Drugs similar in efficacy for neuropathic pain in diabetes

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(HealthDay)—In the treatment of patients with chronic diabetic peripheral neuropathic pain (DPNP), there are no significant differences in pain-relief efficacy between amitriptyline, duloxetine, and pregabalin; however, pregabalin improves sleep continuity and duloxetine improves daytime functioning, according to research published online Sept. 18 in *Diabetes Care*.

Julia Boyle, Ph.D., of the University of Surrey in the United Kingdom, and colleagues conducted a randomized, double-blind, parallel-group study involving 83 type 1 and type 2 diabetes patients with chronic DPNP who were treated with a placebo run-in followed by 14 days of lower-dose therapy, then 14 days of higher-dose therapy, with either amitriptyline, duloxetine, or pregabalin. The authors sought to evaluate the impact of these medications on pain, polysomnographic sleep, daytime functioning, and quality of life.

The researchers found that all three medications improved pain compared with placebo, but no statistically significant between-group difference was observed. Pregabalin was associated with improved sleep continuity, while duloxetine increased wake and reduced total sleep time. Despite its negative effect on sleep, duloxetine improved central nervous system arousal and performance on sensory motor tasks. Pregabalin was associated with a significantly higher number of adverse events compared with the other drugs.

"In conclusion, amitriptyline, duloxetine, and pregabalin were equally

effective analgesic medications in patients with DPNP. Daytime function was relatively unaffected by drug treatment, and all three drugs were well tolerated," the authors write. "In this short, 28-day dosing study, there was no evidence of improved quality of life (Short Form 36) even with the sleep enhancement observed with pregabalin."

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More information: Abstract
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