compared to a more innocuous clot that forms in the visible "superficial" veins, the ones beneath the skin. A clot that forms in the large, deep veins is more likely to break free and travel through the vein; it is then called an embolus. When an embolus travels from the legs or pelvic area and lodges in the lungs, it causes a condition known as a "pulmonary embolism" (PE), a potentially fatal condition if not immediately diagnosed and treated.

Research shows that a PE originates in the deep veins of the leg or pelvis at least 90 percent of the time. In order to reduce this risk, most patients with DVT are placed on an anticoagulant (blood-thinning) medication.

This treatment does not work for all people or in all situations. Some people cannot use blood-thinning medications because of bleeding or a history of developing complications from blood thinners. Other patients may be at a very high risk of developing DVT (but do not actually have a clot), such as certain trauma victims and obese patients. For these patients, a filter may be placed within the inferior vena cava (IVC), which is the main vein in the abdomen. Blood from the legs passes through the IVC to return to the heart and lungs. An IVC filter traps clots that move up the vein before they can reach the lungs and cause a PE.



Greenfield IVC filter image
used courtesy of Boston Scientific

Typically, IVC filters are left in place permanently. Recently, however, removable IVC filters have been developed. There are certain situations where a removable filter may be more desirable than a permanent one. Some people develop complications when the filter is left in place for a long time. Complications include clotting of the leg veins, an IVC fracture (or breaking off) of a piece of the filter, movement of the filter, and thrombosis of the filter. Some people need protection from a PE for only a short, well-defined time period. For example, some patients may regain their mobility and no longer be at high risk for DVT or no longer have a need for blood thinners.

An IVC filter is inserted through a vein in the neck (jugular vein) or groin (femoral vein). The procedures for placing both permanent and removable filters are similar. The medical team will clean the insertion area and numb it with

Removing a filter is similar to inserting a filter. Again, access into a vein is obtained, often through a jugular vein. A sheath is again placed into the vein under x-ray guidance. A snare or a special device to grab the filter is used to pull the filter into the sheath. A venacavogram may be done to confirm that the IVC is not damaged. The sheath is removed and pressure is applied to the site to stop bleeding.

Removable filters must be removed within a certain time frame. Depending on the type of filter, the time frame may be from several weeks to several months after the filter is placed. If the filter is not removed within the specified time frame, it will be left in place permanently. There are certain reasons why a filter cannot be taken out within the time frame. These reasons include patients with continuing contraindications to blood thinners, patients who are still at high risk for developing DVT or PE and cannot have blood thinners, and/or patients who have significant amounts of blood clot trapped within their removable filter.

These filters are used to save lives. Only a doctor can decide if a patient needs a filter and whether he or she needs a removable filter or a permanent filter.

About the Author: Meghal Antani, MD is an interventional radiologist in the Washington DC area.



"When an embolus travels from the legs or pelvic area and lodges in the lungs, it causes a condition known as a "pulmonary embolism" (PE), a potentially fatal condition if not immediately diagnosed and treated....An IVC filter traps clots that move up the vein before they can reach the lungs and cause a PE."



P.A.D. Coalition Reaches Out to Women During Heart Month

This year, the P.A.D. Coalition worked to inform women about peripheral arterial disease (PAD) and its link with heart disease, and the public's lack of awareness of the disease.

While about 4.5 million American women have PAD, a recent P.A.D. Coalition study showed that only 28 percent of American women are aware of the disease. The cross-sectional, population-based telephone survey of 2,501 adults over age 50, included 1,338 women. The majority of women surveyed reported having at least one risk factor for PAD, including high blood pressure, high cholesterol level, diabetes, and history of smoking. Women who reported familiarity with PAD actually knew very little about the disease's potential consequences. Only 27 percent of women who reported to be aware of PAD associated the disease with an increased risk of heart attack.

During February, the Coalition issued a news release to disseminate these survey findings. In addition, Coalition spokespersons Alan Hirsch, MD, Diane Treat-Jacobson, PhD, RN, and Michael Criqui, MD, participated in a radio media tour to help inform the American public about PAD.

Twelve interviews were held with top radio networks, including CBS Radio, CNN Radio, and the American Radio Urban Network, as well as individual stations in Atlanta, Chicago, Cleveland, Denver, Miami, Minneapolis, San Diego, and Washington, DC. Approximately 2,390 radio stations aired these interviews to an estimated audience of 20 million listeners.

