

Featuring Olympic Legend PEGGY FLEMING



A GUIDE TO

P.A.D.

PERIPHERAL ARTERY DISEASE



DVD
Inside

ACP
AMERICAN COLLEGE OF PHYSICIANS
INTERNAL MEDICINE | 2015-2016 | 100 YEARS OF ABILITY



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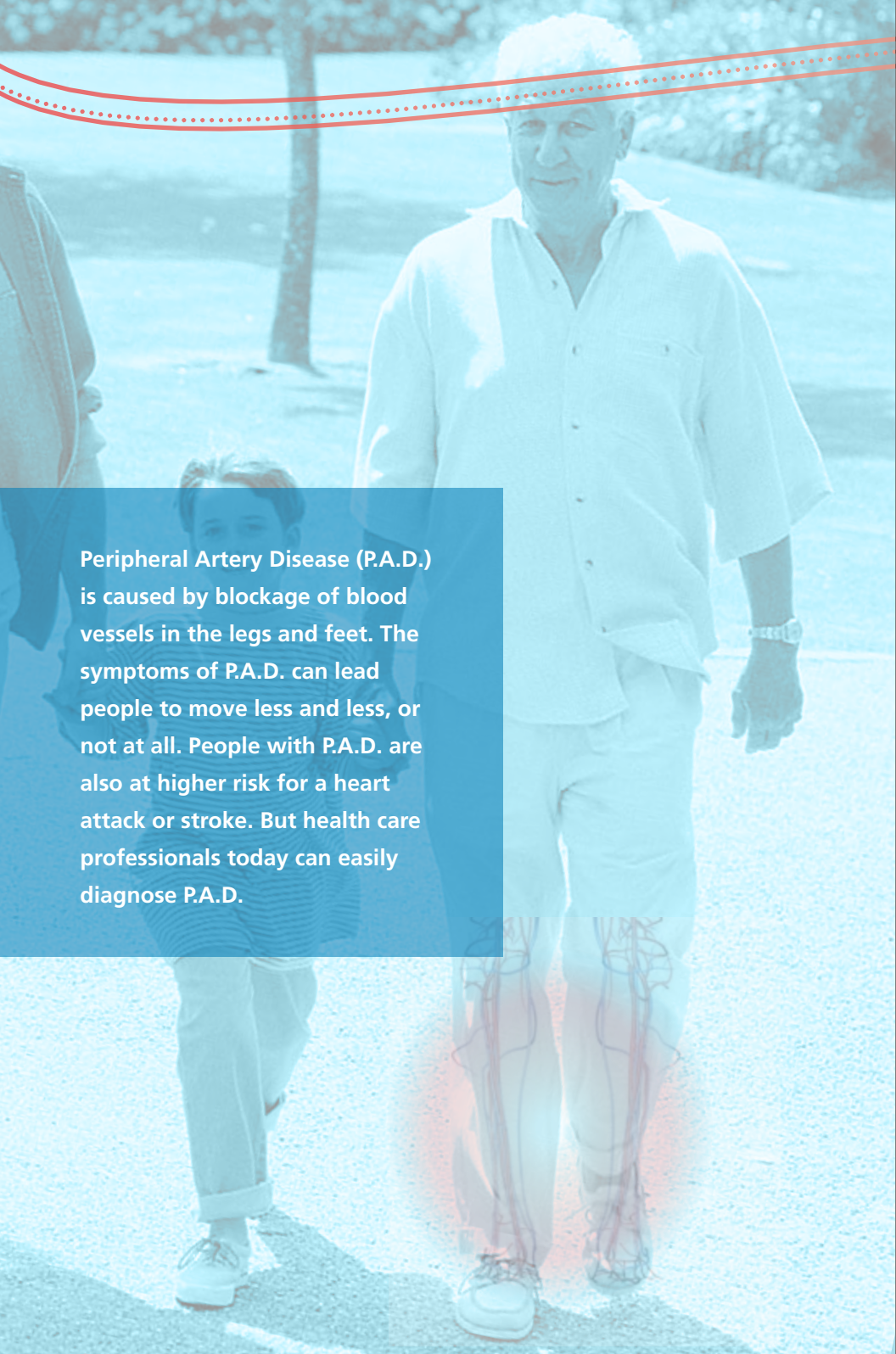
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Peripheral Artery Disease (P.A.D.) is caused by blockage of blood vessels in the legs and feet. The symptoms of P.A.D. can lead people to move less and less, or not at all. People with P.A.D. are also at higher risk for a heart attack or stroke. But health care professionals today can easily diagnose P.A.D.

