Percutaneous Angioplasty or Venoplasty

A percutaneous angioplasty or venoplasty has been recommended. This handout explains the procedure, how to prepare for it and what to expect after the procedure.

About Angioplasty and Venoplasty
These procedures involve placing a small tube in your artery (angioplasty) or vein (venoplasty) and taking a series of x-ray pictures. Contrast dye is used to show the doctor which arteries or veins are narrowed or blocked. The doctor uses a special catheter with a balloon on the tip. This balloon is placed in the narrowed part of the artery or vein and is inflated and deflated to open up the blocked vessel.

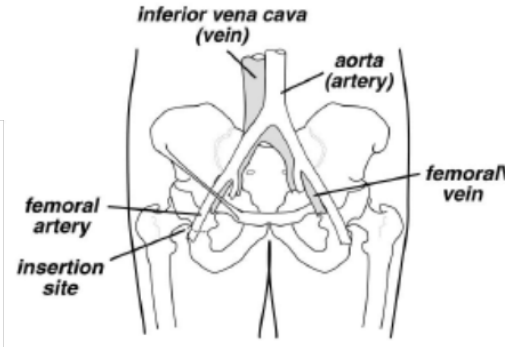
Reason for Procedure
An MRI or CT scan shows that an artery or vein is narrowed or blocked. This procedure opens these blood vessels without surgery. Most of the time this is the preferred way to open blocked vessels.

How to Prepare

- If you take blood thinners, a nurse will review changes you may need to make.
- You may have solid foods of any kind until 8 hours before your procedure. You may have clear liquids up until 2 hours before your procedure.
- If you have diabetes, we will tell you how to manage your medicines and blood sugars. Take your prescribed oral medicine as scheduled with a few sips of water. If you take a medicine called **Glucophage or metformin**, you will be advised not to take it on the day of the procedure and for 2 days after the procedure.
- If there is any chance you might be pregnant, please tell the radiologist.
- Be sure to tell the radiologist if you have any allergies to contrast dyes, antibiotics, anesthetic agents, iodine, latex or any other medicines that you may have taken before.
- We will draw blood the morning of the procedure if not already done.
- Please make plans to have someone drive you home after the procedure.

During the Procedure
The procedure takes 1-2 hours, sometimes longer. You will lie on your back. An intravenous (IV) catheter will be started to give you fluids. You will be given medicine to relax you. We may place a small tube into your bladder (urine catheter) to collect urine. A nurse will check your blood pressure, pulse and temp throughout the procedure.

The doctor finds the artery or vein. That area will be shaved and cleaned. That area will then be covered with sterile drapes to help prevent infection. The doctors will wear sterile gowns and masks.



The skin at the entry site will be numbed with lidocaine so you will have little pain. You may feel pressure during the placement of the tube into the vein or artery. You will not feel the tube inside your arteries or veins.

Contrast dye is then injected. You may feel warmth or heat in the abdomen or buttocks. This is normal. The contrast dye highlights the blood vessels. These injections will be done a few times. You will be asked to hold your breath and not move while the pictures of your arteries or veins are being taken.