About... HDL Cholesterol

High Density Lipoprotein Cholesterol



lipoprotein. The two most important types of lipoproteins are high-density lipoproteins (HDL) and low-density lipoproteins (LDL). Most cholesterol is LDL (commonly known as the "bad" cholesterol), while between one-quarter to one-third is HDL (the "good" type). HDL cholesterol carries unused cholesterol back to the liver. However, if too much LDL is carried away from the liver and there is not enough HDL to bring back the excess, the LDL will stick to the linings of the arteries. The accumulation of cholesterol is the primary component of "plaques" that line the artery walls.

The HDL removes and carries the LDL from the wall of the artery and excretes it through the liver, reducing the individual's risk for heart and vascular disease.

Regular, moderate aerobic exercise can raise HDL levels, as can weight loss and eating a diet low in trans-fatty acids (which means avoiding fried foods and many fast foods), and a low-cholesterol diet may also help. Certain foods may raise HDL cholesterol (see sidebar). Stopping smoking also helps. Since most people think only about lowering their LDL cholesterol levels, they should also be made aware that it is equally important to have high HDL cholesterol levels.

Current HDL Guidelines

HDL cholesterol should be above 40mg/dl in men and above 50mg/dl in women.

"Good" cholesterol foods to eat are beans, fish, flaxseed, nuts, oat bran, and olive oil, as well as soy products and foods high in soluble fiber. Additionally, red wines (such as Merlot or Cabernet Sauvignon) and orange juice may help. Some physicians feel that any wine in small amounts may help. Cholesterol-lowering drugs may raise your HDL cholesterol and should be discussed with your health-care provider.

Cholesterol is a "lipid" or a fat-like, waxy substance in the blood that is vital for healthy cell membranes and brain tissues. It helps your body use fats and aids in digestion and in the production of hormones.

Cholesterol is manufactured by the human body; the liver produces about 1,000 milligrams of it per day. Most of us consume about 150-250 milligrams of cholesterol from food. However the more fat we eat, the more cholesterol the liver will produce.

Once produced, cholesterol is distributed throughout the body by the bloodstream. To be transported, it combines with certain proteins which act like vehicles, picking up the cholesterol in the liver and transporting it to different parts of the body. When this happens, cholesterol and protein form a

"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.VDF4INFO** or contact us by e-mail at info@vdf.org. It's a great Mother's Day or Father's Day tribute!



Frequently Asked Questions

Excerpted from recent VDF's Live "Ask the Doctor" Chat with Drs. Rathbun and Cherry

Question: I am 22 years old; about two years ago, I got a blood clot in my left leg and I have recently been told that I will be on Coumadin® for the rest of my life. This scares me since I want to have children. Are there any new medicines that I can take that are safe when I want to get pregnant?

Answer: Currently there are no new medicines that have been tested for prevention of blood clots during pregnancy. However, the good news is that there are standard treatments with low-molecular-weight heparin or regular heparin that have been used safely in many women during pregnancy. Coumadin® should not be used during pregnancy due to the risk of birth defects. Typically, a pregnant woman will take a daily heparin shot for the duration of her pregnancy and can resume Coumadin® after delivery. This regimen has been found to be safe

both during pregnancy and while breastfeeding.

Question: When I was 17 years old and six months pregnant, I had a blood clot in my leg while I was in the hospital. I was treated with Lovenox®, but when I was released from the hospital, I did not go home with any kind of medication. Now I am 21 and am six months pregnant. The doctor has put me on Lovenox® for the rest of my pregnancy and I'm concerned about the effect this may have on my baby. Is this life-threatening for me or the baby, and what are the risks now or during labor?

Answer: Being on Lovenox® during pregnancy is safe. There is a slightly increased risk of bleeding while being on a blood thinner, but most pregnant women do very well on this regimen. Just before the delivery, your doctor may

choose to stop the Lovenox® a day before delivery or switch you to IV heparin up until the time of delivery. This should be discussed with your doctor ahead of time.

Question: What is the difference between an aortic dissection and an aortic aneurysm?

Answer: An aneurysm is a localized enlargement or bulging of an artery, usually to twice its normal size. A dissection occurs when there is a split or tear in the innermost layer of the three layers of an artery, which then allows blood to flow on both sides of that layer, dissecting the artery and creating two channels of blood flow. It may cause an aneurysm in about 30% of patients over time. There are various other causes of aneurysms as well. An aortic dissection or aortic aneurysm is one that takes place in the aorta, the largest artery in the body.



