

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

**PATIENT INFORMATION SHEET
Sphenoidal Electrode Placement with Fluoroscopy**

Indications for the Procedure: The purpose of this procedure is to place electrodes beneath the skull base, in order to monitor electroencephalogram (EEG) recording in patients with seizure disorders.

Description of the Procedure: The patient is placed on his/her back and the skin of the right side of the face is cleaned with an antiseptic that contains iodine. With a small needle, a puncture (stick) is made in the skin, and the deeper tissues of the right side of the face are numbed with lidocaine, an anesthetic drug (numbing medication). Using X-ray guidance, a thin needle with an electrode is placed into the soft tissues of the base of the skull, underneath the part of the brain called the temporal lobe. The needle is removed and the electrode remains in place. The electrode is secured with sterile strips of tape and bandage. The same procedure is repeated on the left side of the face. X-ray pictures are then taken to record the location of the electrodes. At the end of the procedure, the patient is returned to his or her hospital room for observation.

Risks of the Procedure: Serious complications from this procedure are rare. There may be bleeding or infection, pain at the puncture site or within the soft tissues at the base of the brain in the face, or facial weakness.

Alternatives to the Procedure: The alternative to this procedure is sphenoidal electrode placement without fluoroscopy.

Probable Consequences of Refusing the Procedure: Consequences may include not being able to place the electrode in the correct position and therefore, possibly not obtaining EEG recordings of parts of the temporal lobes. This may make it more difficult for the patient's doctors to determine where the patient's seizures are coming from.

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.