

Keeping in Circulation®

The official magazine of the Vascular Disease Foundation

The Maestro

who mastered vasculitis

Meng-Chieh Liu was told he'd never play again. He proved everyone wrong.





Anton Sidawy, MD, MPH
President
Vascular Disease Foundation

Dear Readers,

The Vascular Disease Foundation® welcomes you to yet another educational issue of our *Keeping in Circulation*® magazine! As 2010 comes to a close, we are proud of the Foundation's many accomplishments for this exciting year. First, our annual meeting held this past September was a great success; you can read a recap on pages 12-13.

I continue to be inspired by the strength and perseverance of the many patients who struggle with the challenges brought about by having a vascular disorder. Our featured patient story about the Taiwanese pianist Meng-Chieh Liu and his battle back to health from vasculitis is truly extraordinary. I hope you enjoy this heart-warming story.

With the winter season upon us, VDF is proud to offer this edition of our *Keeping in Circulation* with one of our articles highlighting those vascular conditions that are affected by the cold weather including Raynaud's phenomenon and pernio.

This issue also features information on thoracic outlet syndrome or "TOS" a rare and complex health issue, information about the free Medicare benefit for AAA, an educational FAQ piece on DVT and PE and more!

With the holidays fast approaching, I also want to impress upon you that your financial support during this time of giving is needed now more than ever. Ninety-one percent of all donated funds goes direct to the programs that you have come to depend on and now we are asking for your help so we can expand our outreach. Please consider making a tax-deductible donation to the Vascular Disease Foundation. Thank you for your support!

Happy holidays!

Sincerely,

A handwritten signature in black ink that reads "Anton M. Sidawy". The signature is written in a cursive, flowing style.

Anton Sidawy, MD, MPH
President

1075 South Yukon Street, Suite 320
Lakewood, CO 80226

Board of Directors

Anton Sidawy, MD, MPHPresident
Heather Gornik, MD..... Secretary
Robert McLafferty, MD President Elect
Mary L. Yost Treasurer
Mark A. Creager, MD..... Past-President
Alan T. Hirsch, MD Past-President

John "Fritz" Angle, MD	Marge B. Lovell, RN, CVN
Joe Caporusso, DPM	M. Ashraf Mansour, MD
Richard H. Carmona, MD	Patricia Marques, RVT
David Faxon, MD	George Meier, MD
Samuel Z. Goldhaber, MD	Suresh Vendantam, MD
Patricia S. Hofstra, JD	Jeffrey Weitz, MD
Michael R. Jaff, DO	Karen A. Zupko
Marjorie L. King, MD	

National Corporate Roundtable

Abbott Vascular	Cordis Endovascular
AngioDynamics, Inc.	Eisai, Inc.
AstraZeneca	Endovascular Today
Bard Peripheral Vascular	ev3
BioMedix	Sanofi-aventis
Bristol-Myers Squibb Company	Sigvaris
Cook Medical, Inc.	W.L. Gore & Associates

Scientific Advisory Board

Meghal Antani, MD	Dave A. Meyerson, MD, JD
John R. Bartholomew, MD	Elizabeth Ratchford, MD
Carmel Celestin, MD	Carolyn Robinson, RN
Marcelo P. Villa-Forte Gomes, MD	John Rundback, MD
Rishi Gupta, MD	Robert Schainfeld, MD
Greg Guy, MD	Kerry J. Stewart, EdD
Diane Treat-Jacobson, PhD	Jean White, RVT

Managing Editor	Jason Schneider
Managing Editor, Vascular Disease Foundation	Christa Saracco
Editor	Sheryl Benjamin
Medical Editor	Jan Nunnelee, PhD, RN
Creative Director	Jan McLean
Senior Art Director	James Davis
Production Director	Traci Marsh

Contributing Writers

Susan L. Comer • Ginny Gaylor • Wes Isley • Jennifer Sellers • Erica Stacy



Keeping in Circulation is published quarterly by Vitality Communications
407 Norwalk St. • Greensboro, NC 27407
Phone: (336) 547-8970 • Fax: (336) 547-0768

President William G. Moore
Senior Staff Accountant Kelly Carter

For advertising and sponsorship opportunities, please contact:
Cheryl Bober
(336) 547-8970, ext. 3334

Models are used for illustrative purposes only.

© Copyright 2010 by Vitality Communications, an operating company of StayWell/MediMedia USA and The Vascular Disease Foundation. No part of this publication may be reproduced or transmitted in any form or by any means without written permission from Vitality Communications. Articles in this publication are written by professional journalists who strive to present reliable, up-to-date health information. However, personal decisions regarding health, finance, exercise and other matters should be made only after consultation with the reader's physician or professional adviser. All editorial rights reserved. Opinions expressed herein are not necessarily those of Vitality Communications or The Vascular Disease Foundation.

Features

6 . . . The maestro who mastered vasculitis
After an aggressive episode of vasculitis, professional pianist Meng-Chieh Liu was told he'd never play again. He proved everyone wrong.

10. . Be aware and prepare
Winter weather can aggravate vascular-related conditions

12. . Annual meeting recap

14. . Great SAAAVE!
SAAAVE Act Awareness Program aims to save the lives of those with abdominal aortic aneurysm

16. . Thoracic outlet syndrome
Understanding a rare and complex disorder

18. . Research on trial
Rigorous clinical studies ensure that potential treatments for vascular disease are safe and effective

Departments

2 Letter from the President

5 News from the Vascular Disease Foundation

20 Frequently Asked Questions about DVT

My P.A.D. Guide, an interactive workbook for people with Peripheral Arterial Disease

By Jennifer Sellers

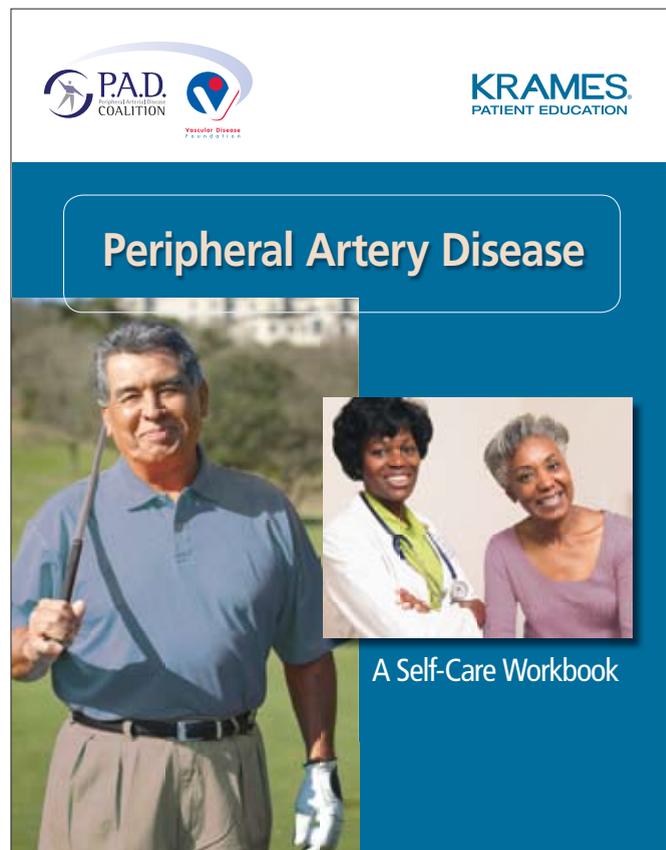
If you have a commonly experienced health condition like diabetes or depression, it seems there's a ton of information available to help you navigate your way through the illness. When it comes to less ordinary diseases, however, quality resources are limited at best. Fortunately, this isn't the case if you suffer from peripheral arterial disease (PAD). The P.A.D. Coalition (an initiative of VDF) has launched an interactive workbook that will help you better manage your condition.

This online tool, which can be accessed at www.myPADguide.org, has turning pages just like a booklet. But unlike a pamphlet you'd pick up at your doctor's office, this interactive guide has narrated text, videos, quizzes, print-outs and graphics. It walks you through PAD, from risk factors and symptoms to diagnosis and disease management. It also offers tips on improving your health. It even covers special PAD procedures.

Take a closer look at what this go-to guide has to offer:

Helpful audio

As you browse through the guide, you'll see that certain paragraphs or sections have a symbol that indicates the content is narrated. Simply press the sound icon by that paragraph, and the guide will provide you with the audio version of that particular text. This is a great feature for those who have poor eyesight or who respond better to the spoken, rather than written, word.



