

Pregabalin in Painful Diabetic Peripheral Neuropathy

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Pregabalin is a novel neuromodulating agent developed for, among other indications, the treatment of painful diabetic peripheral neuropathy (DPN). From a mechanistic perspective, the potential of pregabalin to affect neuropathic pain at multiple levels of the neuraxis by modulating sensitisation in the peripheral nervous system and CNS is particularly attractive.

In three large clinical trials in a total of 729 patients, oral pregabalin at fixed dosages of 300 or 600 mg/day was superior to placebo in relieving pain associated with DPN. Together, these studies constitute one of the largest groups of patients with DPN treated with a single agent where the results have been unequivocally in favour of the active drug, in this case pregabalin.

The fact that pregabalin may be titrated to the effective target dose of 300 or 600 mg/day over 1 week is in sharp contrast to some currently available agents, which have to be titrated over several weeks. In addition to improving pain relief (primary endpoint), pregabalin also significantly improved Short-Form McGill Pain Questionnaire scores and sleep disturbance (both secondary endpoints) as early as 1 week after starting treatment, suggesting that associated pain symptoms and, in particular, insomnia are likely to improve.

Pregabalin appears to be generally well tolerated, with mostly mild-to-moderate, primarily CNS-related, adverse effects, e.g. dizziness and somnolence. Lack of drug-drug interactions is an especially important characteristic of pregabalin, since patients with DPN are on many concomitant medications for the treatment of diabetes mellitus and its comorbidities.

In summary, pregabalin is an important treatment option for the relief of painful DPN symptoms and their negative impact on patient well-being.