

# ARTERIOGRAMS

## Patient Instruction Sheet



**Patient Name:** \_\_\_\_\_

**Date of Procedure:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Where you report: Please go to:** \_\_\_\_\_

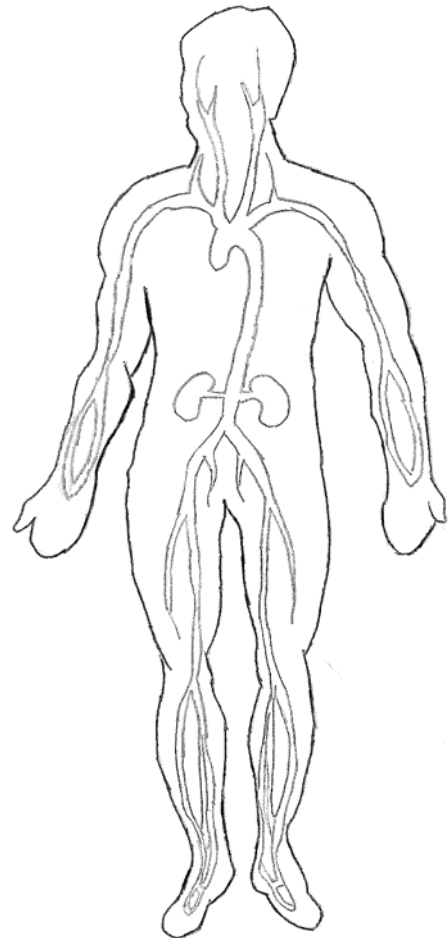
**Phone:** \_\_\_\_\_

### What is an Arteriogram?

An arteriogram or angiogram is a special x-ray to examine the arteries or blood vessels within your body. It is used to look for blood vessels that have become clogged or blocked. A specially trained physician called in Interventional Radiologist, Cardiologist or Vascular Surgeons does the arteriogram. After injecting an x-ray dye through a needle or small catheter, a series of x-rays of the area are taken. The dye allows the physician to see a “road map” of your arteries.

### Why is an Arteriogram necessary?

Your physician will request that you have an arteriogram done if you have signs and symptoms of blocked arteries that may require a procedure to improve the circulation, to evaluate an aneurysm (a weakened area of an artery) or to assess a narrowed area in a bypass graft detected by ultrasound. You may be experiencing these symptoms: pain in your legs while walking, changes in your vision, a wound that does not heal, faint or absent pulses in your feet, and weakness in your arms or legs. This test will help the Physician see exactly where the artery may be blocked, how severe the blockage is, and what is causing the blockage in order to plan the best form of treatment for you.



### What causes blocked arteries to occur?

Atherosclerosis is a chronic disorder of the blood vessels within the body that brings oxygen enriched blood from the heart to its organs and tissues. In atherosclerosis, the artery walls become thicker, harder and lose their ability to stretch. This “hardening of the arteries” occurs when a buildup of cells, fats, and cholesterol deposits called plaque, cause the artery walls to harden and thicken. This plaque narrows the artery walls and can partially or totally block the normal flow of blood so that the heart must work faster and harder to pump the blood through the arteries. Atherosclerosis can occur in any artery of the body, but it causes the most damage by decreasing the blood flow to the heart, brain, kidneys and lower legs. When this happens, tissue damage can occur that can result in a heart attack, stroke, kidney failure or limb loss.

## **Prior to the Arteriogram**

- If you are allergic to x-ray contrast dye, iodine or shellfish, notify the nurse or physician.
  - You will need labwork done.
  - If you have renal insufficiency (your kidneys are not working to clear toxins), remind the physician the day of your arteriogram. Your doctor may want you to start acetylcysteine (Mucomyst) which is a medication that helps protect the kidneys from the IV dye. This medication should be taken twice daily, starting the day before and the day of the arteriogram.
  - Unless directed by your physician to limit your fluids, increase your fluid intake both the day before and following the procedure to decrease the concentration of the dye in your kidneys.
  - EATING: Have nothing by mouth after midnight, unless otherwise instructed by your healthcare provider.
  - MEDICATIONS: Take your medications as directed by your healthcare provider. Bring your medications with you.
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- If you take warfarin (Coumadin), you may be asked to stop taking this medication a few days prior to the test (Stop after taking it on \_\_\_\_\_)
- If you take metformin (Glucophage) check with your healthcare provider whether this medication needs to be held.
- If you take clopidogrel (Plavix), you may be asked to stop taking this medication a few days prior to the test. (Stop after taking it on \_\_\_\_\_)
- You will need an escort home and you must stay with someone overnight, or have someone stay with you.
- The Physician will explain the procedure to you, will answer any questions you may have and will ask you to sign a written consent form.