P.A.D. COALITION
Vascular Disease Foundation

KRAMES
PATIENT EDUCATION

Peripheral Artery Disease

A Self-Care Workbook

Variety of videos

When you're reading the workbook and you see a symbol that looks like the "play" button on a DVD player or VCR, click it to pull up a video on PAD. The clips include recorded stories of other people who are experiencing the condition. (continued on page 23)

P.A.D. workbook

Please visit www.padcoalition.org for an interactive, online version of this self-care workbook. Throughout the online workbook, you can interact with features that will help you make the most of what you learn, such as:

- Videos and animations
- Audio versions of the page information
- Printable materials
- Instant definitions of terms
- Quiz and survey to help gauge what you have learned



Why Walk?
Walking can make a real difference for people with peripheral arterial disease (PAD). Recent studies show that for many people with PAD, a structured walking program is one of the best treatments for reducing leg pain or cramps. Structured walking programs are safe, flexible and often more effective and fun than other treatments for helping people with PAD walk longer and farther without having to stop due to pain.

A Walking Program
A regular walking program will:
• Let you move and stay active.
• Reduce stress and help you relax.
• Help you control your blood glucose, blood pressure, cholesterol, and body weight.
• Improve muscle tone.
• Lower your chance of having a heart attack or stroke.
• Give you peace of mind that you are taking care of your health.

Getting Started
This book helps you start to walk a special supervised walking program designed for people with PAD. In this type of program, you will work closely with health professionals who know about PAD, and who will design a structured or fixed walking program for you. Your health care provider can help you find a structured PAD walking program at a local hospital or a nearby rehabilitation or fitness center.

Set Up for Success
Whether you go to a supervised PAD walking program, you can start walking on your own using the supervised program guidelines on page 66. You can walk on a treadmill at home or at a gym. You can also walk in a mall or a safe place outdoors. Before you start, talk with your health care provider to set up a program that is right for you.

Set Up for Success
Whether you go to a supervised PAD walking program or do it on your own, being these points in mind:
• Make sure to walk at least 3 to 5 times per week.
• Set your first goal to build up to 60 minutes of total walking time daily, with standing the time you take to rest after your first walking goal is met.
• Build up slowly to the final goal of 60 minutes of total walking time. You can take 5-min breaks.
• Be your biggest and best fan. As you add 15 minutes of walking each week, most people start to see real changes in time to these goals, but it could take longer.
• Stick with your program to maintain the improvements you have in walking longer and farther with less pain.
• The goal is to walk as far and as often as you can without pain that keeps you from walking.

"In Memory of" and "In Honor of" Envelopes Available

The Vascular Disease Foundation is the only national non-profit dedicated to providing the public with free, trustworthy and factual education about vascular disease. 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 91 percent of our expenses support our programs.

You can make a donation by sending us a check, calling us toll-free at (888) VDF INFO, or online at www.vdf.org/donate/donation.php.

Thank you for supporting the Vascular Disease Foundation!



Excellence in Care

Nominations are welcome 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 whom 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 that you feel deserves recognition.

New Disease Content

Now available on the Vascular Disease Foundation's Web site, www.vdf.org. Learn about mesenteric artery disease and thoracic aortic aneurysm (TAA).

February is National Heart Month.

Start a walking program and keep your heart healthy. Download a free walking brochure on our Web site at www.vdf.org or call (888) VDF-4INFO to receive your free brochure by mail.

March is DVT Awareness Month.

Learn the warning signs and symptoms of deep vein thrombosis (DVT) and pulmonary embolism (PE) at www.vdf.org or call us to receive your free copy of our "Focus on Blood Clots" brochure. Check our Web site for more information at www.vdf.org.

Jacobson Award

Nominations are now being accepted for the Julius H. Jacobson II award for physician excellence. This prestigious annual award recognizes outstanding contributions to physician education, leadership or patient care in vascular disease. The deadline for nominations is January 31. You may contact us at info@vdf.org or online at www.vdf.org/links/jacobsonaward.php to download an application.

Annual Appeal

VDF would like to ask for a tax-deductible donation to support our efforts to provide education and resources. Every dollar goes towards free programming for those who need it most. Donate online www.vdf.org/donate/donation.php

Ask the Expert Live Chat

VDF is proud to continue to offer its popular Ask the Expert Live Chats, where you can chat live with a health care professional live online each month. Chats take place the second Tuesday of the month at 4 p.m. EST/3 p.m. CST/2 p.m. MST. Join us online on the following dates:

Tuesday, December 7 — Elizabeth Ratchford, MD, will answer your questions about carotid disease and PAD.

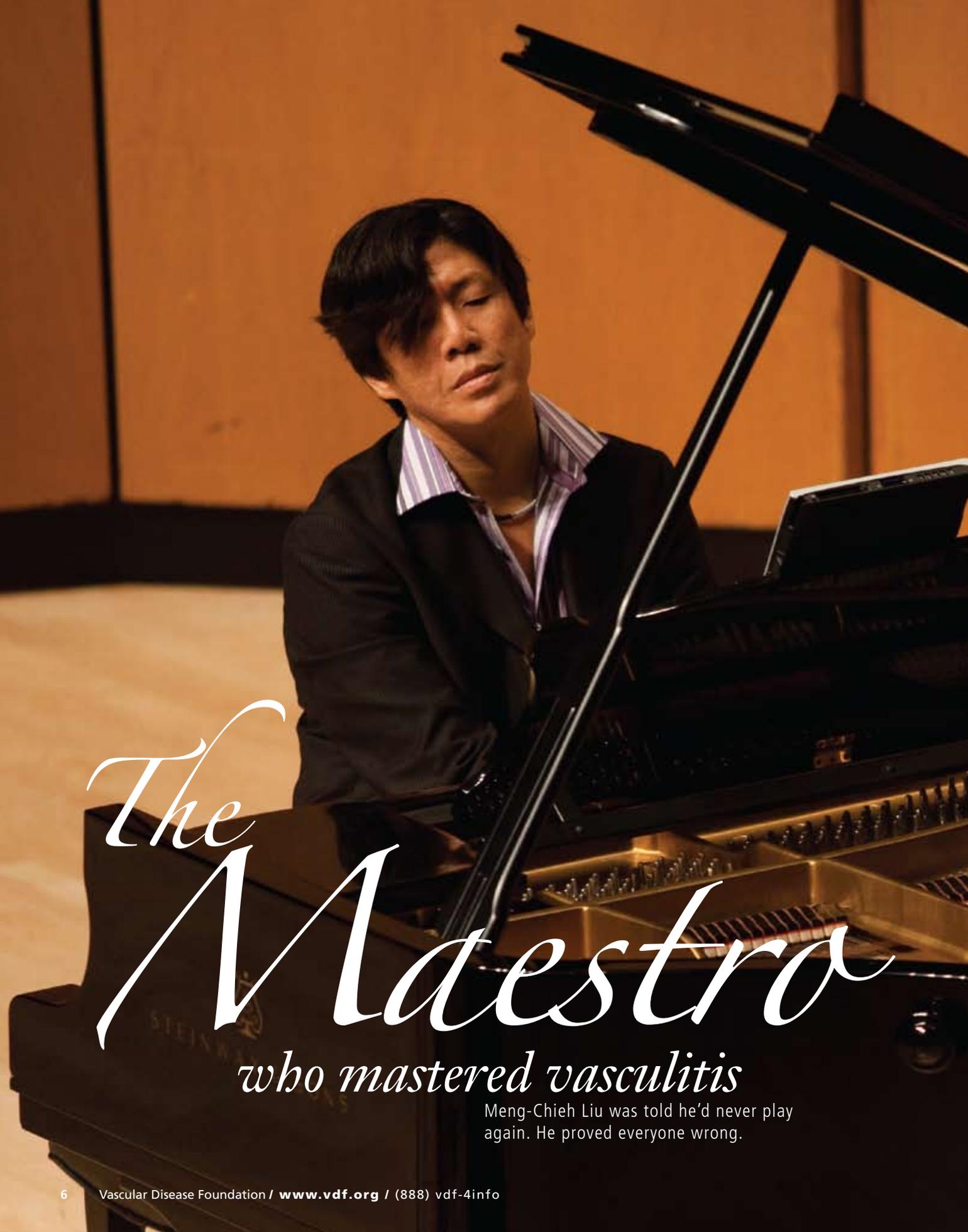
January 11 — Robert Schainfeld, MD, will answer your general questions about vascular disease.

