

Pulmonary Arteriogram

INTRODUCTION

A pulmonary arteriogram is a procedure that uses a special dye (contrast material) and x-rays to see how blood flows through the lungs.

PROCEDURE

A **pulmonary 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 until it reaches the vessels in your lungs. During this time, blood pressure measurements will be taken through the catheter. In addition, 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 pulmonary arteriogram, lytic therapy, a thrombectomy, or stent placement may be performed.

At the completion of the pulmonary 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 pulmonary 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. A **thrombectomy** may be performed to remove the clot. This involves using a device that breaks up and/or removes the clot. If, after either lytic therapy or a thrombectomy, there still is not enough blood flow through the vessel, a metal mesh tube (**stent**) may be placed at the site. The stent will widen the vessel and improve the blood flow.

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), disturbances in heart rhythm (arrhythmia), 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 methods to diagnose and/or treat your pulmonary embolism, including medical management and surgery. If you are unsure about having a pulmonary arteriogram, along with possible lytic therapy, thrombectomy or stent placement performed, please discuss these other alternatives with your physician.