



Patient Teaching Guide

Percutaneous Intervention for Coronary Artery and Peripheral Vascular Diseases

Table of Contents

Overview

2 . . .Your Heart and Circulatory System

Cardiovascular Diseases

3 . . .Coronary Artery Disease (CAD)

4CAD: Risk Factors

5CAD: The Diagnosis

6CAD: Treatment Options

8 . . .Peripheral Vascular Disease (PVD)

9PVD: Risk Factors

10PVD: The Diagnosis

11PVD: Treatment Options

The Procedure

13 . . .Preparing for Your Procedure

14 . . .Before the Procedure

15 . . .The Catheterization Laboratory

15 . . .Inserting the Guiding Catheter

15 . . .Injecting the Dye

16 . . .Angioplasty

17 . . .Stent Implantation

18 . . .Atherectomy

19 . . .After the Procedure

Recovery

22 . . .Your Recovery

23 . . .Lifestyle Changes

Glossary

24 . . .Glossary

Overview

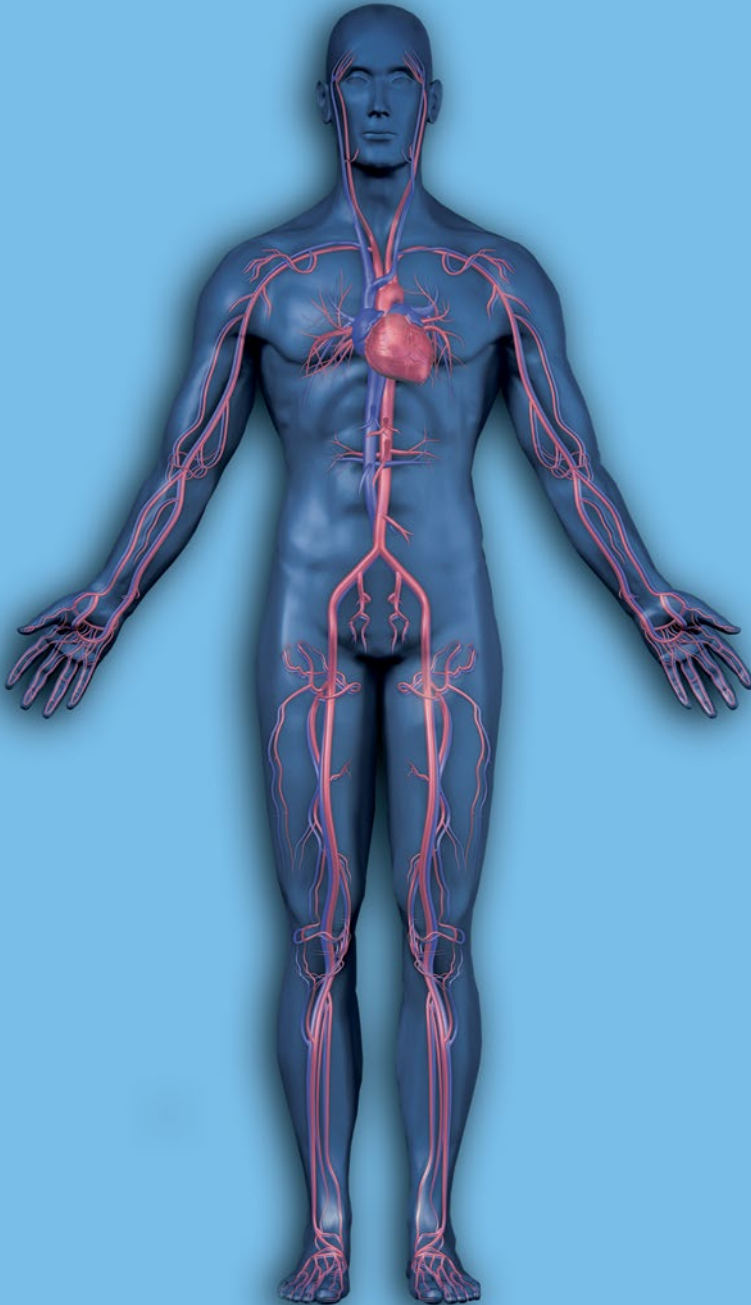
Your Heart and Circulatory System

The heart is a muscle that pumps blood to all parts of the body. The blood carries oxygen and nutrients that your body needs to work correctly.

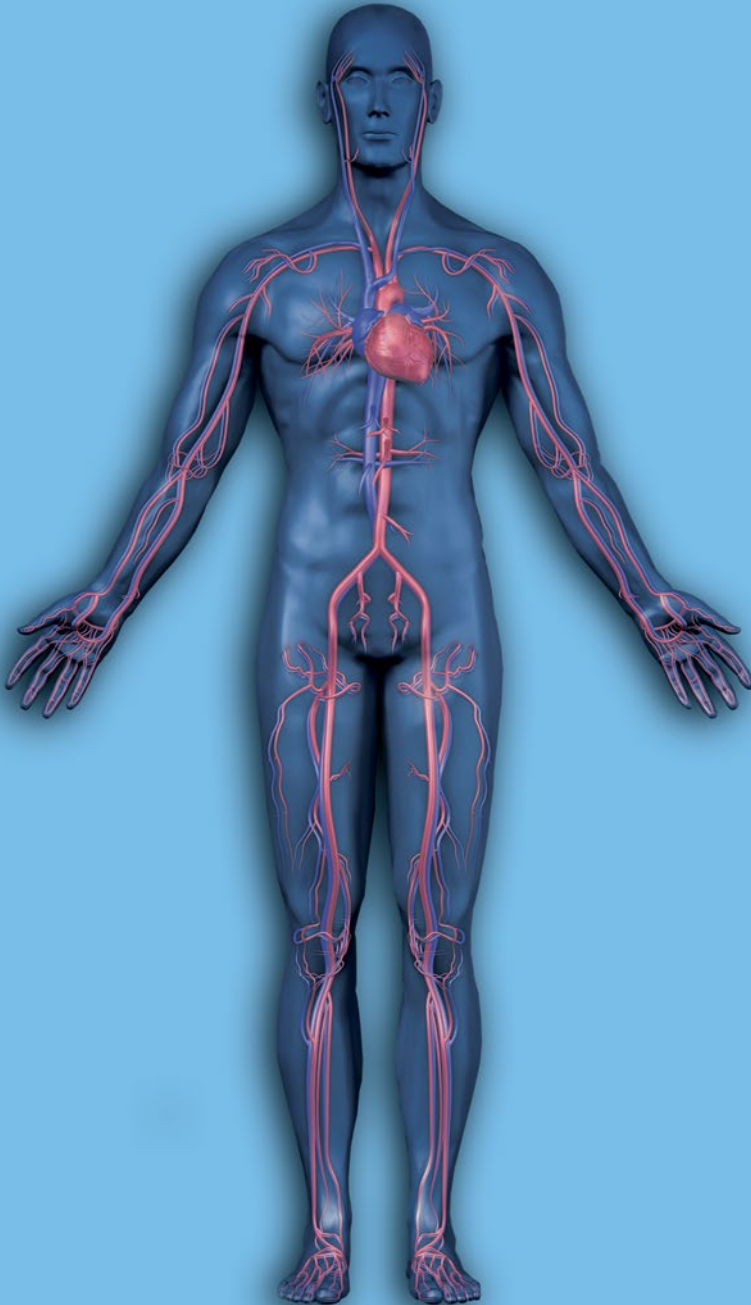
Blood flows out from the heart through the aorta, which is the largest artery in the body. All of the major arteries branch from the aorta and carry blood to all parts of the body. Blood vessels called “veins” return the blood to the heart. After picking up oxygen from the lungs, the blood is pumped out to the body again. The movement of blood through the heart, lungs and body is called “circulation.” As the heart pumps, it produces a pulse. Counting the pulse tells us how many times the heart pumps or beats per minute.

For the heart to be able to function properly, it needs a constant supply of oxygen-filled blood. The vessels that supply this blood to the heart are called coronary arteries. If these arteries become blocked or narrowed, treatment may be required to restore blood flow and the vital supply of oxygen to the heart.

Outside the heart, blood is also delivering oxygen and nutrients to the rest of the body. This is called the peripheral vascular system. The carotid arteries supply blood to the brain while the renal arteries supply the kidneys. Also included in the peripheral vascular system are vessels like the iliac arteries, which supply blood to the lower abdomen and the femoral and popliteal arteries, which supply blood to the legs.



Coronary Artery Disease



Coronary Artery Disease (CAD) is caused by a build-up of fatty substances like cholesterol. Where they collect in the artery, the internal lining thickens, the artery narrows, and blood flow slows. These fatty build-ups are sometimes called plaque or lesions.

If the plaque narrows the channel of the artery or lumen, it may make it difficult for adequate quantities of blood to flow to the heart muscle. If the build-up reduces flow only mildly, there may be no noticeable symptoms at rest, but symptoms such as chest pressure may occur with increased activity or stress. These are signals that your heart is having difficulty.

CAD warning signs*:

- Chest pressure
- Nausea
- Vomiting
- Shortness of breath
- Cold sweat
- Pain in upper back, neck, jaw or stomach

*American Heart Association, "What are the warning signs of a heart attack?" 2007

Coronary Artery Disease

When flow is significantly reduced and the heart muscle does not receive enough blood flow to meet its needs, severe symptoms such as chest pain (angina pectoris), heart attack (myocardial infarction), or rhythm disturbances (arrhythmias) may occur. A heart attack is the result of a completely blocked artery, which may damage the heart muscle.