February 8 — TBA

March 8 — Meghal Antani, MD, will answer your general questions about vascular disease.

April 12 — John H. Rundback, MD, will answer your general questions about vascular disease.

Can't sit in on a live chat? E-mail your questions to info@vdf.org up to 30 minutes prior to each chat or view the transcripts online. For transcripts and log-in information, visit <http://www.vdf.org/interactive/ask.php>.

A photograph of a man with dark hair, wearing a dark suit jacket over a light-colored striped shirt, playing a black grand piano. He has his eyes closed and a focused expression. The piano is open, and the keys are visible. The background is a warm, orange-brown color.

The Maestro

who mastered vasculitis

Meng-Chieh Liu was told he'd never play again. He proved everyone wrong.



By Jennifer Sellers

Meng-Chieh Liu

worked toward one goal his entire youth:
to become a celebrated professional pianist.

He was well on his way to achieving that goal when, at age 24, he came down with what he thought was a simple cold. “I started noticing the cold had gone on for too long,” he recounts. “I also starting getting really strange muscle pulls in my hands. I use my hands a lot, so I’m really sensitive to small changes.”

The first symptoms of vasculitis—fever, fatigue, appetite loss, weakness and body aches—are similar to what a person would experience with a viral infection such as a severe cold. And, often, vasculitis begins as a result of an ongoing viral infection—or shortly after a person has recovered from a virus. For reasons doctors are unsure of, a person’s immune system can have an overreaction to an infection that then damages their blood vessels. At times, vasculitis is even a complication of another autoimmune disease, such as rheumatoid arthritis. Liu was unaware of these facts 15 years ago when his weakness and fatigue devolved into atrophy. And it would be another year and a half—including two cardiac arrests and paralysis—before he would finally get his diagnosis.

Career, interrupted

As his health worsened, Liu started looking for answers. Doctors were baffled by his symptoms, but put him on prednisone to manage inflammation in his muscles and joints. This treatment did nothing to halt the progression of Liu's symptoms. He became frustrated with the lack of healing and sought alternative treatments.

"I went through all kinds of different therapies with many people telling me many different things," says Liu. "I really didn't know what to believe. Weakness and atrophy had extended throughout my entire body. I couldn't walk. I was in really bad shape."

Liu's health, of course, affected his career. "I had to cancel a lot of concerts," he says. "I was supposed to have this big debut, but I couldn't. I felt like all of this hit me at the wrong time in my life—because my career was just taking off. Suddenly, I wasn't able to practice or perform."

Just as Liu's desperation to find answers and healing was peaking, he had a cardiac arrest. The doctors wanted to perform open-heart surgery on him, but felt he was too weak. They sought to stabilize him first. It was during this time that Liu says he first heard from a doctor that his problem could be immune-related. Their prescription for Liu was more prednisone. "I was very disappointed," he says, "because I had tried that and knew it hadn't been working."

Steroids like prednisone are a preferred treatment for vasculitis, but not only was Liu's case severe, the doctors still hadn't pinpointed an actual diagnosis.

Shortly after that first hospital stay, Liu had yet another cardiac arrest and soon became paraplegic. It was at that time he

was finally diagnosed with vasculitis. "They didn't know what to do with me because they had never seen a case like mine," he says. "They thought I was going to die."

In addition to his vasculitis and its complications, Liu also had numerous infections. As the doctors slowly got some of his symptoms under control, they treated him with very high doses of the prednisone, then chemotherapy. In all, he was in the hospital for five months.

Uphill battle

At the time Liu was released from the hospital, he was already considered a marvel by his doctors. Not only did he survive, but he was already starting to walk again. While Liu was very much alive, he felt his career had died. "At that time, I thought I'd never play again," he says. "I had many injuries on my hands due to the paralysis and nerve problems I had while I was sick. I was so non-functional; I even had to learn to use a fork again."

As he was recovering and undergoing physical therapy, Liu had some extra time on his hands—a first for him, as he had previously devoted every hour of the day to his career. During this period, he started tinkering on an electric keyboard a friend had given him. The keys on the electric instrument were much lighter than regular piano keys, so Liu thought he'd give it a try. "It's still something I loved very much, so I thought, 'why not?'" he says. "At first, I didn't have the strength to press the keys. I was so disheartened. I remember crying over the fact that I had been training my entire life on the piano and now couldn't even play a note."

Despite his angst, Liu persisted. He continued practicing with the same persistence and discipline he had given piano

About vasculitis

Vasculitis is an inflammation of the wall of a blood vessel, which may result in narrowing which causes decreased blood flow to the organ it is supplying. When vessel narrowing occurs, the organ supplied by that blood vessel suffers from ischemia (lack of oxygen), which can cause damage with a loss of organ function or even patient death if a critical organ is involved.

The inflammation caused by vasculitis can also cause thinning of the vessel wall, which could lead to aneurysm formation and/or rupture of the vessel, causing hemorrhage.

Symptoms vary greatly depending on the organ(s) involved, the extent of the inflammation and the type of inflammatory change to the blood vessel; is it a thinning of the vessel or narrowing the vessel. Virtually any organ system may be involved by different types of vasculitis.

Establishing the diagnosis of vasculitis is not easy as the signs and symptoms may vary greatly. The diagnosis is a result of a combination of symptoms, laboratory tests, biopsy and/or angiography. Treatment is not the same for all vasculitides as these diseases have unique clinical manifestations and prognosis. Most patients with vasculitis require long-term follow-up for monitoring of disease activity, medication toxicity and damage from other diseases associated with vasculitis.

For more information visit
www.vdf.org/diseaseinfo/vasculitis.

playing his entire life. By January 1998—less than a year after he was released from the hospital—he had already given a small concert. By the end of that year, he was giving official concerts.

The comeback

It surprised everyone when Liu began playing again—but not him. Sure, there was a time when he doubted his body’s ability to recover. But once he put his mind to the task of regaining his career, he was unstoppable. That optimism and perseverance are what he believes were the keys to his comeback.

“I think my mind just wanted something, and I just really went for it,” says Liu. “I had worked very hard in my life to develop this career that I loved. I didn’t want to give up on that.”

These days, Liu is in remission and back to his busy schedule, which includes commuting back and forth from his homes in Philadelphia and Chicago. Unlike his years before vasculitis, however, he no longer abuses his body. “My schedule is hectic, but I try not to overdo it. My doctors are all very pleased with the progress I made. Now I only need a checkup once a year, but I keep an eye on things. I have a little bit of high blood pressure, which I monitor. I know now that vasculitis comes on gradually. I know what to look for.”

While the discipline of years of piano playing may have helped Liu’s recovery, he says anyone can develop the persistent mindset needed to heal. “You have to have a goal,” he says. “You need to have somewhere you want to get, and you have to have a belief that you can get there.” ■



Photo/ Nelson Fitch

With Life Line Screening, early detection can mean prevention.

“Partnering with hospitals across the nation.”



Packages start at \$139.

1 Stroke Screening/ Carotid Artery

This screens the carotid arteries in the neck for plaque buildup. The #1 cause of stroke is linked to carotid artery blockage.

2 Atrial Fibrillation Screening

This screens for the most common irregular heart beat, which increases the risk of stroke 5-fold.

3 Abdominal Aortic Aneurysm Screening

Screens for the existence of an aneurysm in the abdominal aorta. The vast majority of people who have an aneurysm have no symptoms.

4 Peripheral Arterial Disease Screening

It is 4-5 times more likely that you will die of heart disease if you have peripheral arterial disease.

To find a screening near you, call (800) 772-8390 or go to LifeLineScreening.com

LIFE LINE  SCREENING®
The Power of Prevention

All tests are for screening purposes only. You should consult with your personal physician regarding your screening results. Life Line Screening does not participate in the Medicare program and the cost of our screening services is not generally covered or reimbursable by Medicare. Life Line Screening does not file insurance claims and the cost of our screening services is your responsibility. Screenings in Kansas are performed by Life Line Screening of America, LLC on behalf of Life Line Screening Physicians, P.A. In some states, including Texas, physician authorization is required. A Life Line Screening affiliated physician will provide authorization for you if you qualify. Screenings in California are provided by Life Line Mobile Screening.



