

Synergism between gabapentin?tramadol in experimental diabetic neuropathic pain

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© 2018 Société Française de Pharmacologie et de Thérapeutique Neuropathic pain is associated with several conditions such as surgery, cancer, and diabetes and can be induced experimentally. Among the drugs used as monotherapy are gabapentin and tramadol. The purpose of this study was to evaluate the coadministration of gabapentin and tramadol, by isobolographic analysis, in three different algesiometric assays in experimental diabetic neuropathic pain induced by streptozocin in mice. In all the behavioral tests, gabapentin or tramadol produced a dose-dependent antinociception and their coadministration resulted in a positive interaction. This effect can be explained by principles of multimodal analgesia, whereby the different mechanisms of action of each drug contribute to the combined effect in a supra-additive manner. The findings of the present study suggest that the combination of gabapentin and tramadol could be a useful strategy for the treatment of pain induced by diabetic neuro