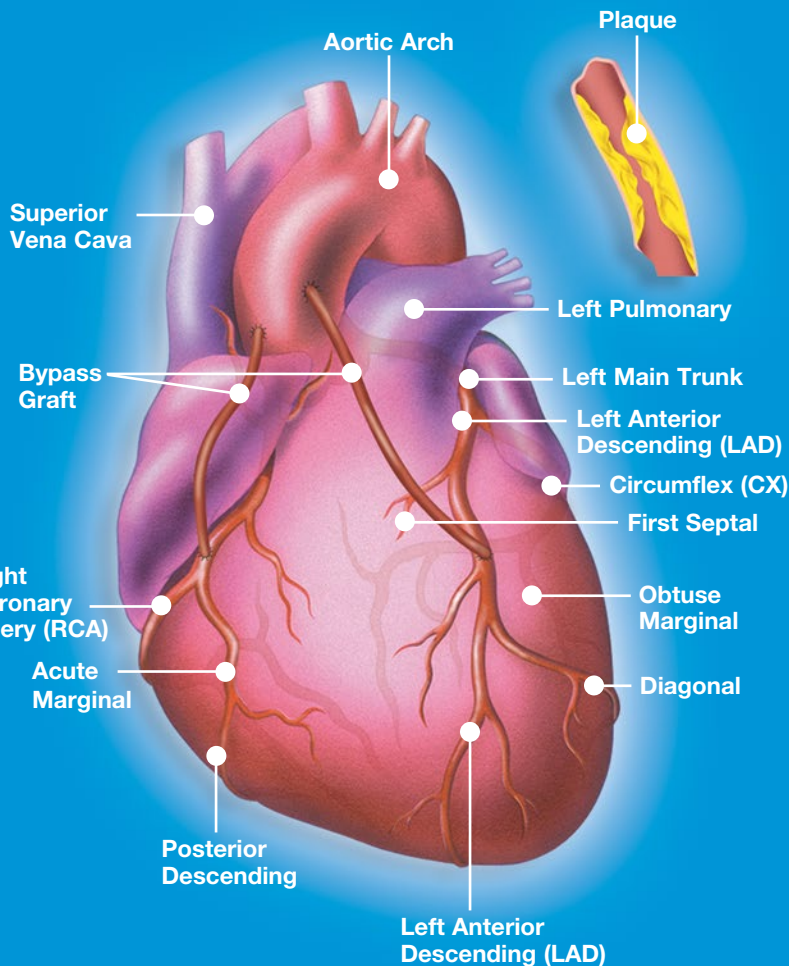
Fortunately, many of the factors that contribute to heart disease are controllable through lifestyle changes. Remember, the first line of defense against cardiovascular disease is self-awareness and education.

CAD: Risk Factors

Clinical studies have identified factors that increase the risk of coronary artery disease and heart attack. Some of these risk factors, such as having a family history of heart disease, being male or postmenopausal*, cannot be changed. However, other risk factors can be changed and can reduce an individual's risk of heart disease. Remember to follow your doctor's recommendations concerning these risk factors.

Any of the following risk factors may increase your chances of developing CAD:**

- Diabetes
- Family history of heart disease (close relatives with heart disease at a young age)
- High blood cholesterol levels
- High blood pressure
- Lack of exercise
- Obesity (being overweight)
- Smoking
- Stress



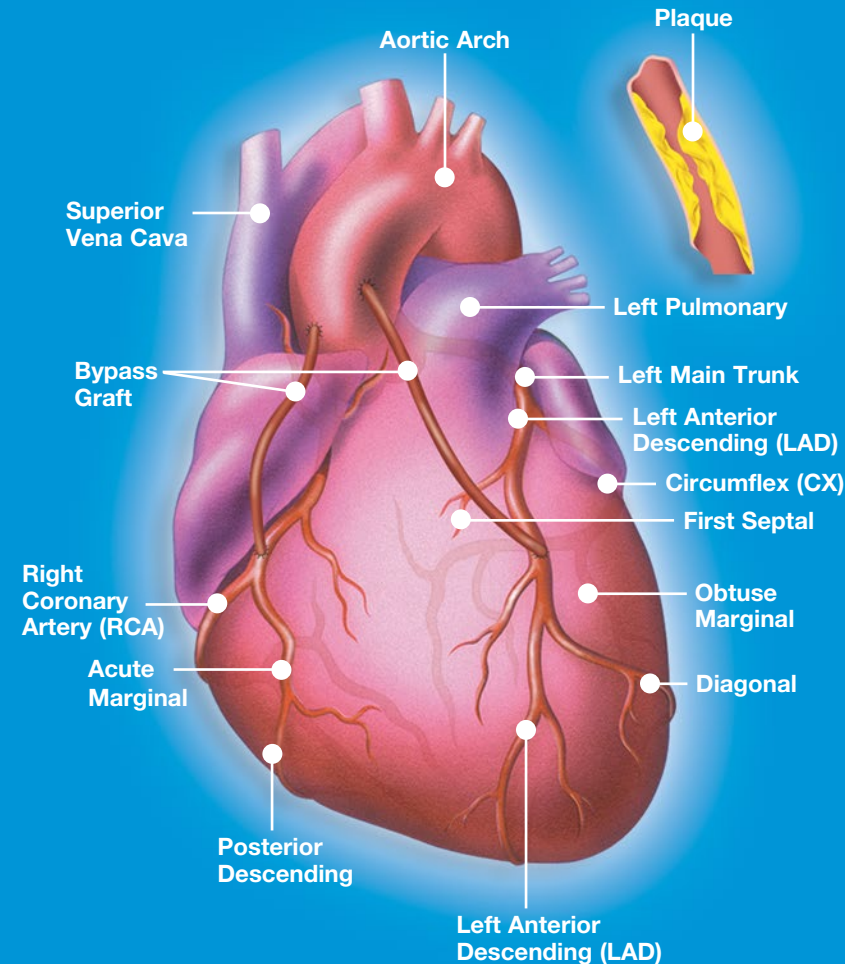
*Women, after age 50, begin to develop and die of heart disease at the rate equal to that of men. This is largely due to the presentation of menopause. **www.heart.org/HEARTORG/Conditions/HeartAttack/UnderstandYourRiskofHeartAttack/Understand-Your-Risk-of-Heart-Attack_UCM_002040_Article.jsp

Coronary Artery Disease

CAD: The Diagnosis

If your doctor suspects that you have coronary artery disease or if you have symptoms of the disease, several tests may be used to make a diagnosis. One of the most common forms of diagnostic testing is the Exercise Electrocardiogram (ECG) or Stress Test. During closely controlled exercise, the changes of your heart's electrical activity will be carefully monitored. If this test indicates that your heart is not getting the oxygen it needs, a cardiac catheterization, also called an "angiogram," may be performed. A special dye/contrast material is injected into the coronary arteries and X-rays are taken. This procedure is performed under local anesthetic in a coronary catheterization laboratory, which is a special room in the hospital containing an X-ray machine to perform this type of procedure. The dye shows up on the X-rays, revealing the arteries and the presence of any narrowing and blockages.

Using the information gathered from one or more of these tests, your doctor is better able to decide the best treatment plan for you. He or she will explain the risks and benefits of your treatment options and answer any questions you or your family may have.



Coronary Artery Disease

CAD: Treatment Options

Lifestyle Changes and Medical Therapy

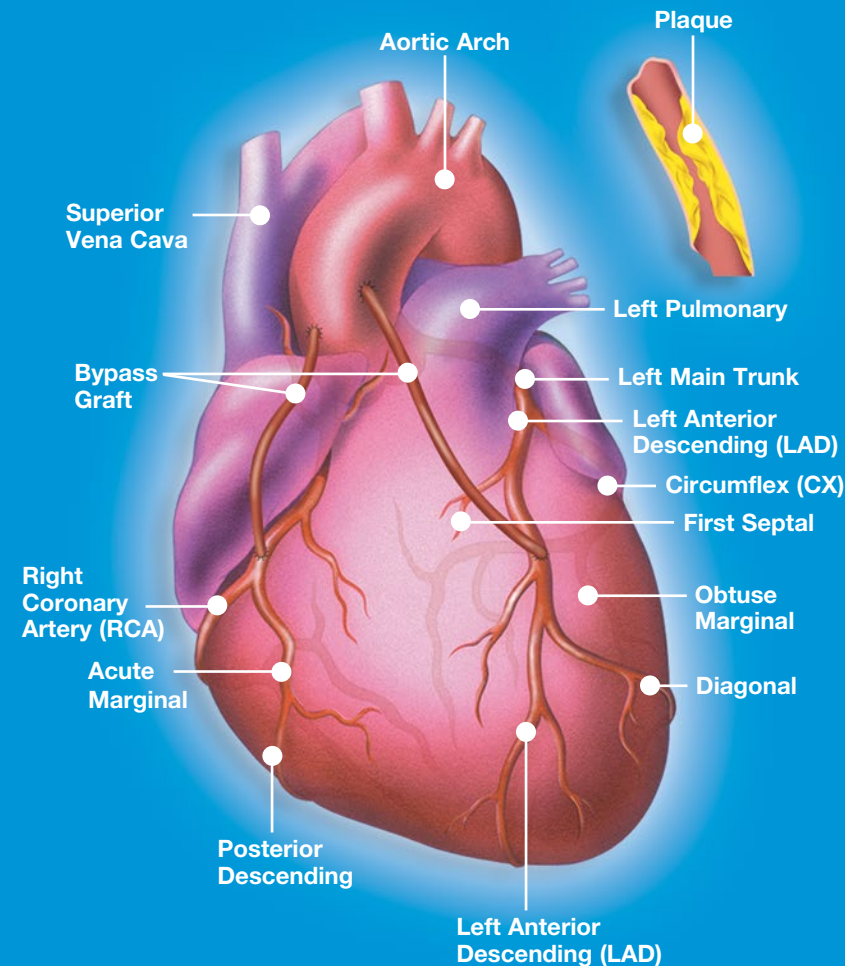
Once a diagnosis has been reached, your doctor will recommend the most appropriate form of treatment. CAD can be managed by a combination of changes in lifestyle (eating a healthy diet low in saturated fat, regular exercise, and giving up smoking) and medical treatment. Your treatment may include medications to relieve your chest pain and/or to expand the coronary arteries, increasing blood flow to your heart. However, because medicine alone may not clear blocked arteries, you may need more treatments(s) including surgery, angioplasty, and/or stenting to treat your symptoms.