Be aware and prepare

Winter weather can aggravate
vascular-related conditions

By Ginny Gaylor

You may not realize the effects weather can have on your vascular health.

Cold weather can negatively impact the flow of blood through your blood vessels.

Exposure to extreme cold in the winter, as well as chilly, damp weather in the fall and winter, can result in several vascular-related conditions. Most can be avoided with a little preparation and awareness.

Raynaud's Phenomenon

The name may not be familiar, but Raynaud's Phenomenon affects as much as 5 percent of the U.S. population. Raynaud's Phenomenon is characterized as recurrent and episodic vasospasm of the fingers and/or toes. Sufferers are extremely sensitive to cold (or stress) and as a result their fingers can turn

white, blue or red. Named for the French doctor Maurice Raynaud, who first described the condition, it is most common in women between the ages of 20 and 40.

Dr. John R. Bartholomew, section head of vascular medicine at the Cleveland Clinic, says, "It usually affects the hands, but it can affect the toes. One gets a sudden onset of cold fingers, with sharply demarcated color changes in the skin."

He adds that the symptoms usually happen on both hands and are generally the result of cold exposure. Anxiety can also cause the condition in some people. Even holding a cold drink can set off symptoms for people with Raynaud's.

There are two types of Raynaud's Phenomenon: primary and secondary. Primary happens because of cold or stress. It is not connected to any other health issue. Secondary Raynaud's Phenomenon happens as a result of another medical condition or because of medications. The conditions that can cause it include scleroderma, rheumatoid arthritis or systemic lupus erythematosus, as well as vascular injury to the hand and frostbite. Medications that may be responsible include chemotherapeutic agents and drugs often used for heart disease and blood pressure (beta blockers). Nicotine may also aggravate Raynaud's Phenomenon.

Medications are available that can treat Raynaud's, but the best advice is to avoid cold. Simple things like wearing a hat, scarf and gloves as well as insulated socks and boots or, in colder climates, having a remote starter for your car can help you avoid the symptoms.

Frostbite

If you suffer from peripheral arterial disease (PAD) you may be more at risk for frostbite, a cold-induced injury, as a result. According to Dr. Bartholomew, symptoms of frostbite include blisters referred to as bullae, a throbbing and aching pain, swelling and clumsiness or a numb, "block of wood feeling" in the affected area. Frostbite is most commonly seen in people who engage in winter outdoor sports, someone who is in a car accident and stranded during cold weather, or the homeless.

Frostbite occurs when your skin, generally the hands, feet, ears, nose and cheeks, have been exposed to freezing temperatures for a long period of time. In addition to people with PAD, older people and infants are both more susceptible to frostbite. The severity of the condition is related to how long the skin was exposed to the colder temperatures or wind chill.

The key to preventing frostbite is to dress warmly and be aware that both colder weather and wind can cause the condition. Dr. Bartholomew says that people who have suffered from frostbite in the past may have a greater risk of developing the condition again.

If you think you may have frostbite, it is important to get out of the cold weather and seek appropriate care. Without proper care, someone suffering from frostbite may end up losing fingers or toes to amputation. "You shouldn't start to warm someone with frostbite and then transport them and re-warm them again," explains Dr. Bartholomew. "Re-warm the person only one time."

He advises that any clothing that is not sticking be removed, and that a frostbite sufferer have the affected areas be re-warmed in a bath of warm water (40-42 degrees C).

Pernio

First described in World War II in Great Britain, pernio (also known by its more common name, chilblains) is a painful swelling in the small blood vessels. Unlike frostbite, pernio can be caused by only moderate or damp cold. Someone with pernio will have bluish or purplish

discoloration in his or her fingers or toes. They may also have a burning pain, itching or red patches as symptoms.

The condition happens more frequently in women and young children. For adults, pernio occurs more often on their toes, while in children the fingers, and even the face, are commonly affected. According to Dr. Bartholomew, pernio is often misdiagnosed and it can be chronic. Repeated incidents of chilblains can result in infections or other permanent injuries if it is not treated.

The treatment for pernio is prevention. Avoiding or minimizing cold exposure or dressing in appropriate clothing is important. ■



The 2010 Vascular Disease Foundation Annual Meetings

The Vascular Disease Foundation recently held its Annual Conference: “Current Issues in Vascular Disease,” which included the P.A.D. Coalition and Venous Disease Coalition annual meetings and awards ceremonies.

“Current Issues in Vascular Disease” is a conference designed to bring together health care providers and organizations with a stake in the care of patients with vascular disease. The most current information was presented, as well as new developments in clinical practice and relevant research.

P.A.D. Coalition Seventh Annual Meeting

More than 115 people gathered in Arlington, Va., for an update on Coalition activities and new resources developed over the past year. Other presentations and discussions focused on hot topics and key issues in the area of PAD patient care, research and policy. Highlights included several panels and discussions.

Jack Lewin, MD, Chief Executive Officer of the American College of Cardiology reviewed the Pinnacle Registry conducted a session on “Using Disease Registries to Improve Patient Care.” The Pinnacle Registry is the largest, most robust ambulatory U.S. cardiovascular patient record database. It is being used to guide quality improvement efforts, ensure adherence to guidelines, aid development of performance measures and reduce health care disparities.

Drs. Alan Hirsch and Peter Sheehan discussed the “National Efforts to Address Critical Limb Ischemia (CLI).” CLI, a severe form of PAD and is associated with poor patient outcomes, fragmented care pathways, under-diagnosis and inconsistent treatment, and few treatment options. They addressed the need to improve the prevention and early detection of CLI, increase



(TOP) VDC Annual Meeting Keynote speaker, Christopher S. Parker, PhD, MPH Deputy Director, Division of Blood Disorders, Centers for Disease Control and Prevention.



(BOTTOM) VDC Best Science Award Winner Peter J. Pappas, MD

awareness of CLI among the public and health care community, disseminate evidence-based care pathways to facilitate the development of new science.

Dr. Hirsch also described efforts in Minnesota to improve the care of patients with PAD in a discussion on “Improving Care at the State Level.” These efforts include a study to document the incidence and economic burden of CLI in Minnesota and a push to include atherosclerotic vascular disease in state public health plans.

Cindy Goff, BioMedix’s Vice President, Legislative, Policy and Insurance Affairs, moderated a panel discussion on the new health care reform legislation, the Patient Protection and Affordable Care Act “The Next Stages of Health Care Reform and Strategies for Shaping Discussions.” Panelists Stephanie Mohl (Government Relations Manager, American Heart Association), Joseph LaMountain (P.A.D. Coalition’s Washington, DC representative) and Paul Bonta (Associate Executive Director, Policy

and Government Affairs, American College of Preventive Medicine) discussed what the next stage of health care reform will bring and other changes that can potentially help to improve the affordability and accessibility of care for patients with PAD.

P.A.D. Coalition Awards

The P.A.D. Coalition presented the annual Best PAD Research Awards to honor the work of investigators and acknowledge the creation of new clinical research relevant to the understanding and treatment of PAD published in 2009.

The Best PAD Research Award in Vascular Medicine was presented to Diane Treat-Jacobson, PhD, Associate Professor at the University of Minnesota School of Nursing in Minneapolis, MN.

The Best PAD Research Award in Epidemiology/Preventive Medicine went to Professor Curt Diehm of Germany.

Best PAD Research Award in Vascular Interventions was presented to Dr. Feinglass, Research Professor of Medicine in the Division of General Internal Medicine and the Institute for Healthcare Studies at the Northwestern University Feinberg School of Medicine.

Stay in Circulation Community Service Awards

The Coalition also presented its Stay in Circulation Community Service Awards to recognize collaborative programs focused on increasing awareness about PAD high-risk populations, patients and the health care community.

WomenHeart: The National Coalition for Women with Heart Disease received the Stay in Circulation Community Service National Award for its efforts to educate high-risk women about PAD.

The Stay in Circulation Community Service Award Local Award was presented to Parrish Medical Center (Titusville, Fla.) for its efforts to build a local PAD network.