Introduction

Peripheral Artery Disease (P.A.D.) commonly refers to blockages that some people have in the blood vessels of their legs and feet. P.A.D. is sometimes also called “poor circulation” in the legs. While most people have never heard of it, P.A.D. is a common cause of disability, pain, and restricted lifestyle. P.A.D. makes it hard or impossible to walk, or climb stairs. Importantly, P.A.D. is also a serious blood vessel disease, putting people at more than **double the risk** for a heart attack or stroke.

Approximately 8 million people in the U.S. have P.A.D. Many of these people don't know they have it! But health care professionals can easily tell if you have P.A.D. And you can treat the painful symptoms, and reduce your heart attack and stroke risk, with medications and lifestyle changes. You don't have to lose your freedom to P.A.D.!

This guidebook and DVD program will help you understand P.A.D. You'll learn what the risk factors are and how to get the treatment that is right for you. **The key steps:** know the signs; see your health care professional to discuss treatment options; and make healthy lifestyle changes.

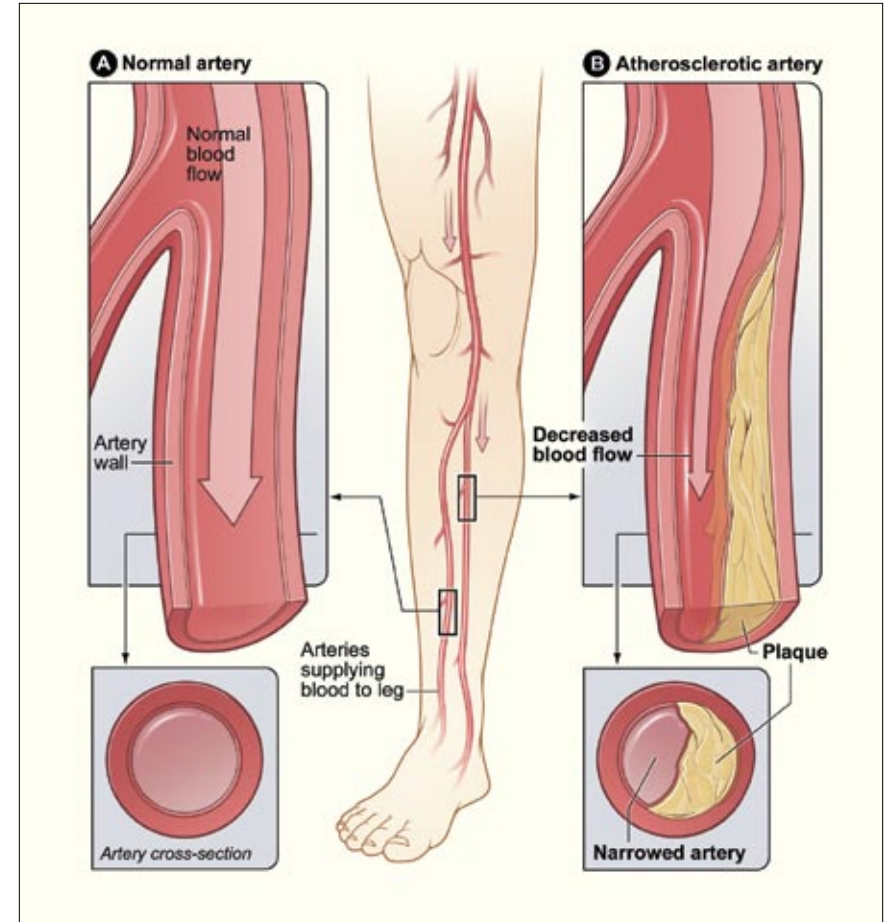
What Is Peripheral Artery Disease?

P.A.D. occurs when arteries in the legs and feet become narrow or clogged with fatty deposits called plaque. Blood flow may slowly decrease over time. This reduced blood flow may cause only mild symptoms. For example, P.A.D. can cause an achy, crampy feeling or pain in the muscles when the legs are used. This can happen when you walk or climb stairs. The discomfort usually goes away when you rest. Such discomfort is called *claudication*.

