



American
Association of
Neurological
Surgeons

**American Association of Neurological Surgeons
and
Congress of Neurological Surgeons**



Position Statement

on

**Performing and Interpreting Diagnostic Imaging Procedures on the
Nervous System by Neurological Surgeons**

Background

In some practice settings, neurological surgeons have been denied reimbursement for performing and/or interpreting diagnostic imaging procedures related to the nervous system. In addition, attempts are being made to prevent neurosurgeons from owning and operating certain imaging equipment. These efforts have challenged neurological surgeons' qualifications in this field, attempting to refute the training, expertise and ability of neurosurgeons to appropriately perform and interpret diagnostic imaging procedures on the nervous system. Neurosurgeons are exceptionally expert in neuroanatomy, and as such they have the singular ability to compare neuroradiologic images to actual pathology on a daily basis. The following statement sets forth the qualifications of neurosurgeons as they pertain to diagnostic imaging procedures.

Position Statement

A thorough understanding of neuroanatomy, neuropathology, neuropathophysiology and neuroimaging is essential to ensure that patients receive high quality, reliable and precise diagnostic imaging studies of the nervous system. Neurological surgeons receive extensive training in these key areas and are therefore qualified and certified to perform diagnostic imaging procedures on the nervous system. Central nervous system includes brain, spinal cord, and vertebral column (spine).

Rationale

- 1) The definition of neurological surgery includes the "...prevention, diagnosis, evaluation, treatment, critical care and rehabilitation of disorders of the central, peripheral and autonomic nervous systems..." Neuroimaging is a key component of diagnosing, evaluating and treating disorders of the nervous system.
- 2) Neurological surgery residency programs have three to six month rotations in neuroradiology, where residents learn advanced neuroradiology techniques including interventional neuroradiology and neuroangiography. In addition, neurological surgery residents perform and interpret patient-specific films on a daily basis during their clinical rotations. Throughout the typical six year residency, a neurological surgery resident interprets thousands of diagnostic imaging studies.
- 3) More than 15 percent of the written board examination for neurological surgery is exclusively dedicated to the interpretation of neuroimaging. Topics include: plain radiographs (films), angiography, myelography, CT, MRI, nuclear medicine scans, therapeutic radiology,

ultrasonography, PET imaging and others. Neuroimaging is also a key part of the oral board examination and the maintenance of certification requirements for neurological surgeons.

- 4) Practicing neurosurgeons make clinical decisions based on their own “wet reads” performed in the trauma center and operating room everyday. In addition, practicing neurosurgeons read and interpret diagnostic imaging studies, including intra-operative MR, every day when making a diagnosis, planning treatment and evaluating the outcome of a specific treatment.
- 5) The interpretation of a diagnostic imaging study is more accurate when a patient’s history, clinical symptoms and pathophysiology of the disease are known. Only the patient’s treating neurosurgeon has this information.
- 6) Recognizing the complexity of neuroimaging, the Residency Review Commission for Radiology and American Board of Radiology have developed extended training programs and certifications for radiologists with additional qualifications in neuroradiology. Unfortunately, the services of neuroradiologists are unavailable in many parts of the country and in many facilities.
- 7) The American Medical Association, through its CPT (Current Procedural Terminology) services has clearly stated on numerous occasions that no section of the CPT book of procedural codes is reserved exclusively for or limited to any specialty. Any physician may report any CPT procedural code as long as the service has been performed and documented by the physician.