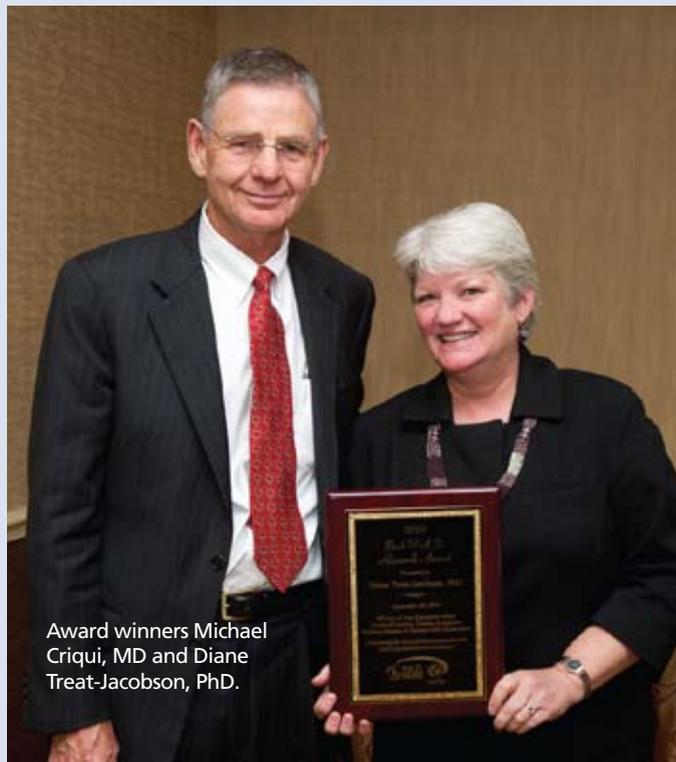
Venous Disease Coalition's Fourth Annual Meeting

Over 100 attendees participated in the Annual Meeting of the Venous Disease Coalition (VDC) in Alexandria, VA on September 21, 2010. Samuel Z. Goldhaber, MD, CDC Chairman welcomed the participants to their meeting and provided a report on Coalition programs and initiatives produced during the past twelve months. The first few topics presented highlights of hot topics in venous disease, current issues and programs and tools to help improve patient care by VDC and member organizations.

The VDC meeting featured a special keynote address by Christopher S. Parker, PhD, MPH, Deputy Director, Division of Blood Disorders, NCBDDD, Centers for Disease Control and Prevention (CDC). Dr. Parker addressed how the CDC is working to broaden the network of partners to improved venous disease outcomes and is committed to "work with national and consumer organizations such as VDC."

Drs. Suman Rathbun and Thomas Ortel unveiled the new national campaign for DVT awareness developed in

(continued on page 22)



Award winners Michael Criqui, MD and Diane Treat-Jacobson, PhD.

Vascular Disease Foundation President's Awards

These awards also show our appreciation for the extraordinary measures individuals have taken to support the Foundation's efforts to increase awareness of vascular disease and enhance the lives of those living with vascular disease.

The Presidents Awards were presented to Michael Criqui, MD for Vision, Marge Lovell, RN for Leadership, Garth N. Graham, MD for Inspiration and the Centers for Disease Control and Prevention's Division of Blood Disorders/ National Center on Birth Defects and Developmental Disabilities for Partnership.

Julius H. Jacobson II MD Award

The prestigious Julius H. Jacobson, II, MD Award for Physician Excellence was presented to Jack Cronenwett, MD, Professor of Surgery at Dartmouth-Hitchcock Medical Center. The award was honored by Dr. and Mrs. Jacobson who were in attendance.

(See photo on page 22)



Great SAAAVE!

*SAAAVE Act Awareness Program
aims to save the lives of those with
abdominal aortic aneurysm*

By Susan L. Comer

What do Lucille Ball, Albert Einstein, Harvey Korman, George C. Scott and Conway Twitty have in common? Despite their fame and resources, they all died of a highly treatable condition known as abdominal aortic aneurysm that, while far from rare, is in fact rarely discussed.

Perhaps you've never even heard of it, let alone wondered if you should be screened for it. The National Aneurysm Alliance (NAA) is hoping to change that by boosting the profile of this silent killer through the SAAAVE Act Awareness program. The NAA consists of several medical societies and public organizations including VDF.

SAAAVE stands for Screening Abdominal Aortic Aneurysms Very Efficiently. The SAAAVE Act, which provides a one-time Medicare-reimbursed AAA screening for at-risk Medicare beneficiaries, was signed into law by President George W. Bush in 2006. What exactly is an abdominal aortic aneurysm (AAA)?

Defining the problem

An AAA is an irregular weakness and expansion or bulging of the abdominal area of the aorta, the largest blood vessel in

the body. When a bulge grows to five centimeters in diameter—roughly the size of a small or medium orange—it can rupture, resulting in severe internal bleeding. Such a rupture is fatal in 75 percent of cases. The Society for Vascular Surgery (SVS) estimates that 15,000 people per year die from AAA. Indeed, the condition is present in some 200,000 individuals, many of whom are unaware of it due to the lack of symptoms. Those most at risk are men aged 60 and above who have ever smoked as well as men and women 60 and above with a family history of AAA.

However, in contrast to the high fatality rate following rupture, the condition is both treatable and curable if detected prior to rupture. The best line of defense? A simple, painless, and noninvasive ultrasound screening, a test which uses high-frequency sound waves to produce an image of the soft tissues and organs that are being scanned.

Unfortunately, due to a general lack of awareness of AAA, relatively few potential victims get screened despite the provision of Medicare-reimbursed screenings through the SAAAVE Act. In fact, only 10,000 at-risk Medicare patients were screened for AAA through SAAAVE in 2007, the year the benefit went into effect; only 18,000 were screened in 2008, and 20,000 in 2009.



Unused benefit

One major barrier to widespread screening, says Anton Sidawy, MD, MPH, president of the Vascular Disease Foundation (VDF), is the fact that those Medicare-reimbursed AAA screenings are linked to the “Welcome to Medicare” physical exam, a one-time preventive physical exam that must be conducted within 12 months of Part B enrollment. That is, a Medicare beneficiary at risk for AAA must obtain a referral for his or her AAA screening during the “Welcome to Medicare” physical exam and must get screened during the first year of eligibility.

“The problem with that,” says Dr. Sidawy, “is that most people don’t actually take advantage of the ‘Welcome to Medicare’ exam.” In addition, he says, many primary-care physicians who perform “Welcome to Medicare” physical exams remain unaware of the AAA screening benefit now available, so they do not refer patients for screening.

Screen for success

That’s where the SAAAVE Act Awareness program comes in. Essentially, says Dr. Sidawy, the NAA is seeking, through additional legislation and regulations, to delink

the AAA screening through SAAAVE from the “Welcome to Medicare” physical exam. The goal is to extend the one-time screening to many more at-risk Medicare beneficiaries than are currently eligible and being screened. At the same time, says Dr. Sidawy, the NAA is working to better publicize the Medicare-reimbursed screening, thereby increasing awareness among patients and referring physicians. Both familiarity with the condition and the value of early detection have become ever more crucial as the baby boomers are now reaching Medicare age and are, therefore, more susceptible to AAA.

If you are aged 60 or above, have ever smoked, or have a family history of AAA, an ultrasound screening could save your life.

And this brings us to the question of what two other prominent individuals, Sen. Bob Dole and baseball personality Bob Uecker, have in common—besides their first names, of course. Both Bobs had aneurysms that were detected early and, thus, both have lived to tell about it. ■

If you aren't familiar with thoracic outlet syndrome, you aren't alone.

Thoracic outlet syndrome (TOS) is a rare and complex health issue. Because many of the symptoms of TOS are also associated with other, more common, medical problems, it can be difficult to diagnose and treat.

"Getting the word out about thoracic outlet syndrome is a step toward helping people understand this controversial disorder," suggests Carmel Celestin, MD, of the Cleveland Clinic. "There is not much information for patients, and although it is a fairly simple concept, it can be difficult to diagnose. It is often confused with arthritis of the cervical spine."

Thoracic outlet syndrome

By Erica Stacy

Understanding a rare and complex disorder

What is TOS?

Thoracic outlet syndrome is the term physicians use to describe a group of disorders that occur when the blood vessels or nerves in the thoracic outlet—the space between by the muscles of the outlet or by an extra rib, called the cervical rib.

