

**DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE
SECTION OF NEURORADIOLOGY**

PATIENT INFORMATION SHEET

Angiogram: Spinal

Indications for the Procedure: A spinal angiogram is used to diagnose several diseases of the blood vessels (arteries and veins) in the spine and spinal cord, such as aneurysms (ballooning of a part of the vessel), vascular malformations (too many vessels), tumors, narrowing (stenosis) or blockage of vessels.

Description of the Procedure: The patient is placed on his/her back on the X-ray table. Sedative medication may be given into a vein to make the patient comfortable. The skin of a groin (usually the right) is cleaned with an antiseptic fluid that contains iodine, and the area is covered with sterile drapes. The skin and deeper tissues of the groin are numbed with an anesthetic (numbing medication), which is injected with a tiny needle. This injection may cause the patient to feel a brief stinging, pinching and/or burning sensation. The location of the femoral artery, a large artery in the groin, is located by feeling for its pulsation. A small nick is made in the skin, and a different needle is used to puncture the femoral artery in the groin. A small tube is then placed in the femoral artery, using X-ray fluoroscopy to make certain the tube is in the correct place. A second, smaller tube, called a catheter, is placed through the first tube in the femoral artery. While watching the X-ray fluoroscopy, the catheter is put into the arteries that supply blood to the spine and spinal cord. X-ray dye is injected through the catheter to make the blood visible in X-ray pictures. At the end of the procedure, the catheter and the larger tube in the femoral artery are removed, and the femoral artery is compressed by the doctor's fingers for 15 to 20 minutes until the bleeding stops. The patient is returned to his or her hospital room and observed for 6 to 12 hours or longer.

Risks of the Procedure: Serious complications from this procedure are rare. There may be bleeding at the puncture site from the femoral artery, narrowing or blockage of the femoral artery with loss of blood flow to the leg, infection at the puncture site, allergy to the contrast material producing shock, difficulty breathing and/or hives, kidney shutdown from large amounts of contrast material, weakness or paralysis of the arms and/or legs, memory loss, an inability to speak, or other damage that may be permanent or temporary.

Alternatives to the Procedure: Non invasive imaging procedures can be performed to demonstrate the blood vessels, such as CT scan angiography (CTA) or MRI angiography (MRA).

Probable Consequences of Refusing the Procedure: If a patient refuses the procedure, the patient's doctor may not be able to tell the best way to treat the patient's condition.

Person(s) Performing the Procedure: The key portions of the procedure will be performed by an attending physician who is a member of the medical staff of Rush University Medical Center, or a fellow or resident in Neuroradiology who will be observed and supervised by a member of the medical staff. Residents and fellows are licensed physicians. Fellows have completed a residency in radiology and are in an approved post-residency training program. Residents are in training in an approved residency program. The parts of the procedures fellows or residents will perform will be based on their level of training and competence.

Date of Last Revision: 8/2009