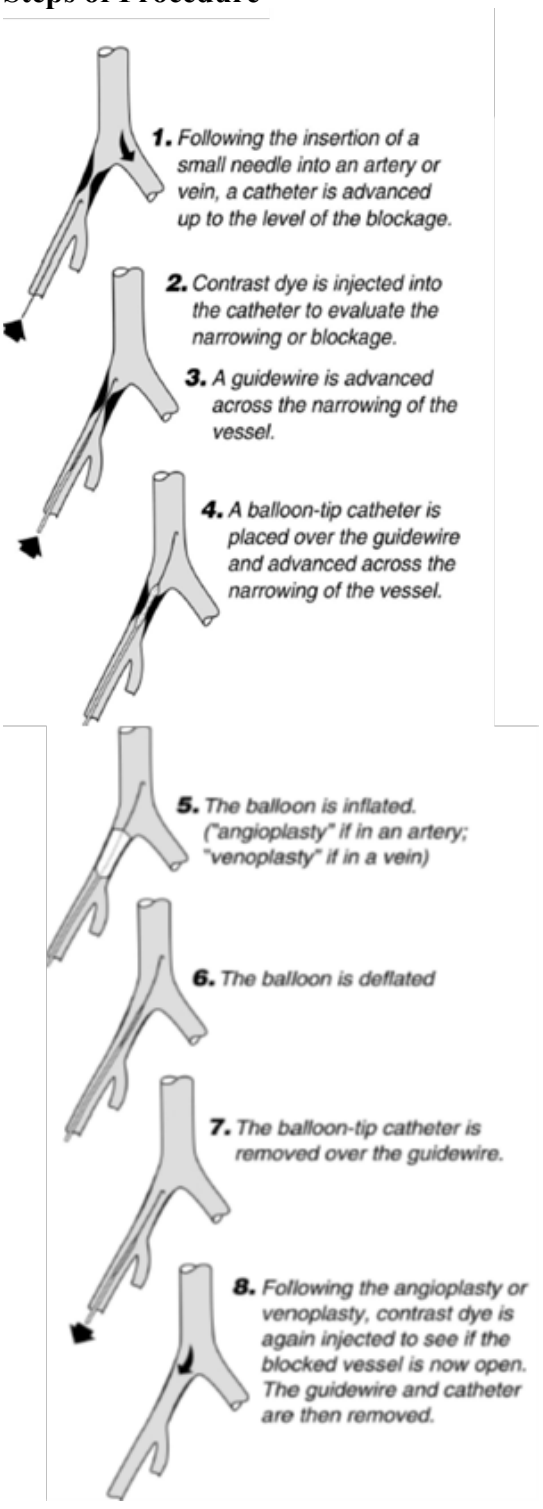
After finding the place and size of the blockage, the angioplasty or venoplasty will begin. The tube is threaded up until it reaches the blocked area. At the end of the tube is a balloon. The balloon inflates for 15-60 seconds at a time. It inflates and deflates several times. You may feel pressure at the site where the balloon inflates. Some patients have a fair amount of pain where the balloon inflates. If this happens, you will be given IV pain medicine. After the angioplasty, more dye is injected to see if blood flow has improved and if the procedure has been a success.

After the Procedure

You will return to a nursing unit. You will need to lie flat with your leg straight for up to 6 hours. Your blood pressure, pulse, temperature, and circulation of your leg or arm will be checked often. The puncture site will be checked for bleeding.

You may eat and drink what you'd like. You may resume your usual medicines. To make it easier for you, you may still have a urine catheter in place while you are lying flat. This is so you do not have to use a bed pan or a urinal. You will have an IV for fluids.

Steps of Procedure



Before Going Home
You will be taught how to apply direct pressure to the site if it bleeds. Also be sure to write down the date you can:

- return to work.
- resume driving (often in 48 hours).
- resume taking your blood thinning medicines (if taking).

Home Care

- If bleeding occurs at the site, apply direct pressure and go to the nearest emergency room.
- Keep the gauze dressing dry for 24 hours. After that, you can remove the gauze dressing and shower or bathe as you'd like. Put a Band-Aid® over the site for the next 3 days.
- Drink at least 8-10 glasses of fluid (water, coffee, juice, tea,) for the first 24 hours. **Do not** drink alcohol the first day.
- Keep your leg or arm (with the puncture site) straight when sitting or lying down for the first 24 hours.
- **No** heavy lifting (more than 10 pounds) for 72 hours.
- If you feel very dizzy, faint or light-headed, this may be due to low blood pressure, and you may be bleeding internally. If you feel this way, go to the nearest emergency room.

Puncture Site
Once a day for 5 days, look at the puncture site for signs of infection or other problems such as:

- Red and/or hot puncture site.
- Foul-smelling, yellowish or greenish drainage from puncture site.
- Increased swelling at puncture site or of the leg or arm.
- Temperature (taken by mouth) above 100°F.

Pain
You should feel only a little pain after you are home. For relief, take acetaminophen (Tylenol®). Do not take aspirin. It may cause bleeding.

When to Call
Call your doctor if you have:

- Signs of infection
- A large bruise under and around the puncture site (often firm to touch)
- Severe pain, spasms, numbness and/or tingling in the leg or arm
- Loss of motion in leg or arm
- Itching or hives anywhere on your body
- Vomiting

Who to Call
If you have any questions or concerns, call Radiology at **(608) 263-9729, prompt #3,** 8:00 am to 4:30 pm.

Nights, weekends and holidays, call **608-262-2122.** Ask for the Angio/ Interventional Radiology resident on-call. Give your name and phone number with the area code. The doctor will call you back.

If you live outside the area, call toll-free at **1-800-323-8942.**

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2024 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4642.