Imagine wrapping your arms around a pillow and squeezing tightly. The compression actually changes the shape of the pillow, and restricts its movement. Similarly, compression of the thoracic outlet squeezes the nerves and vessels in and around the neck and shoulders. The resulting squeezing of the structures causes pain particularly if nerves are involved. Swelling occurs if the veins are involved and aneurysm formation or compression of the artery if the arteries are involved.

The symptoms of TOS vary depending on the vessel structure. Generally, medical professionals recognize three types of TOS:

Neurogenic or neurological TOS occurs when the nerves in the thoracic outlet are compressed by surrounding structures. This network of nerves branch out from the spinal cord and control the muscle movements and feeling in the shoulder, arm and hand. These nerves control the muscle movements and feeling in the shoulder, arm and hand. Warning signs and symptoms include numbness or tingling in the fingers, pain in the shoulder and/or neck, aching in the arm or hand and a weakening grip.

According to Dr. Celestin, nearly 95 percent of TOS cases involve nerve compression.

Vascular TOS results from compression of one or more of the arteries or veins in the thoracic outlet. When these blood vessels are involved, patients may experience loss of color in the hand or fingers, arm pain and swelling (sometimes due to blood clots), a throbbing lump near the collarbone or tiny black spots on the fingers.

Arterial TOS is rare. It results from compression of the artery that brings blood to the arm to feed it oxygen. When the artery is involved, patients may experience numbness or tingling or a loss of color in the hands or fingers, mainly when using the arm. Some patients will have color changes in the fingers in response to cold. In some patients, the damage to the artery can cause clots that can go to the fingers and can result in gangrene.

Venous TOS is also rare. It results from compression of the vein that brings blood back to the heart to get oxygen. When the vein is involved, the patient will experience pain and swelling due to blood clot formation from trauma to the vein from compression.

What causes TOS?

There are many different factors that contribute to TOS. The compression may result from birth defects such as an extra rib located above the traditional first rib or an unusually tight fibrous band that connects the spine to the rib. It may be aggravated by repetitive activity such as typing on a computer for hours at a time, performing assembly line work, or stocking shelves. Trauma, such as a car accident, can trigger TOS. Poor posture, obesity, and pregnancy are also risk factors.

Diagnosis and treatment

“Successfully diagnosing thoracic outlet syndrome begins with a thorough history and examination,” notes Dr. Celestin. “Your physician will want details about your job, your medical history and your symptoms. He or she will probably conduct one or more provocation tests to try to reproduce your symptoms.”

Based on the results of the personal interview and examination, the physician will want to confirm the diagnosis by ordering additional studies. These may include X-rays or MRIs to create images of what is happening in the body. Nerve conduction studies or electromyography, a procedure that detects electrical activity in the muscles, may also be ordered.

Treating TOS depends on what the symptoms are and the cause. Generally speaking symptomatic arterial and symptomatic venous TOS need to be surgically treated while neurogenic TOS may respond to physical therapy, relaxation techniques and continue with that sentence. However, patient age, symptoms and the cause of the TOS have to first be thoroughly evaluated.

Untreated, TOS may cause significant disability and other serious problems. In the cases of vascular TOS with blood clots,

Thoracic outlet syndrome is the term physicians use to describe a group of disorders that occur when the blood vessels or nerves in the thoracic outlet—the space between by the the muscles of the outlet or by an extra rib, called the cervical rib.

clot busters may be needed, followed by blood thinners and possibly surgery to remove the abnormal structure causing the compression.

Like most health issues, the best treatment for TOS is prevention. Although patients cannot control birth defects or avoid every accident, following simple steps every day reduces the risk of developing TOS.

- Avoid repetitive movements. Take breaks and move your body when you must stay in the same position for long periods of time.
- Avoid lifting heavy objects.
- Don't carry heavy bags over one shoulder.
- Stretch your muscles every day and exercise to keep your shoulders strong.
- Maintain a healthy weight.

Most importantly, schedule a visit with your family care provider if you experience the symptoms of TOS. “When the pain or irritation interferes with your day-to-day life, you should get it checked out,” says Dr. Celestin. “TOS can cause permanent irreversible damage.” ■



Research on trial

*Rigorous clinical
studies ensure that
potential treatments
for vascular disease
are safe and effective*

By Wes Isley

Clinical trials provide the fastest and most effective route for bringing new treatments to people living with peripheral arterial disease (PAD), a narrowing of blood vessels away from the heart, typically caused by plaque build-up. But a number of factors can influence the outcome of clinical trials, ultimately affecting how and when patients see a benefit, if at all.

First, a researcher must have an interest in testing an experimental therapy beyond laboratory and animal studies, and must secure a sponsor to pay for clinical trial expenses. One researcher working today to improve outcomes for patients with severe PAD is Michael P. Murphy, MD, associate professor of surgery at Indiana University School of Medicine and clinical director for the IUPUI Vascular and Cardiac Center of Adult Stem Cell Therapy.

Dr. Murphy's particular interest is in learning whether stem cells taken from a patient's own bone marrow can be used to help improve blood flow and prevent the loss of a limb, most often the patient's leg, in a severe or advanced form of PAD known as critical limb ischemia (CLI). Dr. Murphy says he sees about 10 patients a month with CLI.

Since approximately half of patients with CLI eventually face amputation of a leg, successful clinical trials that test the safety and effectiveness of methods for improving blood flow to the limbs are essential for improving quality of life. In 2004, Dr. Murphy launched a Phase I-II trial to determine whether bone marrow stem cells could actually facilitate the development of new blood vessels, a process called angiogenesis. The stem cells work by signaling the patient's own pre-existing blood vessels to sprout and grow new pathways. The small study involved 30 patients, which Dr. Murphy and his team followed at regular intervals after their procedure, in which stem cells were injected into the leg muscle. The study wasn't completed until March 2010, however, due in part to Dr. Murphy's two deployments to Iraq with the U.S. Army Reserves.

The results were worth the wait. "We found that the procedure was safe, and there were no adverse events," says Dr. Murphy. Seventy-six percent of participants experienced a significant improvement in blood flow. Most promising is that at one year after their

procedure, only 14 percent of participants had undergone an amputation, an improvement that Dr. Murphy calls "astounding." And not one of the remaining participants has needed an amputation since.

As often occurs in clinical trials, Dr. Murphy's procedure appeared to work but several questions were left unanswered. Does age or gender influence the outcome? If a participant has diabetes, what role does it play? "You have to tweak out demographic variables to help uncover exactly what determines how a patient will respond to the treatment, and likewise, we need more analysis of the bone marrow itself to determine which stem cell populations are most critical to the process," adds Dr. Murphy.

Encouraged by the results so far and eager to eliminate those pesky variables, Dr. Murphy launched a Phase III trial in June 2010—the only trial of its kind currently in effect. The trial is a double-blinded, randomized control trial, which means that patients are randomly assigned to receive either the actual procedure or a placebo (inactive treatment), but neither the participants nor the evaluating physicians know who falls into either group. This approach produces more objective results, and participants are made aware of the nature of the trial. After one year, those participants who received the placebo in Dr. Murphy's trial can receive the bone marrow cells.

"To determine if bone marrow cells truly prevent amputation, we have to eliminate the variables," says Dr. Murphy. "It's the only way to determine if there is a difference between the actual procedure and the placebo. We need more well-controlled, randomized studies."

Next, Dr. Murphy must recruit 158 patients and 15 surgical facilities. Patients must meet exacting health criteria and understand that they may receive no benefit at all; of course, their participation will eventually help other patients. Dr. Murphy will evaluate participating facilities based on their experience treating CLI. Then the work begins again.

While Dr. Murphy is enthusiastic about the prospects of his latest trial, he cautions patients with CLI to be wary of media

hype about stem cell therapies: "There hasn't yet been a randomized control trial to prove efficacy. The work is promising, but it is still truly experimental." ■

Critical Limb Ischemia:

Occurs in severe cases of peripheral arterial disease, in which blood flow to the leg or foot is restricted, resulting in pain, tissue damage and, potentially, amputation. Angiogenesis: The growth of blood vessels already present in the body through the use of proteins or genes.

Clinical Trial Phases

Phase I: Initial studies involving small groups of participants to determine the safety of a drug or procedure and potential side effects.

Phase II: Further evaluation of safety, effectiveness, side effects and risks, usually involving larger groups of participants.

