This is a summary of the American Academy of Neurology (AAN) guideline regarding efficacy of transcutaneous electric nerve stimulation (TENS) in the treatment of pain in neurologic disorders. Recommendations are presented for use of TENS in treating chronic low-back pain and painful diabetic neuropathy.

Please refer to the full guideline at www.aan.com for more information.

**CHRONIC LOW-BACK PAIN**

### What is the efficacy of TENS in the treatment of chronic low-back pain?

| Strong evidence | TENS is not recommended for the treatment of chronic low-back pain due to lack of proven efficacy (Level A*, two Class I studies). |

**PAINFUL DIABETIC NEUROPATHY**

### What is the efficacy of TENS in the treatment of painful diabetic neuropathy?

| Good evidence | TENS should be considered for the treatment of painful diabetic neuropathy (Level B, two Class II studies). |

**CLINICAL CONTEXT**

Many treatment options are commonly used for diabetic neuropathy, but there are presently no comparative studies of TENS to other treatment options.

*Classification of Recommendations: A = Established as effective, ineffective, or harmful (or established as useful/predictive or not useful/predictive) for the given condition in the specified population. (Level A rating requires at least two consistent Class I studies).*  
*B = Probably effective, ineffective, or harmful (or probably useful/predictive or not useful/predictive) for the given condition in the specified population. (Level B rating requires at least one Class I study or two consistent Class II studies.)*  
*C = Possibly effective, ineffective, or harmful (or possibly useful/predictive or not useful/predictive) for the given condition in the specified population. (Level C rating requires at least one Class II study or two consistent Class III studies.)*  
*U = Data inadequate or conflicting; given current knowledge, treatment (test, predictor) is unproven.  
*In exceptional cases, one convincing Class I study may suffice for an “A” recommendation if 1) all criteria are met, 2) the magnitude of effect is large (relative rate improved outcome >5 and the lower limit of the confidence interval is >2).  
*Classification of Evidence for Studies of Therapeutic Intervention: Class I = Prospective, randomized, controlled clinical trial with masked outcome assessment, in a representative population. The following are required: a) Primary outcome(s) is/are clearly defined; b) Exclusion/inclusion criteria are clearly defined; c) Adequate accounting for dropouts and crossovers with numbers sufficiently low to have minimal potential for bias; d) Relevant baseline characteristics are presented and substantially equivalent among treatment groups or there is appropriate statistical adjustment for differences. Class II = Prospective matched group cohort study in a representative population, with masked outcome assessment that meets a–d above OR a randomized controlled trial in a representative population that lacks one criterion a–d. Class III = All other controlled trials including well-defined natural history controls or patients serving as own controls in a representative population, where outcome assessment is independently assessed or independently derived by objective outcome measurement.**  
**Class IV = Evidence from uncontrolled studies, case series, case reports, or expert opinion.**  
**Objective outcome measurement: an outcome measure that is unlikely to be affected by an observer’s (patient, treating physician, investigator) expectation or bias (e.g., blood tests, administrative outcome data)**  

This is an educational service of the American Academy of Neurology (AAN). It is designed to provide members with evidence-based guideline recommendations to assist with decision-making in patient care. It is based on an assessment of current scientific and clinical information and is not intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physicians caring for the patient, based on the circumstances involved. Physicians are encouraged to review carefully the full AAN guidelines so they understand all recommendations associated with care of their patients.

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