SAVE THE DATE: VDF is planning its first national vascular disease forum for patients and their families. It will be held in Colorado on August 16, 2008 and will feature experts on diseases affecting the arteries and veins. Call us or check our Web site to suggest topics you'd like covered or for registration information.

You CAN Kick the Habit!



If you're still trying to give up smoking, don't give up! Sometimes it takes more than one try or a combination of methods to help you quit.

There are three basic ways to quit smoking:

1. **Cold turkey**—When you immediately give up smoking regularly to not smoking at all.
2. **Tapering off**—Setting a quit date and decreasing the number of cigarettes each day until you reach your quit date. It is better to quit over a few days, rather than weeks, since slow tapering off tends to drag out the process. You also may decide to postpone the actual date to taper off even more slowly.
3. **Postponing**—Delay your first cigarette by two hours each day until you are not smoking between the time you wake up and when you go to sleep. For example, if you normally have your first cigarette at 8 am, wait until 10 am the first day, until noon the second day, and so on.

There are several pharmacologic methods to help you with quitting. The first are nicotine replacement medi-

cines which replace the nicotine but do not have the other harmful chemicals in them that cigarettes do. They come in many over-the-counter forms such as gum, patches, lozenges, and prescription nicotine nasal sprays. All of these methods decrease your cravings for cigarettes as well as withdrawal symptoms. If you choose to use one of these forms, you must NOT smoke. Smoking with the medications can cause heart attacks or heart arrhythmias.

Whichever method of nicotine replacement medication you choose involves two steps. First of all, you must get over your craving to smoke, which may take four to six weeks of no cigarettes. Secondly, you must withdraw from the nicotine itself. That may take another four to eight weeks, during which time you will decrease the amount of nicotine replacement you are using.

The second types of medications are those that stimulate the nicotine receptors in the brain to decrease nicotine withdrawal symptoms. These drugs are bupropion (Zyban) and varenicline (Chantix). Varenicline reduces the desire to smoke by blocking nicotine from binding to nicotine receptors in the brain. Varenicline should not be used with nicotine replacements and should be started about one week before the quit date. Both of these drugs are by prescription only.

WITHDRAWAL

Your body tries to recover from its addiction to cigarettes by showing withdrawal symptoms. These may include: irritability, increased coughing (which makes you wonder why quitting cigarettes is good for you), insomnia, depression, poor concentration, and increased appetite (which is partly due to the fact that you can taste food better if you are not smoking). These symptoms will go away, but you must have a way of dealing with the symptoms when they occur. Activities that help include: drinking water frequently during the day, taking walks or engaging in other forms of exercise, and using deep breathing or visual imagery to relax. Avoiding situations where you used to smoke also helps. For example, if you

always smoked at the breakfast table with a cup of coffee after you have eaten, get up and take your coffee into the living room to watch the news.

You can avoid weight gain by careful planning. It is true that 80% of people who quit smoking gain up to ten pounds, but almost 60% of people who continue to smoke gain the same amount of weight in the same amount of time. You should follow a healthy diet (see a dietician if it will help you to identify what you need) with plenty of vegetables. Make sure you do not substitute high-calorie snacks for cigarettes. Keep low-fat foods and vegetables readily available as healthy snacks and chew sugar-free gum.

RELAPSE

If you relapse, do not give up. Get back on track. Throw away the cigarettes. Figure out what triggered your relapse and avoid it the next time. Get a "non-smoking" support buddy whom you can call when you really crave a cigarette. Use a stress ball when you have the urge to smoke. Clean your house and your car to get rid of the "cigarette smell." Most of all, avoid situations where you want to smoke. Save the money you would have used to buy cigarettes and reward yourself in a month with something you really want—or save up for a year and take a trip. Remind yourself why you wanted to quit smoking.