Phase III: Expanded controlled or uncontrolled studies after preliminary effectiveness has been established. Benefits and risks are evaluated, and comparisons are made to existing treatments.

Phase IV: Post-marketing studies evaluate additional details including the risks, benefits and optimal use.

The Vascular Disease Foundation and its sponsors disclaim, either explicitly or implicitly, that any one of the medications, treatments, or devices 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 Clinical Trials, please visit: www.vdf.org/clinical.

To inquire about Dr. Murphy's Phase III CLI Trial, please contact Patricia at (317) 278-6585.

Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE) FAQs

By **Carmel Celestin, MD**. Dr. Celestin is a physician in the Department of Vascular Medicine at Cleveland Clinic Weston. Her specialty interests include lower-extremity edema, peripheral arterial disease, upper-extremity disorders, Raynaud's and hypercoagulable states.

Deep vein thrombosis, commonly referred to as "DVT", occurs when a blood clot, or thrombus, develops in the large veins of the legs or pelvic area. Some DVT's may cause no pain, whereas others can be quite painful. With prompt diagnosis and treatment, the majority of DVT's are not life threatening. However, a blood clot that forms deep beneath the skin, where it cannot be seen, "deep veins" can be an immediate threat to your life, as compared to a clot that forms in the visible "superficial" veins, the ones beneath your 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 areas and lodges in a lung artery, the condition is known as a "pulmonary embolism," or PE, a potentially fatal condition if not immediately diagnosed and treated.

These FAQs were designed to answer some of the commonly asked questions from those patients and their families receiving treatment for DVT/PE.

Why can't we use clot busters to break the clot apart?

Blood thinners are the mainstay of treatment in patients with deep vein thrombosis (DVT) or pulmonary embolism (PE). They have been proven to prevent clots from growing and from dislodging. There are clot busting medications (known as thrombolytics) that may be used in cases of DVT when there are so many clots that it causes severe leg swelling, compromising blood flow to the leg or in cases of PE when the strain on the heart from the blood clot is significant or a patient is unstable with low blood pressure. The use of thrombolytic medications can be associated with an increased risk of serious bleeding. Furthermore, although they dissolve clots, it is not yet clear to what extent they improve patient outcomes. Even if a thrombolytic/clot buster is given, a blood thinner such as heparin is also generally used.

Why can't we use a screen to prevent the clot from going to my lungs?

Screens that can be used to prevent clots from breaking apart from the legs and traveling to the lungs are called inferior vena cava filters (or IVC filters). Some IVC filters are placed permanently while others are left in place for a short period of time and then removed. They are used instead of or in addition to blood thinners in select patients with DVT or PE. These are patients who are at risk of bleeding while being on blood thinners or who have been determined by their physician to be at high risk from the clot itself. Patients are carefully selected for IVC filter placement because it requires an invasive procedure to place them. Complications of IVC filters, though uncommon, include bleeding or reaction to dye during IVC filter placement, tilting or movement of the filter, or very rarely pieces of the filter breaking off of the device. While IVC filters do decrease the risk of pulmonary embolism, they are associated with a risk of future DVTs in the legs below the filter.

Will walking, exercising, or physical therapy cause my clots to break lose?

If you have a DVT, getting up and moving around does not increase your risk of PE compared with bed rest. Studies have suggested that those patients with DVT who get out of bed and walked earlier have shown faster resolution of pain and swelling in the legs.

What limitations do I have now that I have these clots?

Most patients who have had a DVT or PE are eventually able to resume their normal daily routine and may continue to participate in activities they enjoy, including massage, exercise and travel. Contact sports are generally not recommended for a fear of trauma and bleeding while on blood thinners. Having a DVT or PE should not preclude one from being at high altitudes in most cases. As always, check with your doctor as to when you may resume the activities and travel that you enjoy.

Should we check to see if the clot has dissolved?

Checking for resolution of a blood clot is not a great measure of success of treatment. The majority of patients who have had a PE will still have some visible clot on repeat imaging as far as six months after their event and treatment. The same is true for some patients with DVT of the legs. For leg DVT, the presence of residual clot months after treatment may be used as a marker for the risk of having another DVT. In some cases a physician may order another ultrasound study months after a DVT to assess for the presence and amount of remaining clot, but in most cases, there is no need to repeat an ultrasound after a DVT.

Will my blood clot put me at risk for a heart attack or a stroke?

Having a DVT or PE generally will not result in a heart attack or a stroke as the two involve different parts of the vascular system. An exception is if there is a hole in the heart to connect the two systems together, but this is highly unusual.

Why do I still have some leg pain and swelling even after the clot is treated or gone?

Many patients will develop symptoms of the post thrombotic syndrome (PTS) after developing a DVT. The post thrombotic syndrome is a cluster of leg symptoms such as swelling, pain, and discoloration of the legs that can develop after a DVT, especially if the DVT is extensive. The symptoms of PTS are generally controlled with compression stockings. Research has also shown that among patients with leg DVT, the likelihood of developing symptoms of PTS can be reduced by wearing compression hose during treatment of DVT.

For how long do I need to be on blood thinners?

The duration of treatment is individualized and should be discussed carefully with your physician. The decision is mainly based on the reason why the clot occurred and if the risk factor is still present or not (for example a DVT that develops after knee surgery). Three months has been shown to be the minimal duration of treatment as it has been found that up to 20 percent of clots will worsen or recur if treatment is stopped short of this time. If there is no known reason for the clot (i.e., unprovoked DVT or PE), it is generally recommended that blood thinners be continued long term. This can be done with lower doses of blood thinners in some cases. The presence of a genetic risk factor for clotting does not automatically require one to be on blood thinners indefinitely.

Will I be OK to travel?

In most cases, yes. Prolonged travel (thought to be greater than four-eight hours) is associated with only a mild risk of blood clots. Most patients who have had a blood clot after a flight also have other risk factors for DVT and PE.

If you have recently suffered a DVT or PE, check with your physician prior to travel. You may also need to make arrangements for monitoring your blood thinners if you are to be away for a long period of time.

The general recommendations for minimizing the risk of blood clots during travel are to avoid constrictive clothing, drink lots of fluid, avoid alcohol, and get up and walk or do calf muscle exercises frequently. Those with risk factors for DVT and PE should also wear compression hose in flight. At times, a small amount of blood thinners may be prescribed prior to travel. Aspirin is generally not recommended.

Can aspirin help my clots or prevent clots from happening?

Aspirin is most effective in reducing vascular events in patient with arterial disease. It does offer some protection against venous disease, but it is not recommended because there are more effective methods of prevention such as heparin, low-molecular-weight heparin, and warfarin are available.

Can I get another blood clot while on blood thinners?

It is very rare to develop another blood clot while on blood thinners if you are prescribed the right dose and are within the target range on coumadin.



Anton Sidawy, MD and Jack Cronenwett, MD, 2010 Jacobson Award Winner.

partnership with CDC, titled "This is Serious." The program is now available nationally and can be accessed at www.thisisserious.org. Another new resource available on DVT was also presented by William Geerts, MD. A new VTE Toolkit which includes twelve chapters of slides, pictures and information that can be used for educating patients or staff about venous thromboembolism (VTE) which can be found online at www.venousdiseasecoalition.org.

Thomas Wakefield, MD, encouraged the VDC and its member organizations to help reduce venous ulcers by fifty percent by 2020, the goal of a national campaign spearheaded by the American Venous Forum. A pilot program that will support this goal by focusing on venous outcomes from two hospital systems. Lawrence Hofmann, MD is chair of the new VDC committee presented this new program, which is still in development.

Mary Ellen McCann, RN reviewed a new online accredited resource for nurses and other healthcare providers from the National Blood Clot Alliance. The "Stop the Clot Professional Education Program" is a complete curriculum to help providers understand clotting, its management and treatment.

A public television program that provided information to viewers and a phone bank to answer questions about superficial venous disease was highly successful according to Diana Neuhardt, RVT, RPhS. The program was conducted by the American College of Phlebology and is posted on its Web site so it can continue to reach the public.

Robert McLafferty, MD, led a discussion on gaps in VTE prevention, public awareness and educational programs through a few questions encouraging participants to identify where we can work to make a difference for patients. Several ideas were provided which will help frame strategies in the year ahead.