Many people mistake claudication for arthritis or simply “old age” and they don’t tell their health care professional about it. That’s a problem! You can’t get help if your health care professional doesn’t know there’s a problem. If you feel symptoms such as leg muscle tiredness, aching or cramping when you walk or climb stairs, you should be examined for P.A.D.

If the clogging in your leg arteries is severe, more serious problems can happen. Wounds heal very slowly. Sores or ulcers can form. Muscle tissue may die. Gangrene can set in. Toes, feet, or parts of the leg may have to be amputated.

More importantly, the kind of blockages that cause P.A.D. can also occur in blood vessels of the heart or brain. If a fatty deposit or plaque breaks apart in these blood vessels, a blood clot can form. The clot can block the flow of blood to your heart or brain, causing a heart attack or stroke. So having P.A.D. means you are at higher risk for these diseases too.



A healthy artery (on left) allows blood to pass easily. But a leg artery clogged with plaque (on right) reduces blood flow, leading to symptoms of P.A.D.



“I had no idea that my dad passing away from a heart attack had any effect on my health...I didn’t relate to that until much later in my life, and I think those are issues even an athlete has to pay attention to.”

– Peggy Fleming
Olympic Gold Medalist and World
Figure Skating Champion

What are the Risks and Symptoms of P.A.D.?

You are at higher risk for P.A.D.

- if you are over 50 and have one or more of the following:
 - diabetes
 - high blood pressure
 - high cholesterol levels
 - a family history of heart attack or stroke
- if you are over the age of 70

Also, African-Americans are more likely to develop P.A.D. than are whites or Hispanics.

When a person feels symptoms of P.A.D., here are some signs that she or he may experience:

- Fatigue, aches, cramping, heaviness, or pain in the leg muscles (buttocks, thighs, or calves) when exercising that typically goes away with rest
- Foot or toe pain at rest that often disturbs sleep
- Slow wound healing on feet or lower legs

Tell your health care professional if you have any of these risks or symptoms!

How is P.A.D. Diagnosed?

If your health care professional thinks you might have P.A.D., he or she will ask you questions about your symptoms and lifestyle. The health care professional may check your feet and legs for changes in your skin, hair, and nails, and inspect your feet for sores. In a physical exam, the health care professional may check the flow of blood in your feet and legs. He or she may also feel the pulses in your ankle and feet. If you have not recently had a blood test for diabetes or cholesterol, your doctor may suggest these.

The simplest and most commonly-used test for P.A.D. is called an *ankle-brachial index* (ABI) test. This test compares blood pressure in the ankle with blood pressure in the arm. Normally, the pressure in the ankle is higher than the arm. But in people with P.A.D., the pressure in the ankle is lower than that of the arm.

The ABI measurements are done with a Doppler probe. It is held over the ankle to listen to the blood flowing through the artery. A gel ointment is placed on the skin over the artery. Then the Doppler probe is placed on the gel to help the health care professional hear the blood flow and measure the pressure.

This is painless and takes only about 10 minutes.

This test, along with your symptoms, will allow your health care professional to determine whether or not you have P.A.D. and how severe the disease is.



“When I got off the treadmill after my exercise ABI test, the pressure in my left leg wasn’t normal as opposed to the right leg. We discovered that the artery of my left leg was 93% blocked!”

— Mary, P.A.D. patient

Talking with Your Health Care Professional

Before seeing your doctor or other health care professional, it may be helpful to write down any questions you have. Take the list of questions to your appointment, and note the answers. If an answer is not clear, ask your health care professional to explain it further.

See pages 16-18 of this booklet for suggested questions to ask. There is also a chart for writing down all the medications you currently take—important information for your health care professional!

Treating P.A.D. and the Risks That Go With It

How your P.A.D. is treated depends on how severe your disease is. Mild cases may improve with measures such as quitting smoking, exercising more, controlling your blood pressure, and maintaining good blood sugar control for people with diabetes. Medications are often needed to help achieve these goals, and to reduce the risk of blood clots that can cause a heart attack or stroke. More severe cases of PAD may require special procedures for treatment. In most cases, treatment has two goals: relief of the P.A.D. symptoms and lowering your risk of heart attack or stroke.