Balloon Angioplasty

Angioplasty or Percutaneous Transluminal Angioplasty (PTA) and Percutaneous Transluminal Coronary Angioplasty (PTCA) are techniques used to widen the narrowing in your artery without surgery.

The basic idea of angioplasty is to position a catheter with a small inflatable balloon on the end within the narrowed section of the artery. Inflation of the balloon catheter causes the balloon to push outward against the narrowing and surrounding wall of the artery. This process reduces the narrowing until it no longer interferes with blood flow. The balloon is then deflated and removed from the artery.

(Please refer to the section titled “The Procedure” for additional information on this procedure.)



Coronary Artery Disease

CAD: Treatment Options

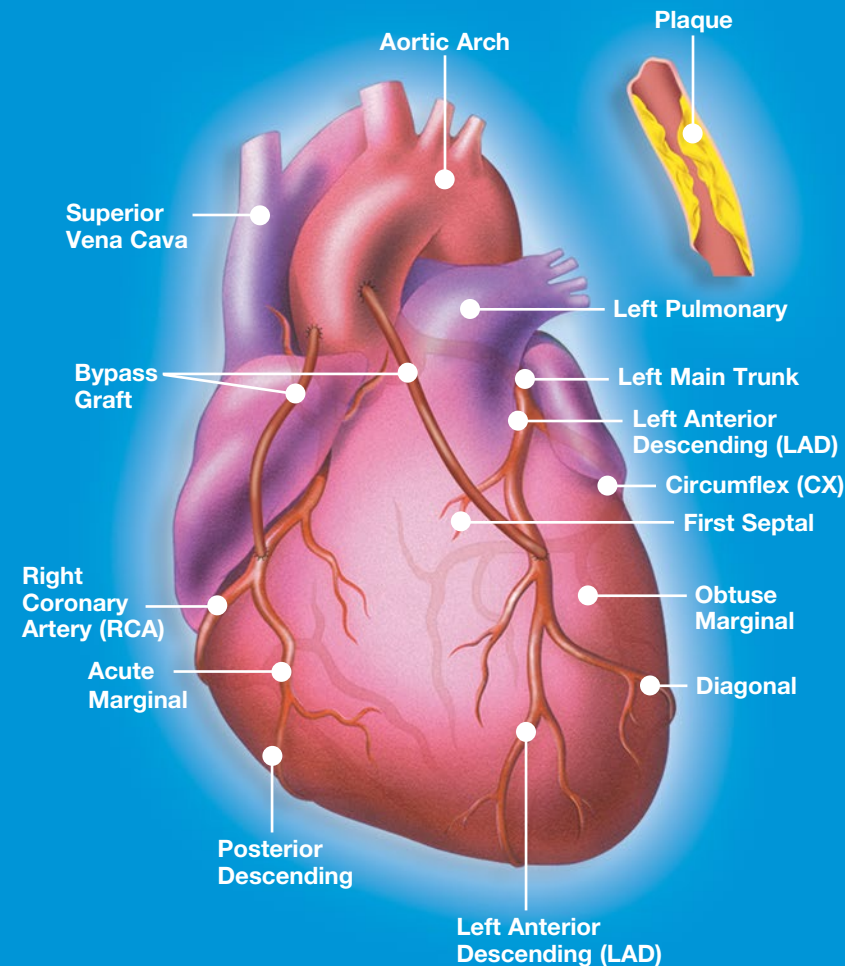
Stent Implantation

Many patients who have angioplasty also have stent implantation. A stent is a small, latticed, metal scaffold that is introduced into your blood vessel on a balloon catheter. The doctor will decide whether to choose a metallic stent or a drug eluting stent, depending on the location and condition of the narrowing in your coronary artery. The doctor maneuvers the catheter into the blocked artery and inflates the balloon. The stent expands against the vessel wall as the balloon is inflated. Once the balloon has been deflated and withdrawn, the stent stays in place permanently, holding the blood vessel open and improving blood flow.

(Please refer to the section titled “The Procedure” for additional information on this procedure.)

Surgery

Coronary artery bypass grafting is a common surgical procedure that removes a section of artery or vein from another part of your body. This vessel is then connected (grafted) to the coronary artery near the blockage site. This creates a new path of blood to flow around (bypass) the blocked artery and to your heart. Often, several blocked arteries are bypassed during the same operation. Most coronary bypass patients remain in the hospital for about a week, followed by a recovery period at home.



Peripheral Vascular Disease

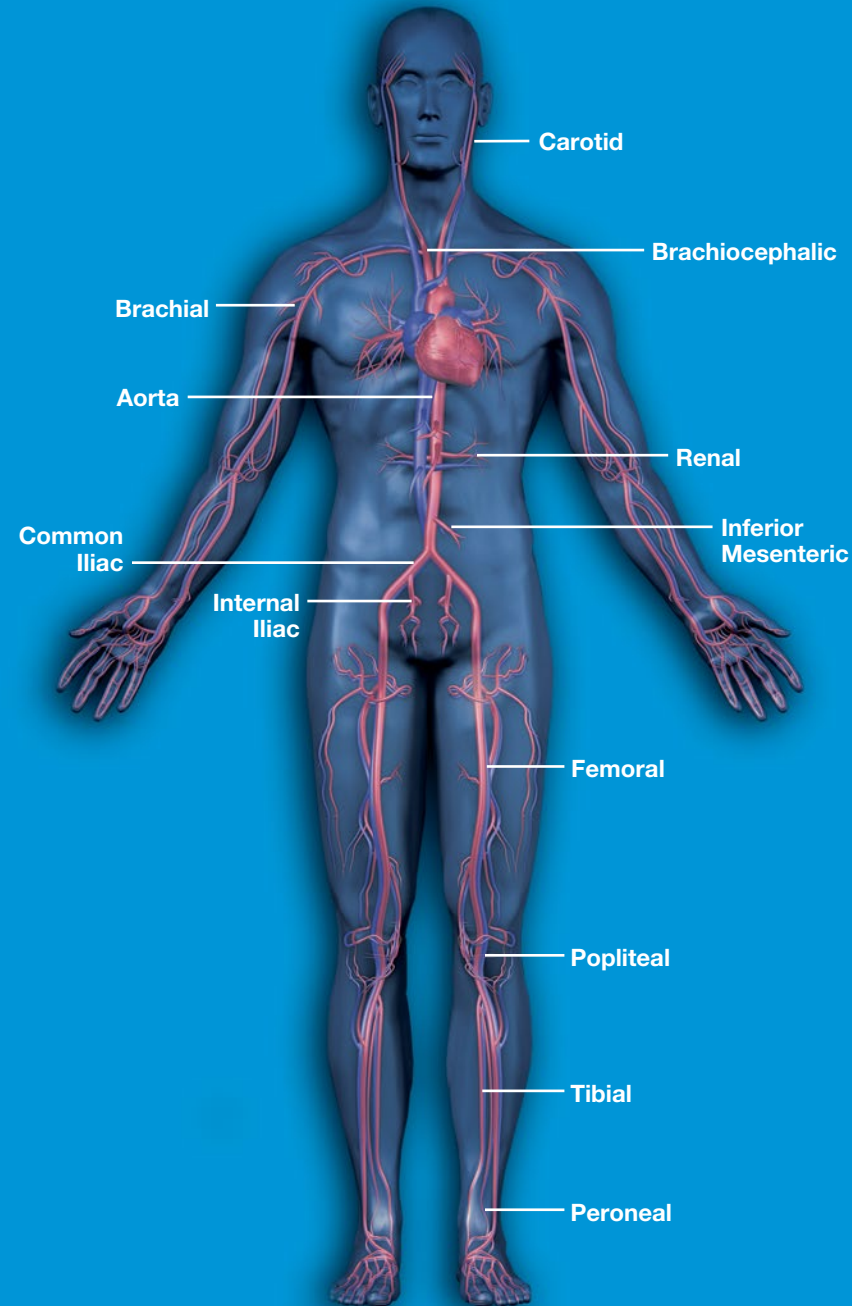
Peripheral vascular disease (PVD) is caused by the same atherosclerotic plaque that causes coronary artery disease, as discussed in the previous section. PVD can affect the arteries leading to the pelvis, legs, feet, kidneys, stomach, arms and neck. Some patients may have both coronary artery disease and peripheral vascular disease.

As plaque builds up, it narrows the opening of the artery, making it difficult for enough blood to flow to the body's tissues. Many people with this disease do not have any symptoms at all, others may have mild or unusual symptoms and often do not report them.

