





Five Things Physicians and Patients Should Question

1

Don't administer steroids after severe traumatic brain injury.

Steroids are not recommended for improving outcomes or reducing intracranial pressure in patients with traumatic brain injury. High dose steroid administration may increase complication risk and may produce increased mortality.

2

Don't obtain imaging (plain radiographs, magnetic resonance imaging, computed tomography [CT], or other advanced imaging) of the spine in patients with non-specific acute low back pain and without red flags.

Imaging of the spine in patients with acute low back pain during the early phase of symptom onset is unnecessary. Red flags that may indicate that early imaging of the spine is required can include neurological deficit such as weakness or numbness, any bowel or bladder dysfunction, fever, history of cancer, history of intravenous drug use, immunosuppression, steroid use, history of osteoporosis or worsening symptoms.

3

Don't routinely obtain CT scanning of children with mild head injuries.

A mild traumatic brain injury is a temporary loss of neurologic function resulting from a blunt blow to the head or an acceleration/deceleration injury. There are predictors that a more severe injury has occurred and CT scanning may be appropriate. In patients younger than age two, a persistent altered mental status, non-frontal scalp hematoma, loss of consciousness for five seconds or more, severe injury mechanism, palpable skull fracture or not acting normally according to the parent may be signs of a more serious injury. In patients older than two, prolonged abnormal mental status, any loss of consciousness, history of vomiting, severe injury mechanism, clinical signs of basilar skull fracture or severe headache may also necessitate CT imaging. Any patient with a traumatic injury to the head that has any neurologic deficits should also be imaged if no other cause can be determined.

4

Don't routinely screen for brain aneurysms in asymptomatic patients without a family or personal history of brain aneurysms, subarachnoid hemorrhage (SAH) or genetic disorders that may predispose to aneurysm formation.

Family history of aneurysmal SAH increases an individual's risk of harboring an aneurysm. Screening patients without a family history or without a personal history of SAH is not indicated.

5

Don't routinely use seizure prophylaxis in patients following ischemic stroke.

Seizures may complicate the clinical course of patients who have suffered a stroke. However, there is no evidence that using prophylactic antiepileptic drugs prevents seizure occurrence. For patients who suffer a seizure after a stroke, seizure treatment may be required.

These items are provided solely for information and educational purposes and are not intended as a substitute for consultation with a medical professional. Patients with any specific questions about the items on this list or their individual situation should consult their physician. This Choosing Wisely® document does not represent a "standard of care," nor is it intended as a fixed treatment protocol. It is anticipated that there will be patients who will require less or more treatment than the average. It is also acknowledged that in atypical cases, treatment falling outside this recommendation list will sometimes be necessary. This document should not be seen as prescribing the type, frequency or duration of intervention. Treatment should be based on the individual patient's need and physician's professional judgment. This document is designed to function as a guide and should not be used as the sole reason for denial of treatment and services. This document is not intended to expand or restrict a health care provider's scope of practice or to supersede applicable ethical standards or provisions of law, but to encourage discussion of these issues between physician and patient, encourage active patient participation in health care decision-making, and foster greater mutual understanding.

How This List Was Created

The American Association of Neurological Surgeons' (AANS) and Congress of Neurological Surgeons' (CNS) Quality Improvement Workgroup and Joint Guidelines Committee, which included representatives from the clinical subspecialties in neurosurgery, developed an initial draft list of *Choosing Wisely** recommendations, based on the scientific evidence, existing clinical practice and expert opinion. This list was then submitted to the leadership of the AANS/CNS clinical subspecialty sections (cerebrovascular, pain, pediatric neurosurgery, spine and peripheral nerve, stereotactic and functional, trauma and tumor) for review and feedback. In addition, we solicited feedback about the recommendations from the general membership of the AANS and CNS. The list was submitted to the AANS Board of Directors and CNS Executive Committee, which reviewed and approved the final set of *Choosing Wisely** recommendations.

The AANS and CNS disclosure and conflict of interest policies can be found at www.aans.org and www.cns.org.

Sources



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About the American Association of Neurological Surgeons and the Congress of Neurological Surgeons

The American Association of Neurological Surgeons (AANS), founded in 1931, and the Congress of Neurological Surgeons (CNS), founded in 1951, are the two largest scientific and educational associations for neurosurgical professionals in the world. These groups represent over 8,000 neurosurgeons worldwide. The AANS is dedicated to advancing the specialty of neurological surgery in order to promote the highest quality of patient care. The CNS exists to enhance health and improve lives worldwide through the



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advancement of education and scientific exchange. Neurological surgery is the medical specialty concerned with the prevention, diagnosis, treatment and rehabilitation of disorders that affect the entire nervous system, including the spinal column, spinal cord, brain and peripheral nerves.

For more information, please visit www.aans.org, www.cns.org or www.neurosurgeryblog.org.