Here are the main ways that P.A.D. is treated:

Quit Smoking

Smoking damages blood vessels, leads to the buildup of fatty deposits, and increases the risk of blood clots. So if you smoke, the first thing you can do to treat P.A.D. is to quit. Talk to your health care professional about this. Quitting is never easy, but there are some new techniques that can make it easier. Of course, quitting smoking will lower your risk for many other diseases too!



Exercise

Your doctor may recommend a careful program of regular exercise to help improve the symptoms of P.A.D. It is a key part of any treatment plan. The basic idea is to start with very short walks and gradually go longer. You walk until you feel pain or other symptoms of claudication. If done regularly, you should be able to walk farther before feeling symptoms. Your health care professional will prescribe an exercise plan that is right for you. The key is sticking to it!



“I walk and stop, so I can walk again. Sometimes the pain goes away, and sometimes it doesn’t, but I just continuously keep pushing myself.”

– James, P.A.D. patient

Medication

There are many types of medicines available to help you manage high blood pressure, high cholesterol, and diabetes. *Antiplatelet* medicines may help further reduce the risk of heart attack or stroke associated with P.A.D. These medicines make it harder for blood to form clots, which are the cause of most heart attacks and strokes.

There are also two approved medicines that can improve claudication leg symptoms. Talk with your health care professional about the medicines that may be best for you.



Special Procedures

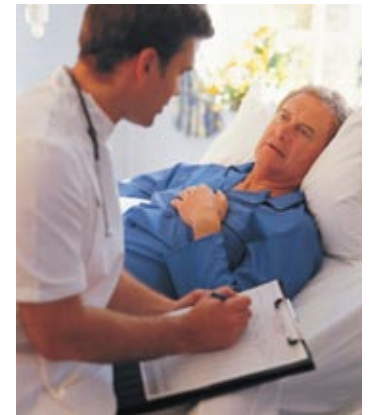
For most people with P.A.D., lifestyle changes and medication may be enough to control symptoms. But some may also benefit from a procedure called *angioplasty*. If an artery is severely narrowed or blocked, it can often be opened with this procedure. A doctor inserts a thin tube into the artery. A small balloon on the end of the tube is inflated at the blockage. This flattens the fatty deposits against the artery walls and makes it easier for blood to flow. The same-day procedure is done in a hospital under local anesthesia.

Sometimes a tiny wire mesh tube called a *stent* is inserted after angioplasty. This helps prop open the artery.

If blood flow in a leg is completely blocked or almost completely blocked, surgery may be needed.

This is called a *bypass*. The surgeon may use one or more blood vessels from other parts of the body, or an artificial vessel, to bypass the blockage. This surgery is done in a hospital under general anesthesia.

Regardless of whether angioplasty or surgery are performed, American College of Physicians guidelines state that patients with P.A.D. will need medications.



“A journey of a thousand miles begins with a single step.”

– Chinese proverb

Moving Forward

You’ve now learned that P.A.D. is when arteries in the leg become blocked. And you’ve seen that P.A.D. can be an early warning signal for poor circulation in the brain or heart. The good news is that P.A.D. can be easily diagnosed. Many treatments exist as well. But you hold the key to real success in treating this disease.

Here’s what you can do:

- If you smoke, quit!
- Talk with your health care professional about a healthy diet, exercise, and medications to bring your blood pressure and cholesterol levels to specific targets. Take responsibility to achieve these goals.
- Use an antiplatelet medication prescribed by your health care professional to lower your risk of heart attack and stroke, according to American College of Physicians guidelines.
- If you have diabetes, work hard to keep your blood sugar levels as close to normal as possible.
- Take care of your feet: check them for sores or injury, and keep your nails trimmed.
- If you take a medication, take it as prescribed by your health care professional.

Reading this booklet and watching the DVD is a great start. Now you know what you need to do. And you know that you don’t have to lose your independence to P.A.D.! You can reduce your risks—and help improve or preserve your mobility—by taking the steps listed above and working closely with your health care professional. You can use the questions on the next page as a guide for your next visit to your health care professional.

Suggested Questions to Ask Your Health Care Professional

If you have been diagnosed with P.A.D., you may wish to ask your health care professional the following questions:

1. Should I start an exercise program to treat my claudication? Who will help me get started?

2. What medications, if any, do I need to take?

3. What target cholesterol and blood pressure goals should I achieve, and how quickly?

4. What is my ankle-brachial index (ABI) value? What does this tell me about my risk of heart attack, stroke, or amputation?

