DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

Patient Information Sheet

Endovascular Embolization

General Indications for the Procedure: Several clinical conditions may be treated with endovascular embolization. It can be used to block a dangerously-bleeding artery or vein (e.g., in the lungs, stomach, intestine, kidneys, arms or legs) or to reduce blood flow to a tumor.

Description of the Procedure: The patient is brought to the interventional radiology holding room, and a needle is placed into a vein and connected to IV tubing and fluid. Medications are given into the vein to prepare the patient for the procedure, including anti-inflammatory drugs and antibiotics. A urinary catheter (a Foley catheter) is inserted in the patient's bladder. The patient is then brought to an interventional radiology procedure room. An area is selected in which a small tube (a catheter) will be inserted into an artery in an arm or a leg, for example, the groin area. The selected area is carefully cleaned with antiseptic solution and covered with sterile drapes. Medicine to numb the skin (called a local anesthetic) is injected with a tiny needle. This causes a stinging or pinching sensation which lasts a very short time. Once the area is completely numb, the skin is punctured, and a second needle is placed into the artery or vein. A small wire is advanced through the needle into the blood vessel. The second needle is removed, and a catheter (a small tube) is advanced over the wire. The selected artery or vein is then blocked with either small metallic springs called coils or with small particles called embospheres. If a tumor is being treated, the particles may be combined with chemotherapy to treat the tumor. Once the blood vessels are properly blocked, the catheter is removed, and pressure is applied to the puncture site for 15-20 minutes to control bleeding. The patient is then taken to the holding and observed for about 1 hour, after which the patient is sent to a hospital room for continued monitoring.

Risks of the Procedure: The most common complication of an embolization is pain, for which patients receive pain medication. There may also be nausea, vomiting, fever and an elevated white blood count after the procedure. These symptoms (including pain) are most intense 2-3 hours after the procedure. Sometimes pain is not well controlled by usual medications, in which case doctors who specialize in treating pain are consulted and give more powerful pain medications. There is a small risk of infection.

Alternatives to the Procedure: The conditions that can be treated with endovascular embolization sometimes can be treated with surgery or medical therapy. However, endovascular embolization is recommended when it is thought to be safer or more effective than other treatments.

Probable Consequences of Refusing the Procedure: The consequences of refusing this procedure depend on the condition that is being treated. Refusal when the procedure will be used to stop bleeding may result in dangerous continuation of bleeding with possible great harm to the patient, including loss of life. If the procedure will be used to reduce bleeding during surgical removal of a tumor, refusal could result in a dangerous loss of blood during surgery. If the procedure will be used to treat cancer, refusal may result in worsening of the condition.

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Persons 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 resident or fellow who will be observed and supervised by a member of the medical staff. Residents are licensed physicians in an approved residency program. Fellows are licensed physicians who have completed a residency in radiology and are in an approved post-residency training program. The parts of the procedures residents or fellows will perform will be based on their level of training and competence.