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Letter to the Editor

Dear Dr. Walson:

With great interest we read the paper by Kang et al[1] on the analgesic effects of ketamine infusion therapy in Korean patients with neuropathic pain.

Since 1994, various articles based on case reports, pilot studies, and clinical trials have documented the value and tolerability of ketamine for the treatment of neuropathic pain states.[2]

Due to its unique mechanism of action, ketamine is a highly interesting drug for treatment-resistant neuropathic pain syndromes, administered via various routes. Long periods of decreased pain can be triggered by relatively short courses of infusion. Dutch anesthesiologists found that complex regional pain syndrome type 1 (CRPS-1) patients with severe pain treated for 4 days with a continuous infusion of low-dose S-ketamine (N = 30) had a clinically relevant and statistically significant reduction in pain lasting for up to 11 weeks compared with patients receiving placebo ($P < 0.001$). However, one of the troublesome clinical aspects of treatment using intravenous ketamine is the reemergence of pain after some weeks and, therefore, the necessity to readminister treatment.[3]

Various topical racemic ketamine formulations, such as gels, ointments, and creams, in a dose range from 0.25% to 10.0%, have been compounded, and the efficacy and tolerability has been documented in a number of papers.[4–7] In a 2009 double-blind, placebo-controlled, crossover study, ketamine 10% in pluronic lecithin organogel was associated with alleviating allodynia in CRPS-1 patients without detectable blood levels of ketamine.[8] This might suggest a topical mechanism of action, or a suboptimal dose regimen.

In our clinic, we gained experience prescribing 10% racemic ketamine cream in CRPS-1 patients with treatment-refractory pain. Anecdotally, we have noted significant pain reduction with this intervention without additional adverse effects, including without negative effects on blood pressure. Well-designed studies evaluating the use of a topical 10% ketamine cream are necessary, as such treatment may be more easily tolerated and less expensive than ketamine infusion therapy.

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