Some of the symptoms you may experience in the affected areas are*:

- Cramping, pain from discomfort in the hips, thighs or calf muscles (“claudication”)
- Buttock pain
- Fatigue, heaviness, tiredness
- Cold sensation, numbness, tingling or pain in the legs or feet
- Sores or wounds on toes, feet or legs that heal slowly, poorly or not at all
- Lower temperature in one leg compared to the other
- Poor nail growth on the hands or feet
- Decreased hair growth on toes and legs
- Renal failure
- Uncontrolled hypertension
- Impotence
- Sudden numbness or weakness of the face, arms or legs
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes

*www.mayoclinic.com/health/carotid-artery-disease/DS01030/DSECTION=Symptoms and www.mayoclinic.com/health/peripheral-artery-disease/DS00537/DSECTION=Symptoms



Peripheral Vascular Disease

PVD: Risk Factors

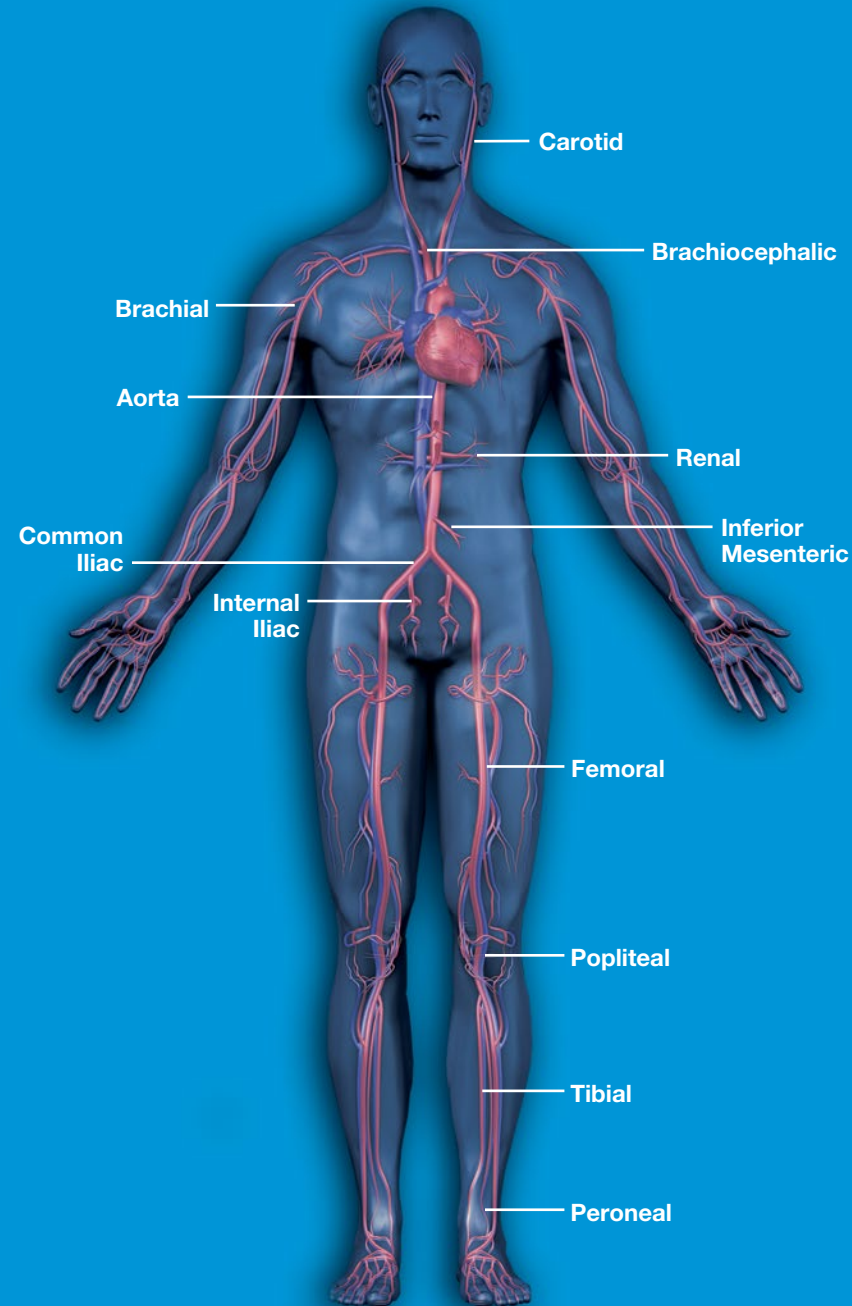
Clinical studies have identified factors that increase the risk of peripheral vascular disease. Some of these factors cannot be changed while others can be managed to greatly reduce your risk of the disease. Remember to follow your doctor's recommendations concerning these factors.

Risk factors you can't change*:

- Advancing age
- Genetic factors like family history

Risk factors you can change to improve your risk*:

- High blood cholesterol
- High blood pressure
- Smoking
- Obesity
- Lack of exercise
- Diabetes



*www.heart.org/HEARTORG/Conditions/More/PeripheralArteryDisease/Your-Risk-for-PAD_UCM_301304_Article.jsp

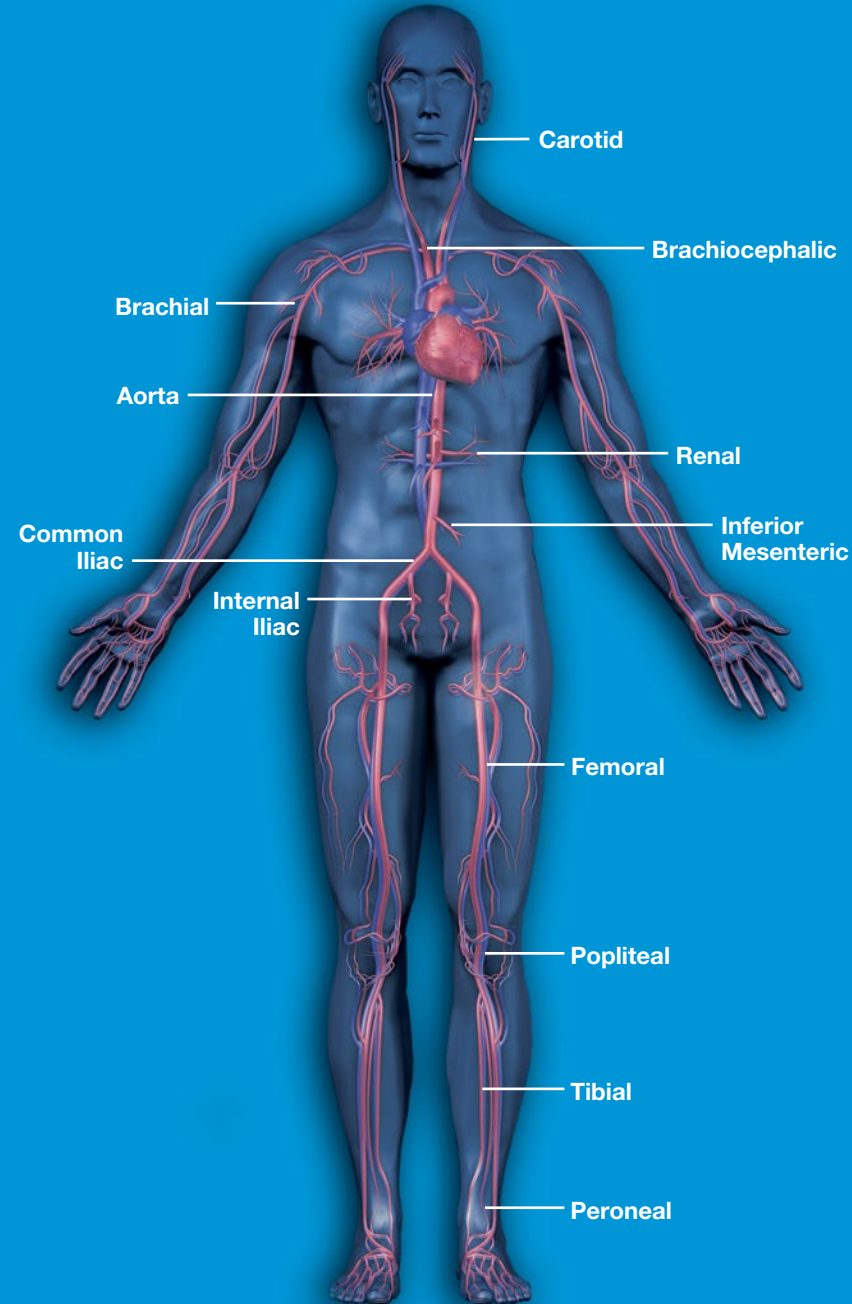
Peripheral Vascular Disease

PVD: The Diagnosis

If your doctor suspects that you have peripheral vascular disease, a complete physical exam, blood tests and functional tests may be completed to diagnose and determine the extent of your condition. Functional tests used to make the diagnosis can include one or more of the following:

- Ultrasound
- Angiogram
- Computerized Axial Tomography Scan (CT or CAT Scan)
- Magnetic Resonance Imaging (MRI)
- Ankle-Brachial index (for arms and legs)

Your doctor will explain the risks and benefits of your treatment options and answer any questions you or your family may have.



