

The Immediate Effect of Combined Lidocaine and Ketamine Infusion on Neuropathic Pain: A 5-year Retrospective Observational Study

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Introduction/Aim

Chronic pain is the leading cause of disability worldwide and costs our healthcare systems more than any other practice area. This study observes the relationship between an infused dose of lidocaine and ketamine, and the extent of immediate pain relief in patients with neuropathic pain (including diabetic neuropathy), fibromyalgia, and headache.

This is a retrospective cohort review, conducted in a single outpatient center.

This project has been conditionally approved by Veritas IRB Inc.

Methods

670 subjects (508 females, 162 males) were treated at Allevio Pain Management by Dr. Safakish from March 2013 to May 2017, were included. In total, we analyzed 670 patients and 3,741 infusions.

Results

The mean age was 53.2 ± 13.4 , mean weight (kg) was 80.7 ± 20.3 . Half of the patients had neuropathic pain (51.8%), followed by fibromyalgia (40.9%), complex regional pain syndrome (CRPS) (6.2%), and chronic headache (1.0%).

The median number of infusions was 3. 38% of patients received more than five infusions for their condition.

Univariable analysis showed that only lidocaine and ketamine dosages had a statistically significant impact on pain improvement.

Conclusions

We have shown that in outpatients with chronic neuropathic pain, the immediate analgesic effects of intravenous lidocaine and ketamine are impressive.

The impact of lidocaine dosage (mg/kg) on pain relief showed borderline significance, while an increase in ketamine dosage (mg) was still associated with clinically meaningful pain relief.

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