



Five Things Physicians and Patients Should Question

1

Avoid routine testing for antiepileptic drug (AED) levels in people with epilepsy.

AED level testing should not be routinely ordered when seizures are well controlled, and no adverse effect is suspected. The reference ranges should not be used as a rigid framework. The effectiveness and tolerability of treatments should be determined by the clinical responses. AED levels should be ordered to address a specific question. Some examples include weight-based dosing adjustments in young children, adherence, suspected toxicity, and pregnant women.

2

Do not treat females of childbearing potential with Valproate if other effective treatments are available.

The risks to an unborn child from valproate (VPA) are significant enough to warrant avoiding this medication if at all possible. If VPA is deemed necessary, aim for lowest effective dose. Females on VPA should receive risk counseling prior to conception including possibility of major malformations from first trimester exposure, and long-term cognitive and behavioral effects (lower IQ and increased risk of autism spectrum disorder and ADHD) throughout pregnancy.

3

Do not routinely order electroencephalogram (EEG) as part of initial syncope work-up.

EEG will be negative in a large portion of patients with epilepsy, and may be positive in patients without epilepsy. False positive EEG findings commonly lead to unnecessary use of antiepileptic drugs and may delay the syncope diagnosis and treatment. EEGs are most helpful in specific situations when there is high pre-test probability for epilepsy based on history and exam, and clinical presentation.

4

Do not prescribe long-term treatment with antiepileptic drugs after withdrawal seizures.

Alcohol and other withdrawal seizures occur due to abrupt cessation in a person who is substance-dependent, and can usually be readily identified by the clinical scenario. Once the acute detoxification is complete, anti-epileptic drugs are not indicated. It is, however, important to identify scenarios where there is increased risk of epilepsy, such as prior epilepsy diagnosis, acute intoxication related brain injury, and seizures with history of alcohol use but without acute withdrawal.

5

Do not routinely perform brain imaging after acute seizure in patients with established epilepsy.

Unnecessary brain imaging increases radiation exposure and medical cost without benefit, yet is often done after habitual seizures when the patient is at baseline. Brain imaging should be considered in certain clinical situations, such as when there is seizure-related trauma or post-ictal deficits on exam.

How This List Was Created

The American Epilepsy Society (AES) and the AES Practice Management Committee (PMC) worked together to prepare the five statements from 2016–2018. The PMC met in person in December 2016 to use the ABIM Foundation’s Operating Principles for Clinician Organizations’ Participation in the *Choosing Wisely* Campaign to discuss and propose topics for further development. The PMC ultimately proposed seven potential topics for further discussion and tasked a subgroup of seven committee members to draft seven *Choosing Wisely* statements. Once drafted, each item was voted upon by the PMC subgroup for further inclusion. Voters were provided additional instructions to select the item for further inclusion if it had (1) clinical relevance, (2) clinical validity, and (3) clarity of concept. Voting occurred electronically. Two items were eliminated, and five items were selected for further and final development. The final five items were completed by individual PMC subgroup members. The entire PMC subgroup then reviewed each statement for final editing and final vote for submission to *Choosing Wisely*, based on the same criteria mentioned above. Items receiving at least six “yes” votes (among seven voters) were advanced and reformatted and edited by the Practice Committee Chair, Dr. Gabriel Martz, to adhere to the ABIM Foundation’s *Choosing Wisely* submission specifications. The PMC subgroup then re-evaluated items to ensure consistency of message after re-formatting, and again voted on each item individually for or against advancement for review and consideration of approval by the AES Council on Clinical Activities, AES Executive Committee, AES Board of Directors. The AES Board of Directors provided feedback and final approval of the five statements for submission to the ABIM Foundation for consideration of inclusion in the *Choosing Wisely* Campaign. The PMC will review the statements on an annual basis to ensure adherence to the Foundation’s Operating Principles and that the statements continue to be supported by generally accepted evidence and are applicable to current clinical practice.

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About the ABIM Foundation

The mission of the ABIM Foundation is to advance medical professionalism to improve the health care system. We achieve this by collaborating with physicians and physician leaders, medical trainees, health care delivery systems, payers, policymakers, consumer organizations and patients to foster a shared understanding of professionalism and how they can adopt the tenets of professionalism in practice.



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About the American Epilepsy Society

The American Epilepsy Society mission centers on sharing knowledge, fostering continuous learning, discovering and applying innovations, acting through partnerships, and supporting current and future generations of those focused on achieving our vision of eradicating epilepsy and its consequences. Education, research, clinical excellence, public education, and awareness—these initiatives all align in the service of this vision.



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