A fascinating presentation that described how follow-on biologics came to be approved earlier this summer by the FDA was given during the lunch by Craig Kessler. He explained

what changes occurred at the FDA, what constitutes "follow-on biologics" or "biosimilars" and how other countries are handling these issues.

Venous Disease Coalition Awards

The Venous Disease Coalition presented the Best Research Awards for papers published from June 2009 through June 2010 to honor the work of investigators and acknowledge the creation of new clinical research relevant to the understanding and/or treatment of venous disease. The lead authors on all the winning research studies also presented their research to the attendees during the meeting.

VDC Research Award in Basic Science was presented to Peter J. Pappas, MD, Division of Vascular Surgery, New Jersey Medical School.

VDC Research Award for Clinical Outcomes was presented to Alpesh N. Amin, MD, Professor of Medicine for the University of California School of Medicine.

VDC Research Award for Quality Improvement and Implementation of Best Practices went to Russell D. Hull, MBBS, MSc, Professor of Medicine at the University of Calgary. ■

SIGVARIS Patient Assistance Program for Compression Therapy

SIGVARIS, Inc, is proud to support the Vascular Disease Foundation!

SIGVARIS would like to donate a limited number of pairs of graduated compression socks or hosiery for VDF's Keeping in Circulation readers in need!

Please include a 150-word statement (statements over 150 words will be disqualified) stating your financial need. There are a limited number of graduated compression stockings available. Be sure to include your name, address, city, state and zip code along with a phone number and/or e-mail to:

By mail:
Judith Brannan
SIGVARIS, Inc.
1119 Highway 74 South
Peachtree City, GA 30269

By e-mail:
Judith.Brannan@sigvaris.com

By fax:
(770) 632-3002

Deadline for all entries is
January 28, 2011

To be eligible, you must have a valid prescription (please include a copy of your prescription) and be able to provide the correct measurements. Quantities are limited and will be given away solely at SIGVARIS' discretion. Be sure to submit all required information.

SIGVARIS
LIFE FOR LEGS
sigvarisusa.com

(continued from page 4)

Digital dictionary

Medical language can be difficult to understand for anyone who's not a healthcare professional. So as you read the workbook, just move your cursor over any word or phrase that is highlighted in red. As you do, a simple definition of the term will pop up.

Easy-to-find information

Each section of the PAD guide has its own tab on the right-hand side of the booklet. Not only will you know which topic is coming next, you can skip ahead to another section, if you want. In addition, you can simply press the forward or backward arrow to access an adjoining page. There is also a search box in which you can type a specific keyword you may be looking for.

Single worksheets

In addition to the information within the booklet, there is a additional content in the guide that can be printed out as single worksheets. As you're reading a section of the booklet, you might see a graphic of a worksheet on a specific topic (like "Tips to Control High Blood Pressure," for example). These sheets elaborate on the topic you were just reading and provide you with a printout that you can save or pass on to a friend. Simply click the printer icon within the worksheet graphic to print out these pages.

Beyond the basics

In addition to the general facts the guide provides, such as the risks and symptoms of PAD, you can also find more comprehensive information on the condition. For example, one section offers a step-by-step foot care plan, while another lets you know what to expect of certain PAD-specific procedures.

A fun, knowledge-testing quiz

On the back page of the guide, you'll find a resource that's sure to help you retain the information you just read. Simply press the brown "Take a Quiz" button (it will turn red when your cursor is over it) and a short, simple quiz will pop up to help you test your PAD knowledge.

Resources for healthy living

Also on the back page is a list of sites you can link to directly. These websites, which range from the American Heart Association to the USDA Food Pyramid, are designed to help you explore any and all information that will benefit your specific condition as well as your overall health.

Refer to it again and again

The PAD Guide isn't a one-time information blast, it's a valuable tool you can refer to any time you want to look up information on PAD Bookmark the site so that it's there when you need it! Visit www.myPADguide.org to access the PAD Guide.

Thank You to Our 2010 Volunteers!

VDF extends our heart-felt gratitude to those who volunteered for The Vascular Disease Foundation, P.A.D. Coalition and Venous Disease Coalition. Your efforts and hard work have made a difference and helped create our success. Thank you!

Matthew Allison, MD
John F. Angle, MD
Meghal Antani, MD
Caitlin Augustine
Eileen and Patrick Augustine
Bonnie Bange
Jerry Bartholomew, MD
Joshua Beckman, MD
Peggy Began, RN
Jacob Benjamin
Michael Benjamin
Carl Black, MD
Andrew Blum, MD
Glenn Buczkowski, RPA-C
Angela Calvert, NP
Nicole Camporeale, RN
Joe Caporusso, DPM
Richard Carmona, MD, MPH
Carmel Celestin, MD
Rabih Chaer, MD
Susanne Chastain
Brian Chastain
Cindi Christensen, RN
Mark A. Creager, MD
Michael Criqui, MD
Franki DeGlow
Mason Dixon
Beth Dole, CES, FAACVPR
Thomas Draper
Alain Drooz, MD

Sue Duval, PhD
Sharif Ellozy, MD
David Faxon, MD
Cindy Felty, RN
Randolph Fenninger, JD
Maria Feo, RN
Anne Foley, NP
Dene Franklin, RN
Judy Fried, RN, RVT
Jim Froehlich, MD
William Geerts, MD
Kirk Geter, DPM
David Gillespie, MD
Peter Gloviczki, MD
Stephanie Glyzowski
Samuel Z. Goldhaber, MD
Jerry Goldstone, MD
Heather L. Gornik, MD
Rishi Gupta, MD
Greg Guy, MD
Shauna Hill, RN
Alan T. Hirsch, MD
Lawrence Hofmann, MD
Patricia S. Hofstra, JD
Michael Jaff, DO
Kelly Johnson
Margie Kasle
Hong Keo, MD
Craig Kessler, MD
Nigel Key, MD

Marjorie King, MD
Debra Kohlman-Trigoboff, ACNP
Raghu Kolluri, MD
Lucy LaPerna, DO
Danielle Leach
Marie-Michele Leger, MPH
Jack Lewin, MD
Sarah Lindaht
Marge B. Lovell, RN
Marilyn Manco-Johnson
M. Ashraf Mansour, MD
Patricia Marques, RVT
Robert B. McLafferty, MD
Anne McLeod, MD
Debi Meeks
George H. Meier, MD, RVT
Donna M. Mendes, MD
David Meyerson, MD
Donna Micallef, RN
Emile Mohler, MD
Jody Monroe
Lisa Moses, RN
Patrick Muck, MD
Lois Olson
Tom Ortel, MD, PhD
Audrey Overpark, RN
Elizabeth Ratchford, MD
Suman Rathbun, MD
Judith Regensteiner, PhD
Cynthia Reilly

Carolyn Robinson, RN, NP
Robert R. Ross, PA-C
Le Keisha Ruffin
John Rundback, MD
Robert Schainfeld, MD
Kathleen Seelig
Jodi Segal, MD, MPH
Karun Sharma, MD
Peter Sheehan, MD
Anton Sidawy, MD
Rita Smith
Kerry Stewart, EdD
Velma Thiesen, MSN
Nora Tobin
Diane Treat-Jacobson, PhD
Sara Vasquez
Suresh Vedantham, MD
Maryann Verrillo
Marcelo Villa-Forte Gomes, MD
Evan Waetzman
Thomas Wakefield, MD
Eileen Walsh, PhD
Cathy Ware, CCRN
Jeffrey Weitz, MD
Jean White, RVT
Donna Wilson, RN
Benson Won, MPH
Mary L. Yost
Karen Zupko

Keeping in Circulation.

The official magazine of the Vascular Disease Foundation

1075 South Yukon Street, Suite 320
Lakewood, CO 80226

NON-PROFIT
U.S. POSTAGE
PAID
PERMIT NO. 4
LONG PRAIRIE, MN



The Vascular Disease Foundation's new national campaign to drive awareness and action around the prevention of deep vein thrombosis (DVT) and pulmonary embolism (PE) in women.

DVT can cause a life-threatening complication called pulmonary embolism (PE). Part or all of a clot can break off and travel through the bloodstream and into the lungs. A blood clot in the lungs can be life-threatening and can cause death.

To take a free risk assessment, or for more information on DVT and PE, including risk factors, symptoms, signs, prevention, and treatment, visit

{ THIS IS SERIOUS™
Learn More About Women + DVT/PE



WWW.THISISERIOUS.ORG