AAN Evidence-Based Guideline Summary for CLINICIANS

TREATMENT OF POSTHERPETIC NEURALGIA

This is a summary of the American Academy of Neurology's guideline assessing treatments for postherpetic neuralgia. The guideline aims to determine which treatments decrease pain and improve quality of life for patients with postherpetic neuralgia. The guideline concludes that tricyclic antidepressants, gabapentin, pregabalin, opioids, and lidocaine patches were found to be effective in reducing the pain of postherpetic neuralgia.

Acute herpetic neuralgia is characterized as burning, aching, electric shock-like pain, or unbearable itching in association with the outbreak of a herpes zoster rash. Postherpetic neuralgia—pain that persists more than three months after resolution of the rash—is relatively common, affecting 10-15 percent of those with herpes zoster. Zoster-associated pain is used to describe the continuum of pain from acute herpes zoster to the development of postherpetic neuralgia.

Please refer to the full guideline for more information at www.aan.com/professionals/practice/index/cfm.

SUMMARY OF EVIDENCE-BASED GUIDELINE RECOMMENDATIONS FOR TREATMENT OF POSTHERPETIC NEURALGIA

Strong evidence supports

- Tricyclic antidepressants (amitriptyline, nortriptyline, desipramine, and maprotiline), gabapentin, pregabalin, opioids, and topical lidocaine patches are effective and should be used in the treatment of postherpetic neuralgia. **(Level A*, Class I and II**)**
- In countries where preservative-free intrathecal methylprednisolone is available, it may be considered in the treatment of postherpetic neuralgia. **(Level A, Class I and II)**

Good evidence supports

- There is limited evidence to support nortriptyline over amitriptyline because of fewer side effects, **(Level B, single Class II study)** and the data are insufficient to recommend one opioid over another. Amitriptyline has significant cardiac effects in the elderly when compared to nortriptyline and desipramine.
- Acupuncture, benzydamine cream, dextromethorphan, indomethacin, epidural methylprednisolone, epidural morphine sulfate, iontophoresis of vincristine, lorazepam, vitamin E, and zimelidine are NOT of benefit. **(Level B, Class II)**

Weak evidence supports

- Aspirin in cream is possibly effective in the relief of pain in patients with postherpetic neuralgia. **(Level C, Class II and III)** The magnitude of benefit of aspirin in cream is low, as is seen with capsaicin. **(Level A, Class I and II)**

There is insufficient evidence to support or refute

- The effectiveness of carbamazepine, nicardepine, biperiden, chlorprothixene, ketamine, He:Ne laser irradiation, intralesional triamcinolone, cryocautery, topical piroxicam, extract of *Ganoderma lucidum*, dorsal root entry zone lesions, and stellate ganglion block are unproven in the treatment of postherpetic neuralgia. **(Level U, single Class II study and Class IV studies)**
- There is insufficient evidence at this time to make any recommendations on the long-term effects of these treatments.

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TREATMENT CATEGORIES FOR POSTHERPETIC NEURALGIA

Group 1	Group 2	Group 3	Group 4
Medium to high efficacy, good strength of evidence, and low level of side effects	Lower efficacy than those listed in group 1, or limited strength of evidence, or side effect concerns	Evidence indicating no efficacy compared to placebo	Reports of benefit limited to class IV studies
• Gabapentin • Lidocaine patch • Oxycodone or morphine sulfate, controlled release • Pregabalin • Tricyclic antidepressants	• Aspirin in cream or ointment • Capsaicin, topical • Methylprednisolone, intrathecal†	• Acupuncture • Benzydamine cream • Dextromethorphan • Indomethacin • Lorazepam • Methylprednisolone, epidural • Vincristine iontophoresis • Vitamin E • Zimelidine	• Biperidin • Carbamazepine • Chlorprothixene • Cryocautery • Dorsal root entry zone lesion • Extract of *Ganoderma lucidum* • He:Ne laser irradiation • Ketamine • Methylprednisolone, iontophoresis • Morphine sulfate, epidural • Nicardepine • Piroxicam, topical • Stellate ganglion block • Triamcinolone, intralesional

†While there were no severe adverse effects in the reviewed studies, there is potential for chemical meningitis and arachnoiditis with the use of intrathecal methylprednisolone. Methylprednisolone is not approved by the US FDA for intrathecal use in this indication. The concurrent use of intrathecal lidocaine carries the risk of hypotension and respiratory depression. Therefore, these injections are best given by experienced medical personnel in a hospital setting.

***Recommendation Level:** *"Level"* refers to the strength of the practice recommendation based on the reviewed literature. **Level A:** Established as effective, ineffective or harmful for the given condition in the specified population. Level A rating requires at least one convincing class I study or at least two consistent, convincing class II studies. **Level B:** Probably effective, ineffective or harmful for the given condition in the specified population. Level B rating requires at least one convincing class II study or at least three consistent class III studies. **Level C:** Possibly effective, ineffective or harmful for the given condition in the specified population. Level C rating requires at least two convincing and consistent class III studies. **Level U:** Data inadequate or conflicting. Given current knowledge, treatment is unproven. ****Class of Evidence for Therapy:** *"Class"* refers to the quality of research methods employed in the reviewed literature. **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 drop-outs and cross-overs 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 RCT in a representative population that lacks one criteria 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 independent of patient treatment. **Class IV:** Evidence from uncontrolled studies, case series, case reports, or expert opinion.

This is an educational service of the American Academy of Neurology. 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 physician caring for the patient, based on the circumstances involved. Physicians are encouraged to carefully review the full AAN guidelines so they understand all recommendations associated with care of these patients.

Copies of this summary and additional companion tools are available at *www.aan.com/professionals/practice/index.cfm* or through AAN Member Services at (800) 879-1960.

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