Intensive Monitoring of Pregabalin; results from an Observational, Web-Based, Prospective Cohort Study in the Netherlands Using Patients as a Source of Information

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Abstract

Background: Pregabalin is one of the first drugs registered for the treatment of neuropathic pain. It is also indicated as adjuvant therapy in the treatment of epilepsy and for generalized anxiety disorder. Pregabalin is a GABA analogue and exerts its effect by binding to the a2-d subunit of voltage-gated calcium channels, leading to a decreased synaptic release of neurotransmitters.

Objective: To gain insight into the safety and user profile of pregabalin in daily practice, reported by patients via a web-based intensive monitoring system based at the Netherlands Pharmacovigilance Centre Lareb.

Methods: Lareb Intensive Monitoring is an observational prospective cohort study with no limiting inclusion or exclusion criteria compared with clinical trials. First-time users of pregabalin were identified through the first prescription signal in intensive monitoring participating pharmacies between 1 August 2006 and 31 January 2008. Eligible patients received information about the pregabalin study in the pharmacy. When registering online, patient characteristics and information about pregabalin and other concomitant drug use were collected. After registration, the patient received questionnaires by e-mail 2 weeks, 6 weeks, 3 months and 6 months after the start of pregabalin. In these questionnaires, possible adverse drug reactions (ADRs) were addressed. Reactions not labelled in the Summary of Product Characteristics of pregabalin, and reactions that were labelled but were interesting for other reasons, were analysed on a case-by-case basis.

Results: In total, 1373 patients filled in the online registration form. The average age of participants was 54.5 years (range 11–89), with 58.0% being female. The indication for pregabalin use was neuropathic pain in 85.9% of participants. The average daily dose was 201 mg, and 80.5% of all users used pregabalin capsule 75 mg. All patients who registered for the study were sent a questionnaire; 1051 (76.5%) patients filled in at least one questionnaire. There were no statistically significant differences found regarding sex, age or daily dosage between this latter group compared with the patients who registered for the study but did not fill in a questionnaire. At least one possible ADR was reported by 69.3% of patients and serious ADRs were reported by 11 patients. The five most frequently reported possible ADRs were dizziness, somnolence, feeling drunk, fatigue and increased weight. Four associations were further analysed. Headache was analysed because of its high frequency. The time to onset ranged from a few hours to 5 months, with a median time to onset of 2 days. In 15 reports the headache passed without withdrawing the drug, and in ten cases the headache disappeared after drug withdrawal. Upper abdominal pain, a possible drug interaction between pregabalin and blood glucose-lowering agents, and suicidal ideation were considered to be signals.

Conclusions: Web-based intensive monitoring is an observational prospective cohort study. It will therefore provide a picture of the use of pregabalin and its ADRs in daily practice. This study indicates that pregabalin is a relatively safe drug. Eleven patients (<1.0%) experienced a serious ADR while using the drug. The most frequently reported possible ADRs correspond with the reactions most frequently reported during clinical trials. The study demonstrates that a web-based intensive monitoring system can contribute to greater knowledge about a reaction, such as headache, with quantification and information about latencies and time course of the reaction. It can also detect signals worth further investigation, such as abdominal pain and possible interaction with oral antidiabetics.

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