Peripheral Vascular Disease

PVD: Treatment Options

Depending on the location of your peripheral vascular disease, your physician may suggest one or more of the following treatment options:

Balloon Angioplasty

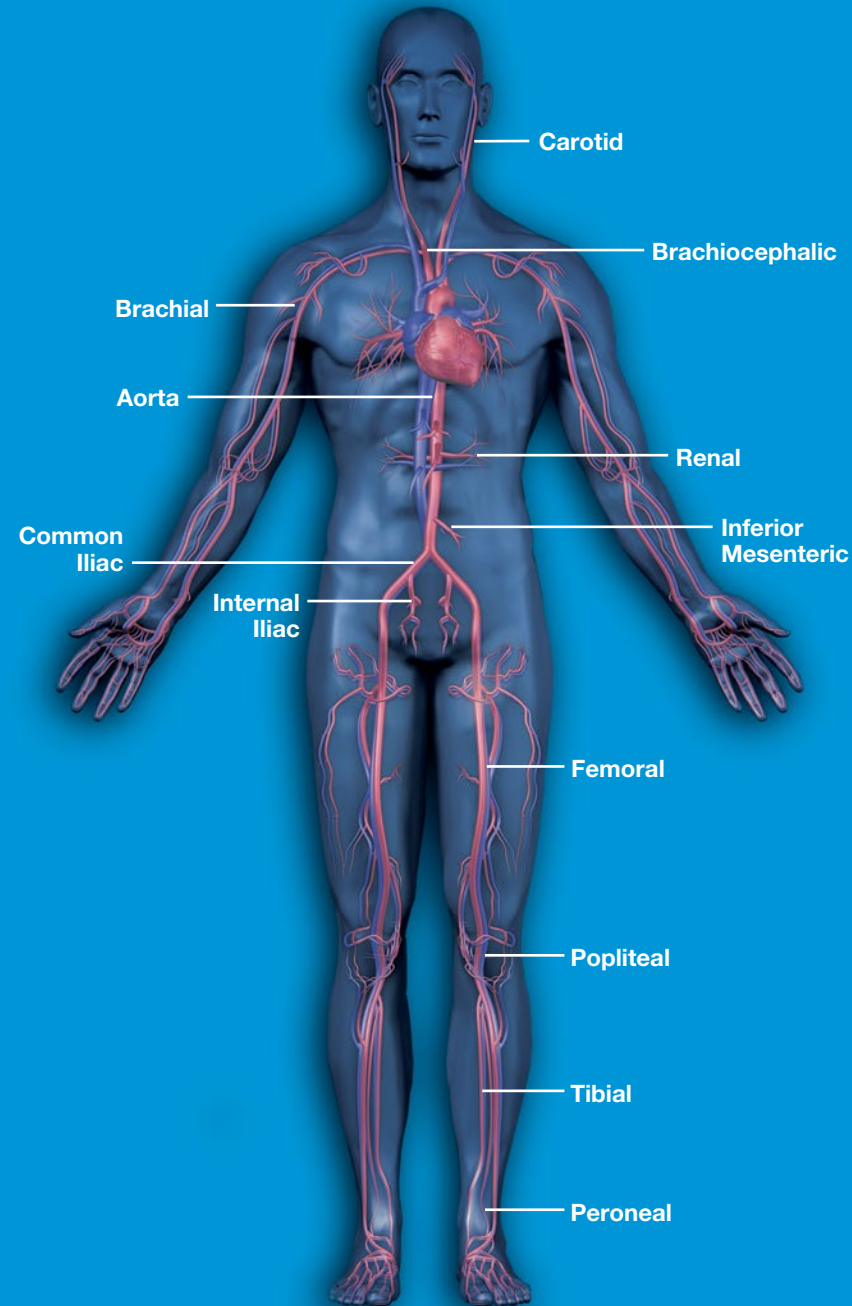
During an angioplasty procedure, a doctor threads a small balloon through a catheter into your artery then blows up the balloon to open the narrow or blocked part of the artery. The doctor will take the balloon and catheter out of your body when the procedure is completed. Patients are usually awake during angioplasty but your doctor will give you some medicine to help you relax.

(Please refer to the section titled “The Procedure” for additional information on this procedure.)

Stent Implantation

Many patients who have angioplasty also have stent implantation. A stent is a small, metal mesh tube that holds open the narrowed or blocked part of your artery. The doctor will thread the stent through a catheter to the diseased artery and open the stent with a small balloon. The stent stays in the artery permanently. Patients are usually awake during the stenting procedure, but your doctor will give you some medicine to help you relax.

(Please refer to the section titled “The Procedure” for additional information on this procedure.)



Peripheral Vascular Disease

PVD: Treatment Options

Atherectomy

Atherectomy is a procedure to open blocked arteries by using a small mechanically-driven cutting device on the end of a catheter to cut or shave away plaque. It can be used alone or in conjunction with angioplasty or stenting. Patients are usually awake during the procedure, but your doctor will give you some medicine to help you relax.

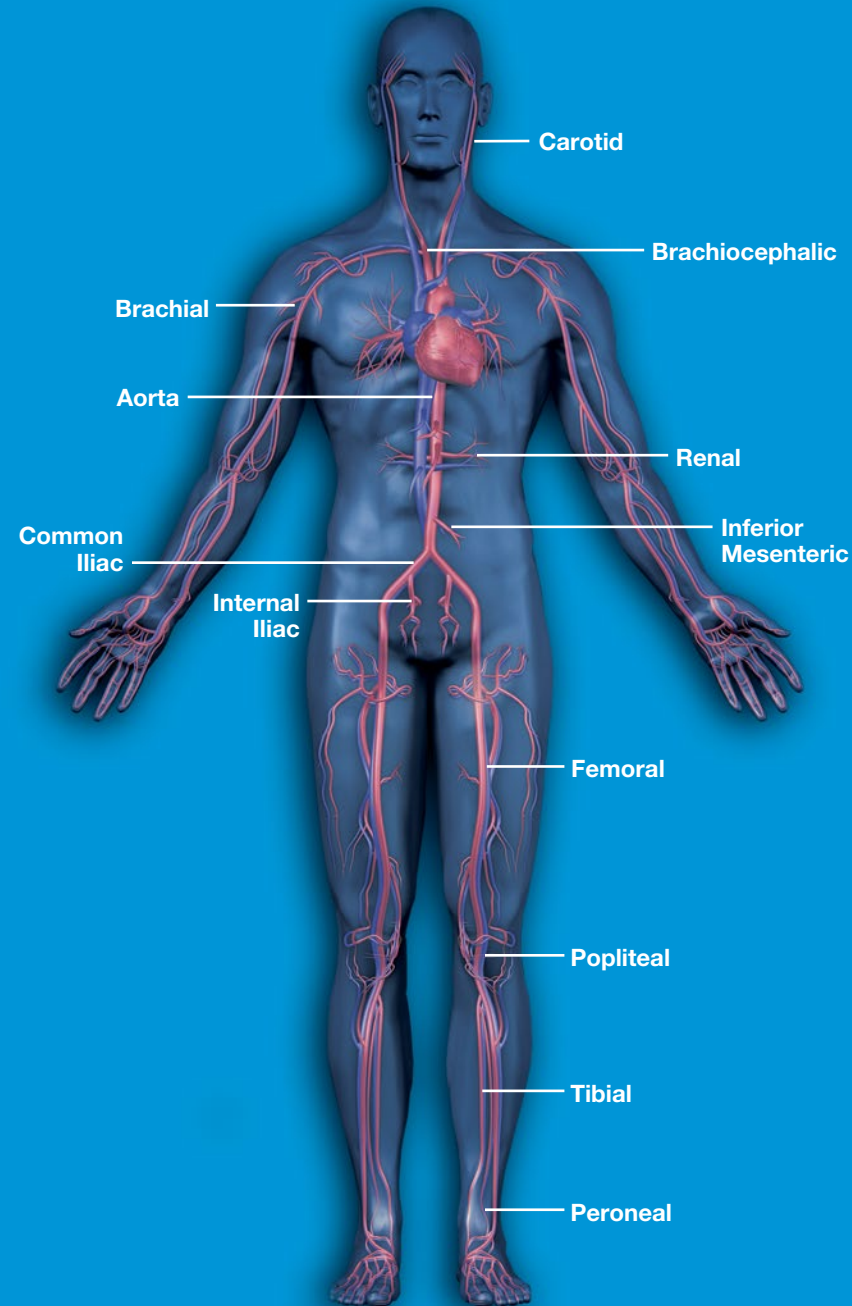
(Please refer to the section titled “The Procedure” for additional information on this procedure.)

Surgery

A surgeon can operate on your artery to clean out the narrowed/blocked part of your artery or to bypass the diseased part of the artery by using a healthy vessel. Surgery is usually performed under general anesthesia.

Medical Therapy

Your doctor may prescribe medicines to help your condition. The medicines may be in addition to, or in place of any of the procedures listed above.



The Procedure

This section describes the procedure for balloon angioplasty, stent implantation and atherectomy.

Preparing for Your Procedure

Upon admission to the hospital, your preparation prior to treatment may include tests such as an ECG, X-rays and routine blood tests. Your doctor will also visit you in your hospital room to discuss the procedure in detail and tell you the approximate time the procedure is scheduled. He or she will explain the possible risks and benefits and answer any questions you or your family may have.

Be sure to tell your doctor what medications you are currently taking. You should also tell your doctor about any allergies you have to metal, medications, X-ray dye or iodine. These allergies may require additional medication prior to a procedure. It is also important to let your doctor know if you cannot take aspirin, since this and other medications are usually begun prior to a procedure and continued for several months thereafter.

