

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

**PATIENT INFORMATION SHEET  
Lumbar Vertebra Biopsy with CT Guidance**

**Indications for the Procedure:** This procedure is performed to determine if a spinal vertebra contains a tumor.

**Description of the Procedure:** In this procedure, a needle is used to remove a very small amount of spinal bone . The patient is placed on his/her stomach on the computed tomography (CT) table, and the skin of the back is cleaned with an antiseptic which contains iodine. A small needle puncture (stick) is made, and the skin and deeper tissues of the lower back are numbed with lidocaine, an anesthetic drug (numbing medicine). Using CT guidance, a needle is placed into the vertebra (spinal bone). CT pictures are taken to show the location of the needle in the vertebra. A very small amount of spinal bone material is removed through the needle. The material is sent to the laboratory for analysis to determine if a tumor is present. This procedure may be repeated more than once in order to make certain a good sample has been obtained. After the spinal bone has been biopsied, all needles are removed and only a small puncture mark remains on the back. The puncture mark is covered with one or more band-aids. The patient is either observed in the X-ray department for 1-2 hours or returned to his/her hospital room for observation.

**Risks of the Procedure:** Serious complications from this procedure are rare. There may be bleeding within or outside of the spine; spread of the infection to the spinal bone; local infection at the puncture site; or injury to nerves.

**Alternatives to the Procedure:** Alternatives to this procedure include observation by repeated imaging or surgery for removal of spinal bone material.

**Probable Consequences of Refusing the Procedure:** Consequences may include not being able to determine if there is a serious abnormality in the vertebra, which may make proper treatment difficult.

**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.