

Arteriography

INTRODUCTION

An arteriogram is an imaging test that uses x-rays and a special dye to see inside the arteries. It can be used to see arteries in the heart, kidney, and many other parts of the body.

PROCEDURE

An **arteriogram** involves the placement of a plastic intravenous tube (catheter) into an artery in either your groin or your forearm. Some numbing medicine will be injected in the skin over the artery that will be used before the catheter is inserted. Intravenous medications may also be given to you to make you more comfortable and relaxed. This is known as conscious sedation.

Once the catheter has been placed into the artery, it will be advanced through the blood vessels. During this time, x-ray contrast material (x-ray dye) will be injected through the catheter and x-ray pictures taken. You may be asked to hold your breath for several seconds as these pictures are taken. During the injection of x-ray contrast material, you may experience a warm feeling or a strange taste in your mouth. Both of these sensations are temporary and will go away soon. Depending on the results of the arteriogram, an angioplasty, stent placement, or lytic therapy may be performed. At the completion of the arteriogram, the catheter will be removed and pressure will be applied to the insertion site until the bleeding has stopped. To help prevent bleeding, it will be very important for you to lie flat in bed without moving your arm or leg for up to six hours.

If the arteriogram shows an area of blockage, an angioplasty may be performed in an attempt to open up the area. This involves the insertion of a special tube, which has a tiny deflated balloon. The balloon is positioned at the site of the blockage and is then inflated. Following an angioplasty, if there still is not enough blood flow through the area of blockage, a metal mesh tube (**stent**) may be placed at the site. The stent will widen the vessel and improve the blood flow.

If the arteriogram shows that a blood clot is blocking one of your vessels, a special intravenous drug may be given to dissolve the clot. This is known as **lytic therapy**. This therapy may take 24 hours or more and may require that you be admitted to the Intensive Care Unit for monitoring while this drug is being given. Additional arteriogram x-ray pictures may be taken to determine the progress of the dissolving blood clot.

RISKS

Risks associated with the procedure include pain or discomfort at the catheter insertion site, bleeding at the site, injury to a blood vessel, infection which may result in an infection of the blood stream, the development of a blood clot (embolization), and stroke. Risks associated with the x-ray contrast material include an allergic reaction and reduced kidney function. The medications used for the conscious sedation are associated with the risks of aspiration (inhaling food or liquid into your lungs) or respiratory depression. In addition to these potential risks associated with the procedure, the x-ray contrast material, and the conscious sedation medications, there may be other unpredictable risks including death.

ALTERNATIVES

There may be other procedures that can be performed to further evaluate your circulation and/or treat an area of blockage. If you are unsure about having an arteriogram, along with a possible angioplasty, stent placement, or lytic therapy performed, please discuss these other alternatives with your physician.