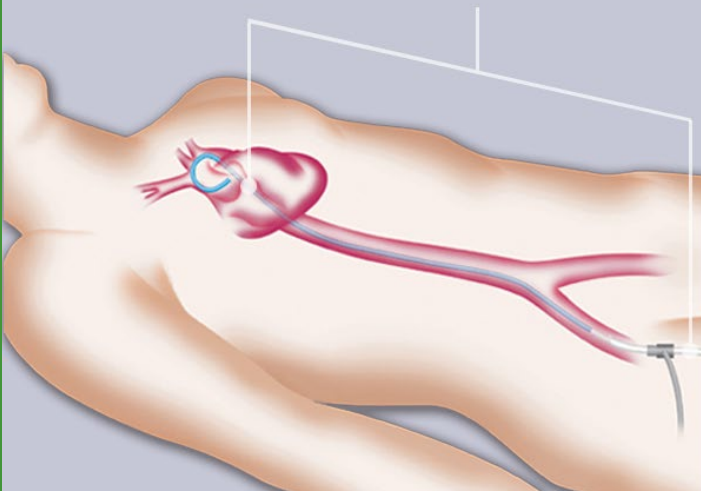
You will probably be asked not to eat or drink anything after midnight on the night before your procedure. Finally, if you have not already stopped smoking, your doctor may recommend that you do so prior to being admitted to the hospital in preparation for the upcoming procedure.



The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)

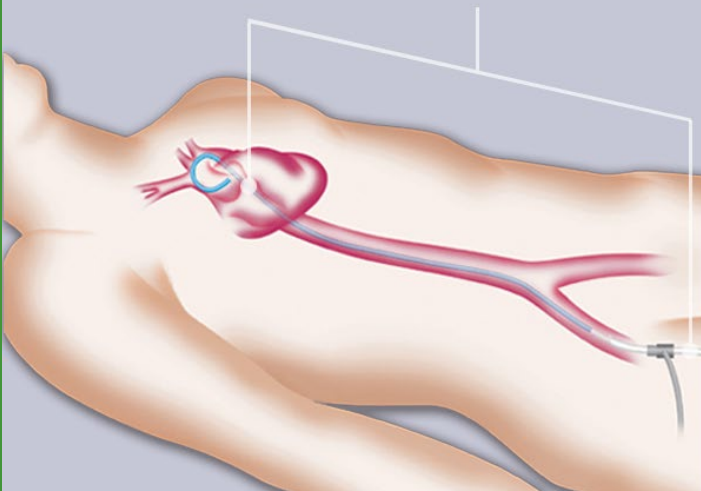




The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)



The Procedure

Before the Procedure

Some hospitals do not allow patients to wear dentures or glasses during the procedure. If you have dentures or glasses and want to wear them, ask your nurse about hospital policy.

Just before you leave your room, empty your bladder so you will be comfortable during the procedure. You may be given a mild sedative to help you relax, but you will not be put to sleep. There are two reasons for this. First, most people find they can cope quite well with any discomfort they experience. Second, your doctor may need to ask you to take a deep breath while X-rays are being taken to improve the quality of the pictures.

An intravenous (IV) needle and tube may be placed in the vein in your hand or arm. Fluids or medications can be given quickly and easily through this tube if they are needed.

The area where the catheters are to be inserted, either your groin, arm or wrist, will be scrubbed with an antiseptic solution to prevent infection. Your groin area may also be shaved. You will then be covered with sterile sheets.

Your doctor will inject a local anesthetic (numbing medicine) where the catheters will be inserted. You may feel a stinging sensation as he or she does this. However, after the medication takes effect, you should only feel dull pressure where the physician is working with the catheters. If you do feel pain, please tell your doctor.

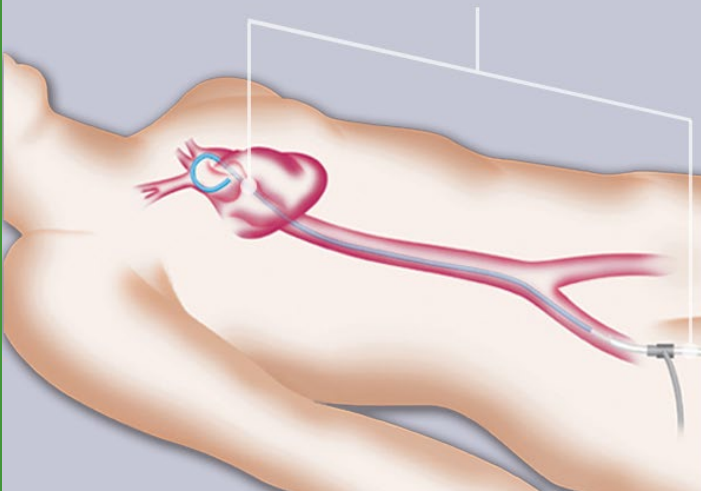
The procedure usually lasts about 90 minutes, during which time your doctor will ask you to remain very still. For the most part, you will be comfortable but you may feel some pressure or chest pain when the balloon is inflated. This is normal and will quickly fade when the balloon is deflated.



The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)



The Procedure

The Catheterization Laboratory

Your procedure will be performed in a catheterization laboratory (cath lab) or a special procedure radiology suite. This room may be similar to the one where you had your diagnostic angiogram. You will lie on an X-ray table, and an X-ray camera will move over you during the procedure. The staff will monitor your heart by attaching several small, sticky patches to your chest and use a specialized ECG recorder and monitor.

Inserting the Guiding Catheter

Catheter introduction into the groin requires a small incision to be made on the inside of your upper thigh. This incision will allow an introducer sheath (short tube) to be inserted into your femoral artery. Your doctor will then insert a guiding catheter (long, flexible tube) into the introducer sheath and advance it to the affected artery.

Additional options for catheter introduction are the arm/ brachial approach (incision is made on the inside of your elbow) and the transradial approach (incision is made on the inside of your wrist).

Injecting the Dye

After the catheters are inserted, your doctor will inject a dye/contrast material through the guiding catheter into your artery to view the narrowing. Your doctor will watch this injection on an X-ray monitor, much like a TV screen. You may be able to watch these pictures yourself. While these X-rays are being taken, your doctor may ask you to take a deep breath and hold it for a few seconds. You may also be asked to cough after the X-ray picture is completed to help speed the removal of the X-ray dye from the arteries.

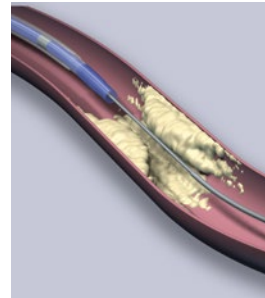
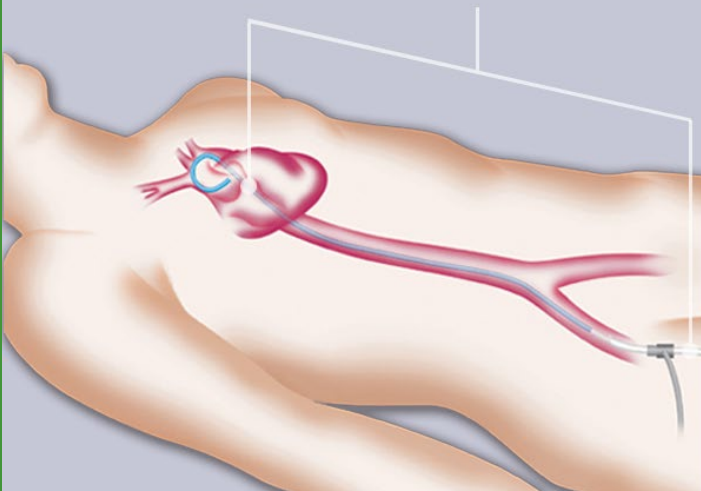
The Procedure — Angioplasty



The Cath Lab

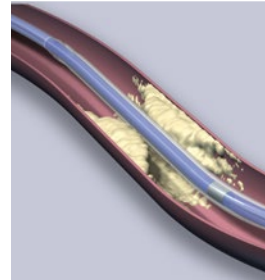
Guiding Catheter

(Illustration of the Coronary Procedure)



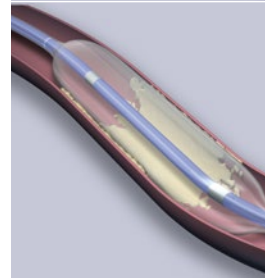
Step 1

The balloon catheter is passed through the guiding catheter to the area near the narrowing. A guide wire inside the balloon catheter is then advanced through the artery until the tip is beyond the narrowing.



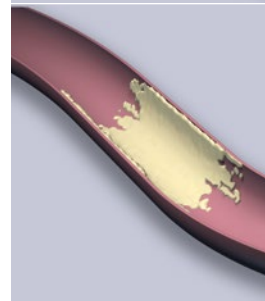
Step 2

Next, the angioplasty catheter is moved over the guide wire until the balloon is within the narrowed segment.



Step 3

The balloon is inflated, compressing the plaque against the artery wall.



Step 4

Once the plaque has been compressed and the artery has been opened sufficiently, the balloon catheter will be deflated and removed.

