Preparing for a Percutaneous Transluminal Angioplasty or Venoplasty in Interventional Radiology

You are scheduled for a percutaneous transluminal angioplasty or venoplasty to be done by our Interventional Radiologists on ______________ at ______________ AM/PM. This handout explains the procedure to you, and tells you how to prepare for it and what to expect after the procedure.

What is an angioplasty or venoplasty procedure?
This procedure involves placing a small tube in your artery or vein and then taking a series of x-ray pictures with the use of contrast (x-ray dye). The contrast dye study will show the doctor which arteries or veins are narrowed or blocked. The doctor will then use a special catheter with a balloon on the tip. This balloon will be placed in the narrowed part of the vein or artery and will be inflated and deflated to open up the blocked vessel.

Why do I need this procedure?
• An MRI or CT scan has shown that an artery or vein is narrowed or blocked and needs to be opened back up
• Most of the time it is the preferred method to open blocked vessels and can be performed without surgery.

How do I prepare for the procedure?
• We will draw blood work the morning of the procedure if that has not already been done.
• If you are taking any blood thinners a nurse will review your medications with you and give you further instructions.
• You may have solid foods of any kind until 6 hours before your procedure. You may have clear liquids (liquids that you can see through) up until 4 hours before your procedure.
• If you have diabetes and take insulin, we will tell you what to do to manage your medications and blood sugars before the procedure. Take your prescribed oral medicine as scheduled with a few sips of water.
• 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.
• Please make plans to have someone drive you home after the procedure.
• If you are on a medicine called Glucophage or Metformin, you will be advised to hold this medication on the day of the procedure and for 2 days after the procedure.
What can I expect during the procedure?
The procedure is done in the Radiology Department in our Angio-Interventional Suite. The procedure takes 1-2 hours, sometimes longer.

- An intravenous (IV) catheter will be started to give you fluids. You may be given medicine to relax you.
- We may have to place a small tube into your bladder (urine catheter) to collect urine during the procedure.
- You will be positioned on your back on the procedure table.
- A nurse will check your blood pressure, pulse and temperature (vital signs).

The doctor will locate the artery or vein that he will be going into. 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 to provide a clean setting.

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

Contrast dye will then be injected into the tube to assess your artery or vein. You may have a feeling of warmth or heat at this time. This is normal. It is often felt in the abdomen and buttocks. The contrast dye highlights the vessels being studied. You will be asked to hold your breath so you do not move while the pictures of your arteries or veins are being taken. These injections through the tube will be done a few times.

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 will be inflated for 15-60 seconds at a time. It will inflate and deflate several times.
- You may have a feeling of 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, another contrast dye study is done to see if the angioplasty has been a success and if blood flow has been improved.
The following is a sequence of how your Transluminal Angioplasty or Venoplasty will be done.

1. Following the insertion of a small needle into an artery or vein, a catheter is advanced up to the level of the blockage.

2. Contrast dye is injected into the catheter to evaluate the narrowing or blockage.

3. A guidewire is advanced across the narrowing of the vessel.

4. A balloon-tip catheter is placed over the guidewire and advanced across the narrowing of the vessel.
5. The balloon is inflated. ("angioplasty" if in an artery; "venoplasty" if in a vein)

6. The balloon is deflated

7. The balloon-tip catheter is removed over the guidewire.

8. Following the angioplasty or venoplasty, contrast dye is again injected to see if the blocked vessel is now open. The guidewire and catheter are then removed.
What can I expect after the procedure?
You will return to a nursing care unit on a cart.
- You will need to lie flat, with your leg straight for up to 6 hours.
- Vital signs such as blood pressure, pulse, and temperature will be checked often.
- Circulation checks of your leg or arm will be done with vital signs.
- The puncture site will be checked for bleeding.
- You may eat and drink what you’d like, when you feel ready.
- You may start taking all your prescribed medicines as scheduled.
- To make it easier for you, you may still have a urine catheter in place while you are lying flat. This is placed in your bladder to keep it emptied so you do not have to use a bed pan or a urinal.
- You will have an IV to give you fluids.

How do I care for myself at home?
- 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, any food that melts at room temperature, etc) 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 24 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 five (5) days, look at puncture site on your leg or arm for signs of infection or other problems. Call your doctor if you notice any of these signs:
  ✓ 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 (by mouth) above 100°F or 37.8°C.

What do I do if I have pain?
You should feel only a little pain after you are home. For relief, take acetaminophen (such as Tylenol®). Do not take aspirin. It may cause bleeding.

Home Care after Your Angioplasty or Venoplasty

What do I need to know before going home?
- The nurse or doctor will show you how to apply direct pressure to the site in case it bleeds.
- Write down the date the doctor says you can return to work.
- Write down the date the doctor says you can resume driving (often 48 hours after the procedure).
- Write down the date the doctor says you may resume taking your anticoagulants or blood thinning medicines if you are on them.
When should I call my doctor about concerns?

Call your doctor if any of these happen:
- Signs of infection
- Large bruise under and around the puncture site (often firm to touch)
- Severe pain or spasms in the leg or arm
- Numbness and/or tingling in the leg or arm
- Loss of motion in leg or arm.
- Itching or hives anywhere on your body
- Vomiting

Phone Numbers
If you have any questions or problems once you are at home, call the Radiology Department (608) 263-9729, prompt #3, during the day (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.