5. Would I benefit from an evaluation by a blood vessel (vascular) specialist?

6. What foot and skin care recommendations should I follow?

7. How often do I need to come back for a checkup?

Medications That I Take

Name of Medication	Amount and Frequency	Purpose

Resources

For more information about Peripheral Artery Disease, contact the following organizations or find them on the Internet.

American College of Physicians

Philadelphia, Pennsylvania
1-800-523-1546
www.acponline.org/patients_families

Peripheral Arterial Disease Coalition

Lakewood, Colorado
1-866-P.A.D.INFO (1-866-723-4636)
www.PADcoalition.org

Vascular Disease Foundation

Lakewood, Colorado
1-866-P.A.D.INFO (1-866-723-4636)
www.vdf.org

American Heart Association

Dallas, Texas
1-800-242-8721
www.americanheart.org

National Heart, Lung, and Blood Institute

National Institutes of Health
Bethesda, Maryland
1-301-592-8573
www.nhlbi.nih.gov/health/

Stay in Circulation: Take Steps to Learn About P.A.D.

A national campaign of the National Heart, Lung, and Blood Institute and the P.A.D. Coalition
www.aboutPAD.org

MedlinePlus

<http://www.nlm.nih.gov/medlineplus/peripheralvasculardiseases.html>
A service of the U.S. National Library of Medicine and the National Institutes of Health

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About sanofi-aventis

Sanofi-aventis, a leading global pharmaceutical company, discovers, develops and distributes therapeutic solutions to improve the lives of everyone.

About Bristol-Myers Squibb

Bristol-Myers Squibb is a global pharmaceutical and related health care products company whose mission is to extend and enhance human life.



Bristol-Myers Squibb/Sanofi Pharmaceuticals Partnership

Partner

American College of Physicians (ACP)

Established in 1915, the American College of Physicians (ACP) is the nation's largest medical specialty organization and second largest physician group. Its mission is to enhance the quality and effectiveness of health care by fostering excellence and professionalism in the practice of medicine. ACP membership includes about 126,000 members including medical students. Members are physicians in general internal medicine and related subspecialties, including cardiology, gastroenterology, nephrology, endocrinology, hematology, rheumatology, neurology, pulmonary disease, oncology, infectious diseases, allergy and immunology, and geriatrics. Internists treat the majority of adults in the United States.

For more information about internal medicine physicians, please visit:
www.acponline.org/patients_families



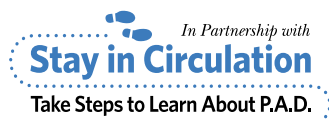
Partner

P.A.D. Coalition

The Peripheral Arterial Disease (P.A.D.) Coalition is an alliance of leading health organizations, health professional societies, and government agencies united to raise public and health professional awareness about lower extremity P.A.D. Established in 2004, the P.A.D. Coalition is coordinated by the Vascular Disease Foundation (www.vdf.org), a national, not-for-profit section 501(c)(3) organization. The P.A.D. Coalition seeks to improve the prevention, early detection, treatment, and rehabilitation of people with, or at risk for, P.A.D. For more information about the Coalition, visit www.PADcoalition.org



The P.A.D. Coalition is partnering with the National Heart, Lung, and Blood Institute of the National Institutes of Health on a national campaign titled *Stay in Circulation: Take Steps to Learn About P.A.D.* For more information on P.A.D., visit www.aboutPAD.org



Credits

A Guide to P.A.D. (Peripheral Artery Disease) has been made possible through the expertise, time, and efforts of many individuals.

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Partners

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A GUIDE TO

P.A.D.



PERIPHERAL ARTERY DISEASE

Approximately 8 million people in the U.S. risk losing their mobility due to Peripheral Artery Disease (P.A.D.). This disease is caused by blockage of the arteries in the legs and feet. The symptoms of P.A.D. can lead people to move less and less, or not at all.

People with P.A.D. are also at higher risk for a heart attack or stroke.

But health care professionals today can easily diagnose P.A.D. Many treatments are available for P.A.D.—and some of the most important steps are under *your* control.

This guidebook and DVD program will help you understand P.A.D. You'll learn how to get the treatment that is right for you. The key steps:

- Know the signs of P.A.D.
- See your health care professional
- Don't smoke
- Be active



“Participate in your health, be aware of your family history, go to your checkups every year...and you can live longer!”

– Peggy Fleming