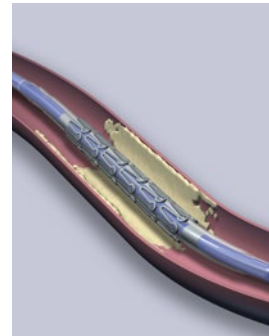
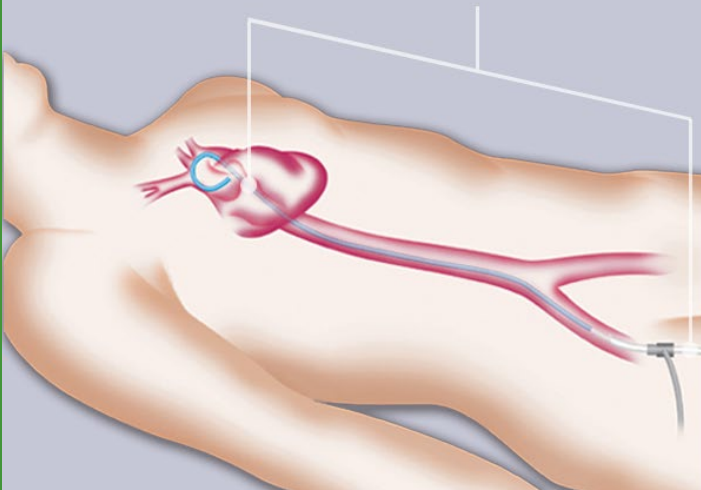
The Procedure — Stent Implantation



The Cath Lab

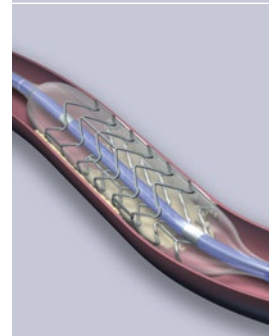
Guiding Catheter

(Illustration of the Coronary Procedure)



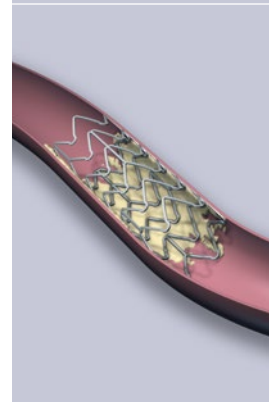
Step 1

The stent is introduced into the blood vessel on a balloon catheter and advanced to the blocked area of the artery.



Step 2

The balloon is inflated and causes the stent to expand until it fits the inner wall of the vessel, conforming to the contours as needed.



Step 3

The balloon is then deflated and withdrawn. The stent stays in place permanently, holding the vessel open and improving the flow of blood.

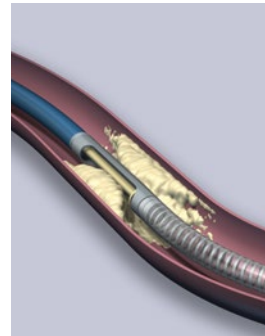
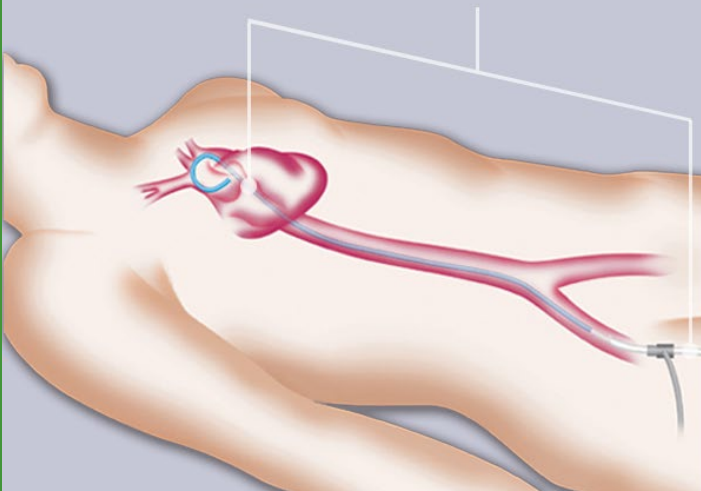
The Procedure — Atherectomy



The Cath Lab

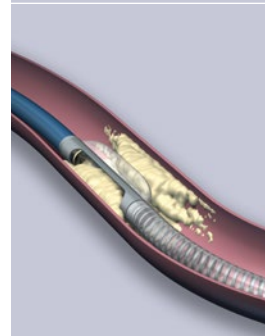
Guiding Catheter

(Illustration of the Coronary Procedure)



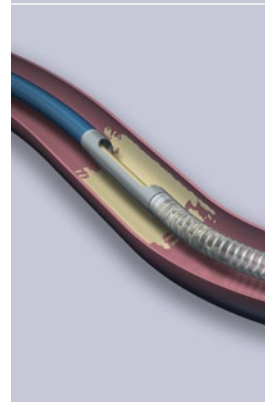
Step 1

The cutter of the atherectomy device is positioned in the direction of the plaque.



Step 2

A balloon on one side of the catheter tip is inflated, causing the plaque on the opposite wall of the artery to protrude into the window of the cutting device. The rotating cutter shaves off this portion of the plaque, which is then stored in the collection chamber of the catheter.



Step 3

Upon sufficient plaque removal, the atherectomy device is withdrawn. The plaque that is in the collection chamber is removed with the device.

The Procedure

After the Procedure

After the procedure, you will return to your hospital room where you will be watched closely by the nursing staff. Your blood pressure will be checked frequently, and you may be attached to an ECG monitor so that your heart can be monitored continuously. While you are in bed, a nurse will check the site where the catheter was inserted as well as the pulses in your feet and arms.

If your groin was used for the procedure, you can expect to stay in bed for several hours. The introducer sheath is usually removed within six hours of the procedure, but may be left in longer if heparin, a medication given during your procedure, is continued. While the introducer sheath is in place, and for about six hours after its removal, you will lie flat on your back in bed, keeping your leg with the sheath straight and still. To remove the introducer sheath, a nurse or doctor will put pressure on the puncture site for 20 to 30 minutes, or until there is no bleeding.

Alternatively, your doctor may use a vascular closure device to seal the puncture site in your groin or arm. You will be allowed to get up and walk around sooner if this type of device is used.

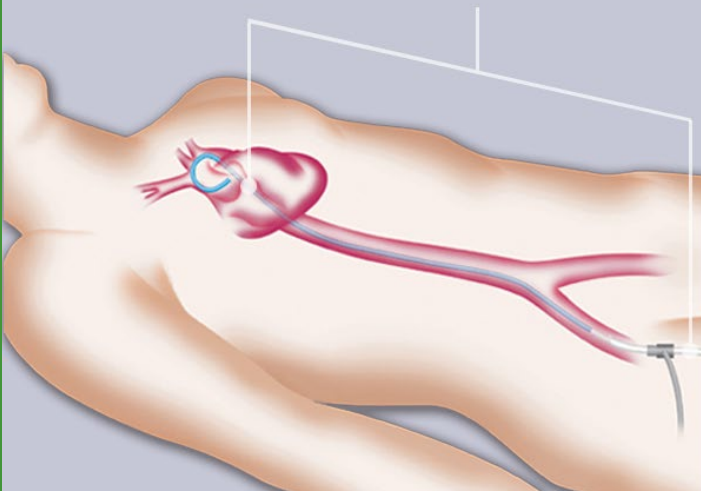
Do not try to sit up until your nurse or doctor instructs you to do so. It is important to lie flat and keep still to prevent bleeding from your artery. If you happen to cough or sneeze, you should press on the site with your fingers. Although bleeding will be unlikely at this time, if you feel a warm, wet sensation or sharp pain in the area of the puncture, call a nurse at once. If your arm was used for the procedure, you may be allowed to sit up afterwards, but you may be asked to stay in bed for several hours. [More >>](#)



The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)

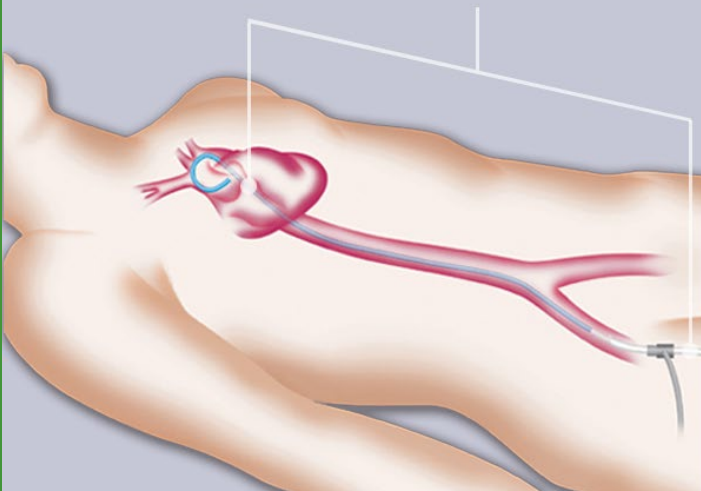




The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)



The Procedure

If you get back pain from lying still, your nurse can help make you more comfortable. You may be allowed to bend the leg that was not used for the procedure. Your nurse may also be able to elevate the head of your bed slightly to help relieve back pain. If you are still uncomfortable, your nurse can give you medication for pain.

Mild chest discomfort is common immediately following a coronary procedure but should fade within one or two hours. If your chest pain increases or returns, be sure to notify a nurse right away. If tests suggest that the pain may indicate a problem with the dilated artery, it may be necessary to take additional X-ray pictures of the artery before you go home. A return of chest pain is unusual beyond the first thirty minutes after the procedure.

You will be asked to walk prior to discharge from the hospital. The nurse will assist you the first time you get out of the bed.