SUCCESS

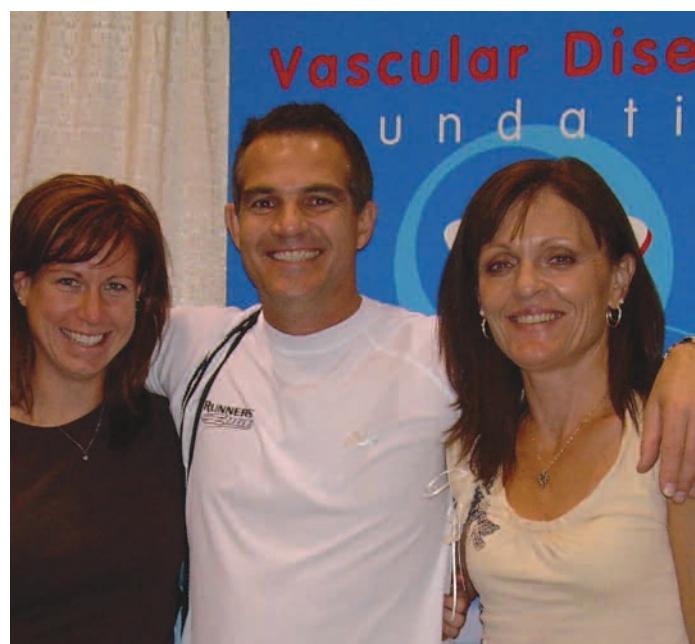
By using some of these strategies, you CAN successfully quit smoking. If you had a smoker's cough, it should gradually disappear. Your risk of vascular disease, cancer, and lung disease should decrease. Congratulate yourself and breathe easier!

Team VDF

For the third consecutive year, the Vascular Disease Foundation has been selected as an "official" charity for the Bank of America Chicago Marathon! Last year, Team VDF was composed of an awesome team of runners from all over the U.S. and Canada.

Registration for the 2008 Bank of America Chicago Marathon is now open and we'd love to have you join Team VDF to support vascular disease education. This year, the marathon takes place on Sunday, October 12. Now is a great time to start training for the 26.2 miles that make up the race. Being a member of Team VDF not only helps to raise money for VDF, but also helps to raise awareness about vascular disease for thousands of spectators.

Want to be part of Team VDF? Now is the time! The marathon limits the number of runners it accepts to the first 45,000 participants who sign up. That deadline will be here soon! Join us and sign up today. Please contact us at 888.VDF.4INFO or online at www.vdf.org/news/BankofAmericaChicagoMarathon.php



2007 Team VDF Members pictured left to right: Janice Pettit, Chris Birkland and Barbara Hambleton.

IN THE NEWS

March is DVT Month

Learn about DVT online at
www.vdf.org/diseaseinfo/dvt

May is Stroke Awareness Month

Learn the risk and symptoms of stroke on VDF's Web site in the disease section or by listening to HealthCast episode #10.

VDF's HealthCasts Have Been Transcribed

Did you know that all of VDF's HealthCasts have been transcribed? You may now view the text for all of our HealthCasts



online or call the office to receive a free transcript by mail.

Online Bulletin Board

Have you visited VDF's online bulletin board? Post a question or honor a loved one in the Tribute Garden.

10 Ways to Continue to Help Us Celebrate VDF's 10th Anniversary



1. Become a member of VDF! Our goal is 10,000 new members in 2008!
2. Attend our first national community celebration August 16 in Denver, CO.
3. Support our fundraising goal of reaching \$1,000,000! Donate \$10 or a multiple of \$10 and get a special commemorative ten-year anniversary pin.
4. Promote the *Stay in Circulation* campaign: wear an awareness pin, or display the static-cling sticker in your car, office, or home during National PAD Awareness Month in September.
5. Start a community alliance.
6. Start a local support group.
7. Listen to our "Ask the Doctor" Live Chat each month.
8. Buy a pin, necktie, t-shirt or other VDF or P.A.D. Coalition item to proudly wear.
9. Become a "Step Steward." Join our virtual walk/run program that lets you walk or run at your own pace and raise awareness about vascular disease in your community.
10. Share your story with VDF! It might be selected to be used in our newsletter or on our Web site at www.vdf.org

Support Vascular Disease Education



The Vascular Disease Foundation is the only national non-profit dedicated to providing the public with trustworthy and factual education about vascular disease for free. While we have wonderful corporate sponsors who help us in our efforts, we also rely on the generous support of the general public. Won't you help support us today? All donations are tax-deductible, and 92% of our expenses support our programs.

You can make a donation by sending us a check using the envelope attached to this newsletter, calling us toll-free at **888.VDF.4INFO**, or online at www.vdf.org/donate/donation.php

Thank you for supporting the Vascular Disease Foundation!

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VDF "Ask the Doctor" LIVE CHAT

VDF is proud to offer live, online chats with medical professionals about different areas of vascular disease. Chats occur one Wednesday per month at 1 pm ET/ 12 pm CST/ 11 am MT. Join us on the following dates to chat live with a medical professional:

April 16 - Dr. John F. Angle answers your questions about PAD.

Can't sit in on a live chat? View the transcripts online. Please visit www.vdf.org and click the "Interactive Resources" tab for more information.

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