## **During the Arteriogram**

The arteriogram is usually an outpatient procedure that generally takes about 1- 1 1/2 hours to perform. You may be given intravenous fluids before the procedure.

## **What to expect during the arteriogram**

- You may have electrodes placed on your chest to monitor your heart rate and will place a blood pressure cuff on your arm to monitor your blood pressure.

- Injection of contrast causes you to feel warm and your face may appear flushed. You may also have a metallic taste in your mouth. These sensations are normal and should last only a minute or so.
- An intravenous line (IV) will be placed in your vein and you will receive medicine to help you relax.
- Your groin or arm will be shaved and cleansed and the doctor will inject a numbing medication at the insertion site.
- A catheter will be inserted into the artery in your groin or arm area through which a dye will be injected.
- **Angioplasty/Stenting:** If the Physician doing the procedure finds a “blockage” that can be treated with a balloon or stent (called angioplasty or stenting) you may stay overnight for observation. In angioplasty, as the balloon expands, it enlarges the inside of the artery wall. After the balloon is deflated, an x-ray picture is taken to see if the artery stays open. Sometimes the blockage needs the help of a wire mesh tube called a stent to keep the artery open. The stent is passed through the catheter over the balloon, and when the balloon is inflated, the stent holds the artery open and is left in the artery permanently. The deflated balloon is then removed.
- **Thrombolysis/Clot Busting Medication:** Sometimes a blood clot is blocking the blood flow to an extremity. Medication (called thrombolytic) is sometimes given directly through the catheter used for the arteriogram in an attempt to dissolve or break up the clot. This clot busting medication often allows the physician a better look at the “road map” of flow to the extremities.

### **After the Arteriogram**

- The catheter in your artery will be removed, and either direct pressure will be applied to the insertion site for 20 minutes or until the bleeding stops, or a closure device may be used to close the needle hole.
- You will have either a pressure dressing or a light dressing applied to the puncture site.
- You will spend up to 4 – 8 hours in recovery where you will be asked to keep the involved leg or arm straight.
- Your temperature, blood pressure, heart rate, and pulses in the area where the catheter was inserted will be monitored.
- You should be able to take fluids, to walk and to urinate before you are allowed to go home after the procedure.

**What complications may occur?** Peripheral angiography, angioplasty and thrombolysis are relatively safe.

Discuss your concerns with your physician. The following are the most common problems associated with angiography or angioplasty:

- Hematoma or bruise around the puncture site. This usually disappears in a few days or a week.
- Allergic reaction to the contrast dye. Let the doctor know if during or after the procedure you have trouble breathing or if you develop itching, a rash or hives.
- Kidney dysfunction – a temporary increase in the creatinine level of the blood. People at risk already have kidney dysfunction, diabetes, multiple myeloma, dehydration or are taking medications that are hard on the kidney.

## **When You Return Home**

### **1. Restrictions:**

- During the first 72 hours following your procedure, avoid strenuous activity including: lifting or moving heavy objects more than 10 pounds, avoid vigorous exercise (jogging, skating, biking, aerobics), avoid straining to move your bowels, avoid sexual activity.
- Wait until the morning after your procedure to shower. You may remove the bandage from the puncture site at that time.

### **2. Pain Management / Medications**

- The puncture site may be tender for 24 – 48 hours. If you have pain related to the puncture site, take a non-aspirin pain reliever such as acetaminophen (Tylenol) or ibuprofen (Advil) in the recommended dose as needed for discomfort.
- Resume taking all previously prescribed medications unless told otherwise by your physician.

### **3. Return to work** – you may miss a few days of work after this procedure. Discuss this with your healthcare provider.

### **4. Contacting your physician:** Call your physician if you develop:

- Increasing pain, swelling, warmth and discomfort at the puncture site.
- Signs of infection at the puncture site (redness, drainage).
- Temperature of 100.4 degrees Fahrenheit or greater.
- Change in color, temperature or sensation of any limb.
- Unusual weakness or faintness.

**Physician's Name** \_\_\_\_\_ **Physician's Phone** \_\_\_\_\_