You will urinate often because your kidneys will be getting rid of the X-ray dye that was injected into your arteries. You will also be asked to drink extra fluids so that your kidneys can get rid of this dye more easily. If you need help with any activity during this time (for example, in using the bedpan or bathroom), ask a nurse to help you. [More >>](#)

The Procedure

After the Procedure Quick Reference List:

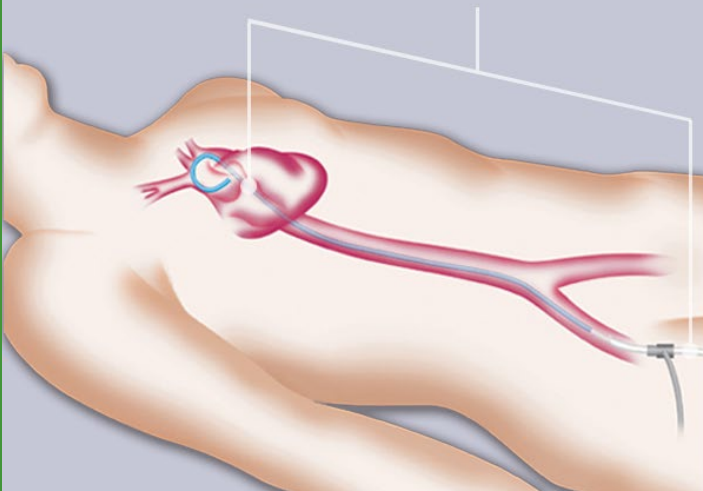
1. You will return to your hospital room where you will be watched closely by the nursing staff.
2. Your blood pressure will be checked frequently, and you may be attached to an ECG.
3. If your groin was used for the procedure, you should expect to stay in bed for several hours.
4. Do not try to sit up until your nurse or doctor instructs you to do so.
5. If you get back pain from lying still, your nurse can help make you more comfortable.
6. Mild chest discomfort is common immediately following a coronary procedure but should fade within one or two hours.
7. You will be asked to walk prior to discharge from the hospital.
8. You will urinate often because your kidneys will be getting rid of the X-ray dye that was injected into your arteries.



The Cath Lab

Guiding Catheter

(Illustration of the Coronary Procedure)



Recovery

Your Recovery

After the procedure, a patient is usually sent home from the hospital in one to three days. You should arrange to have someone take you home rather than drive yourself.

Before you leave the hospital, your doctor will give you guidelines for activities, diet and medications. He or she may ask you to avoid demanding activities like heavy lifting for at least a week. He or she will tell you when you can resume normal daily activities and when you can go back to work. After undergoing your procedure, you may feel better than you have in a long time, but it is important not to over exert yourself.

Because medications will be an important part of your treatment, your doctor will prescribe drugs that you should take at home. These medications will help prevent blood clots from forming in the newly dilated artery and help prevent spasms of the artery. Notify your doctor if your medications cause unpleasant reactions, but do not stop taking them unless instructed to do so. Your doctor may be able to prescribe new medications that better suit you.

It is important to keep all follow-up appointments that are scheduled. Your doctor will want to follow your progress closely and may give you tests to ensure your coronary or peripheral arteries are open and blood flow to the treated area is sufficient. If you have any questions, ask your doctor. [More >>](#)



Adopting a healthy lifestyle will help in your recovery process.

Recovery

Your Recovery *(cont.)*

The majority of patients who go home after a successful procedure have no further problems. In some patients, however, the narrowing in the artery may return. Such recurrences, called “restenosis,” most often occur within the first three to six months after a procedure. If you have pain after you are home, it is very important that you tell your doctor. This may be the first sign that you are developing a restenosis.

Lifestyle Changes

When you leave the hospital, your physician may prescribe lifestyle changes along with medication. Family members should be supportive of your new routine and continually reinforce the health benefits of moderate exercise and simple dietary changes. An excellent way for family members to be supportive is to adopt their own moderate exercise program and low-fat diet. These practices benefit all of us, not just those with heart or peripheral vascular disease.

Many doctors also recommend that patients join support groups following such procedures. Ask your physician about local groups or contact your own local hospital for telephone numbers and literature. Mended Hearts (888) 432-7899 is a national group that offers local support groups for coronary artery disease patients and their family members.

Remember that none of these procedures are a cure for coronary artery or peripheral vascular disease – they are only treatments. Adopting a healthy lifestyle will help in your recovery process and reduce your chances of further treatment.



Adopting a healthy lifestyle will help in your recovery process.

Glossary

Angina Pectoris: Chest pain caused by an inadequate supply of blood to the heart.

Angiography: A diagnostic procedure in which catheters are passed through the arteries of the heart. Pressures are measured and blood samples are taken from within the heart and its major blood vessels.

Angioplasty: (also referred to as PTCA) A minimally invasive procedure whereby a balloon dilatation catheter is passed through to the blocked area of an artery. Once inflated, the catheter compresses the plaque against the blood vessel wall. An angioplasty can also be performed with a stent and/or atherectomy.

Ankle Brachial Index (ABI): A non-invasive test that evaluates the ratio of blood pressure measurements in ankles to arms to screen for presence of peripheral vascular disease.

Anticoagulant: A substance that slows down the clotting of blood.

Artery: Blood vessel that carries blood away from the heart to various parts of the body. Arteries usually carry oxygenated blood, except for the pulmonary artery, which carries deoxygenated blood from the heart to the lungs for oxygenation.

Atherectomy: A minimally invasive intervention procedure that involves the excision and removal of blockages by catheters with miniature cutting systems.

Atherosclerosis: Narrowing or blockage of arteries caused by a build-up of fat (cholesterol) within the artery wall. The build-up is sometimes referred to as “plaque.”

Glossary

BACK

Balloon Dilatation Catheter: An inflatable device used for stretching and compressing plaque against blood vessel walls during angioplasty.

Brachial: Pertaining to the arm.

Cardiac Catheterization Laboratory (Cath Lab): A sterile X-ray theatre in which heart catheterization is performed.

Cardiologist: A physician skilled in the prevention, diagnosis and treatment of heart disease.

Catheter: A hollow, flexible tube used to withdraw or inject fluid into the body.

Cholesterol: A waxy substance found only in food that comes from animals.

Circulation: The movement of blood through the vessels of the body, which is induced by the pumping action of the heart, enabling the flow of nutrients and oxygen through the body.

Claudication: Pain in the legs that occurs with work or exercise.

Coronary: Of, relating to, or being the arteries of the heart.

Coronary Arteries: The blood vessels that carry oxygenated blood from the aorta to the heart muscle. There are three major coronary arteries: the right coronary artery, the left anterior descending, and the circumflex.

Coronary Artery Disease (CAD): The formation of blockages or atherosclerotic lesions within coronary arteries that result in restricted blood flow.

Diabetes: A disease in which the body doesn't produce or properly use insulin. Insulin is needed to convert sugar and starch into the energy needed in daily life. The full name for this condition is diabetes mellitus. [More >>](#)

Glossary

Dilation: The gradual opening of the narrowed coronary artery by cracking and compressing the narrowing or obstructing plaque.

Dilatation Catheter: (See Balloon Dilatation Catheter)

Doppler Ultrasound: A non-invasive test using sound waves to determine the presence of arterial narrowing.

Femoral: Pertaining to the thigh.

Fluoroscope: An X-ray monitor that reveals the arteries.

Gangrene: Necrosis or tissue death, usually due to inadequate or absence of blood supply.

Guide Wire: A device used to guide the placement of a catheter into a vessel.

Guiding Catheter: A hollow tube through which fluids or objects can be introduced or removed from the body.

Heart Attack: A condition in which a blocked artery prevents sufficient blood flow to the heart muscle, causing the tissue to die. Also called myocardial infarction (MI), it can result in cardiac arrest.

Hypertension: High blood pressure, usually ranging from 140/90 to 200/110.

Left Coronary Artery (LCA): One of the two main coronary arteries that supplies blood to the heart. The LCA supplies about 65 percent of the heart's blood.

Local Anesthetic: A substance used to numb the area to which it is applied.

Lumen: The inner channel or cavity of a vessel or tube.

Glossary

BACK

Percutaneous: Performed through the skin.

Percutaneous Transluminal Coronary Angioplasty (PTCA):

(Also referred to as angioplasty. See Angioplasty.)

Peripheral Vascular Disease (PVD): Vascular disease, which affects the blood vessels, especially those of the extremities.

Plaque (also referred to as atherosclerosis):

An accumulation or build-up of fatty deposits, calcium and/or cell debris in an artery that leads to narrowing of the lumen.

Restenosis: A reoccurring blockage caused by excessive cell growth inside the artery or stent, following an interventional procedure such as angioplasty.

Special Procedures Room: A sterile room much like the cardiac catheterization room, where peripheral vascular procedures such as angiograms and angioplasty are performed.

Stent: A tiny, latticed, metal tube that is implanted into an artery during an angioplasty, providing necessary scaffolding to hold the artery open and ensuring blood flow to the heart.

Transluminal: Passing across or performed by way of a lumen.

Transradial: Through the radial artery, near the wrist.

Vein: Blood vessel that returns blood to the heart from various parts of the body. Veins usually carry deoxygenated blood, except for the pulmonary vein, which carries oxygenated blood from the lungs to the heart.



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The information provided is not intended to be used for medical diagnosis or treatment or as a substitute for professional or medical advice. Please consult your physician or qualified health provider regarding your condition and appropriate medical treatment. Individual symptoms, situations and circumstances may vary.

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