Letters to the Editor

The Use of Intravenous Lidocaine in Trigeminal Neuralgia

To the Editor:

We read with great interest the review of Kosharskyy et al (1) about the use of intravenous infusions in chronic pain management. Intravenous infusions of certain pharmacologic agents have been known to provide substantial pain relief in patients with various chronic painful conditions and their review focused on non-opiate intravenous infusions that have been utilized for chronic painful disorders. This is a well-written and well-structured review that was necessary in the literature and, therefore, we congratulate the authors for undertaking this project.

We would like to add the potential use of intravenous lidocaine in the management of intractable trigeminal neuralgia (TN). TN is an occasionally difficult-to-treat pain that pain specialists face that can become severely disabling for the sufferer. Because of the very low incidence of intractable TN it is impractical to perform a randomized placebo-controlled trial. Because of this difficulty a crossover design of trials is usually selected. This is a very good alternative way to study different drug types and/or doses when the study sample is small. Our group has performed a crossover trial and is currently analyzing the data of a prospective study, which has involved 23 patients with TN treated with either intravenous lidocaine (on a standardized dose of 5 mgs per kilogram) or placebo. Thus, each patient participated in 4 sessions, receiving 2 active and 2 placebo treatments in a random sequence.

We have already presented our preliminary results, which have involved the first 10 patients. We have concluded that lidocaine showed significant analgesic effect in patients with TN and it has reduced the paroxysmal episodes of pain for 24 hours (2).

Intravenous lidocaine infusions are gaining acceptance in a variety of pain-management settings (3). Future clinical research should focus on identifying the effective dosage of lidocaine alone, magnesium alone, and lidocaine-magnesium combination to be used in the treatment of TN.

Evmorfia Stavropoulou, MD
1st Anaesthesiology Clinic
Pain Relief and Palliative Care Unit
Aretaieion University Hospital
University of Athens, Greece
E-mail: efistavropoulou@yahoo.gr

Panagiotis Zis, MD, PhD
Department of Neurology
Evangelismos General Hospital
Athens, Greece
E-mail: takiszis@gmail.com

Athina Vadalouca MD, PhD
1st Anaesthesiology Clinic
Pain Relief and Palliative Care Unit
Aretaieion University Hospital
University of Athens, Greece
E-mail: athinajv@ath.forthnet.gr

References
In response

We appreciate the comments by Dr. Stavropoulou. Despite new advances in treating trigeminal neuralgia, including antiepileptic medications, radiofrequency ablation of the Gasserian ganglion, and gamma knife and microvascular decompression surgery, several patients still experience severe and intractable pain. New multimodal treatments including intravenous infusions would be welcomed.

In a recently published case series by Arai YC1 et al (1) 9 patients with intractable trigeminal neuralgia were successfully treated by using a combination intravenous infusion of 1.2 g magnesium and 100 mg lidocaine for one hour, once a week for 3 weeks. All treated patients showed excellent pain relief.

We are looking forward to the results of Dr. Stavropoulou’s ongoing trial.

Boleslav (Boris) Kosharskyy, MD
Director of Anesthesia for Joint Replacement Center
Associate Director Pain Center
Department of Anesthesiology/Pain Medicine
Assistant Professor of Anesthesiology
Montefiore Medical Center
Albert Einstein College of Medicine
E-mail: Bkoshars@montefiore.org

References: