DEPARTMENT OF DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE

Patient Information Sheet

Percutaneous Organ Biopsy

General Indications for the Procedure: When there is abnormal or sick tissue in a patient's body, it may be necessary to take a piece of the abnormal or sick tissue for special testing, in order to diagnose the abnormality and to determine the best way of treating it. This is called a biopsy.

Description of the Procedure: The name of the procedure is "percutaneous organ biopsy," which means biopsy of tissue performed through the skin. In this procedure, the biopsy is performed by puncturing the skin with a needle and passing the needle through the skin into the abnormal tissue to be sampled. A piece of tissue is then taken out through the needle. At the beginning of the procedure, the patient receives sedating medication to help keep the patient comfortable. The patient may receive additional medication into a vein during the procedure. Pictures are taken using either ultrasound or CT, to help find the best place in the skin to insert the needle to sample the tissue. Once the best place (the chosen site) is identified, the skin at that location is carefully cleaned with a sterilizing solution. Numbing medicine (local anesthetic) is then injected into the skin and into the tissue below the skin, in order to completely numb the chosen site. Once the area is completely numb, a larger needle is put through the skin and pushed into the abnormal tissue, using either CT or ultrasound to make certain the correct tissue is biopsied. Once the tissue samples are obtained, the needle is removed, and pressure is applied to the site. The procedure lasts about 25-40 minutes. After the procedure, the patient goes to a recovery area to be observed for 1-2 hours.

Risks of the Procedure: The most common complication is bleeding. The risk of having a large amount of bleeding after a biopsy is very low. Most complications appear within the first two hours after biopsy, although occasionally complications are delayed. If a biopsy of the lung has been performed, a possible complication is the development of a "pocket of air" within or around the lung. This pocket of air may be small or may enlarge, causing difficulty breathing. If the pocket of air enlarges and causes shortness of breath, the doctor will have to insert a tube into the patient's chest to drain the air.

Alternatives to the Procedure: The alternative way of getting tissue for biopsy is surgery. Depending upon the patient's underlying medical condition, surgery may be more risky than percutaneous biopsy.

Probable Consequences of Refusing the Procedure: If the patient decides not to have the procedure performed, the patient's doctor may have difficulty determining the nature of the patient's problem, making it difficult to determine the best way to treat the patient's disease.

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 Licensed Physician's Assistant, 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. Physician's Assistants are specially trained practitioners who are licensed by the State of Illinois and who are qualified to perform these procedures under supervision. The parts of the procedures residents or fellows will perform will be based on their level of training and competence.