Letter to the Editor

RE: Ganglion Impar Alcohol Ablation for Nonmalignant Coccyx Pain

TO THE EDITOR:

We commend your journal and authors Yousef and Monroe on the very educational and interesting article titled: "A Medically Challenging Case of Ganglion Impar Neurolysis in a Patient with Significant Medical Comorbidities, Coccydynia, and Severe Disability" (1). This article is of substantial clinical importance, especially regarding the usefulness of ganglion Impar, (ganglion of Walther), chemical ablation for non-malignant coccyx pain. There are a few additional points that warrant clarification.

Firstly, we ask if the authors could please specify the concentration of ethyl alcohol that was injected. This will allow readers to calculate the effective concentration. For instance, the 4 mL of alcohol was mixed with 4 mL of 1% Lidocaine; so, if it was 4 mL of dehydrated, nearly 100% alcohol, then the effective alcohol concentration would have been 50%.

Secondly, although the paper states that they injected "denatured" alcohol, can we please offer the authors the opportunity to clarify that they presumably meant dehydrated—rather than denatured—which would be for industrial use?

Thirdly, we agree with the authors that adding corticosteroid to the initial, nonablation injection can help treat underlying inflammatory processes and prolong the relief obtained by the anesthetic block.

Lastly, I greatly appreciate the acknowledgment that the ganglion Impar injections were performed using "the Foye technique." Still, I would clarify that the ganglion impar injection techniques, which I was first to publish were trans-discal approaches between coccygeal bones 1 and 2 (2), or between coccygeal

bones 2 and 3 (3), as well as a para-coccygeal corkscrew approach (4). Yousef and Monroe report that they used an approach via the sacrococcygeal joint (SCJ), and in the spirit of acknowledgment we should point out that the SCJ approach was first published by Wemm and Saberski (5).

Thank you again to your journal for publishing this interesting and important article. We hope that our comments will provide additional insights into this topic.

Patrick M. Foye, MD
Professor, Physical Medicine and Rehabilitation,
Director, Coccyx Pain Center,
Rutgers New Jersey Medical School
90 Bergen St, D.O.C. Suite 3100
Newark, NJ, 07103-2425
E-mail: doctor.foye@gmail.com

Gerard J. D'Onofrio, BS, MBA
Department of Physical Medicine and Rehabilitation,
Rutgers New Jersey Medical School
90 Bergen St, D.O.C. Suite 3100
Newark, NJ, 07103-2425
E-mail: gerard.donofrio27@gmail.com

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In Response to Dr. Foye's Letter to the Editor

We would like to thank Dr. Foye for his comments and clarifications on techniques. We believe ganglion impar injections, as well as ablations are underutilized for coccydynia. Hopefully, more interventionalists will consider adding this to their armamentarium.

Dr. Foye is correct, we erroneously reported our agent as "denatured" rather than "dehydrated" ethanol. Denatured ethanol is used industrially and in commercial products such as hand sanitizers and cosmetics, additives range from methanol to simple bittering agents. The addition of these agents is to render the ethanol undrinkable due to toxicity or palatability, allowing industrial usage while avoiding taxes on consumable ethanol. Dehydrated ethanol is produced for medical use and consists of ethanol with a low water content by volume.

Our dehydrated ethanol was 98% ethyl alcohol by volume. Our injected solution was mixed with an equal volume of 1% lidocaine and dehydrated ethanol yielding a 49% ethyl alcohol by volume. However, due to the diagnostic lidocaine injected immediately prior, the final concentration may have been as low as 33% by volume.

Of note, a follow-up was planned with the patient to address his shoulder pain, which was exacerbated due to his increased activity. Unfortunately, since publication the patient suffered a significant cardiac event and passed away. Per his family, his pain had remained well controlled, he frequently requested to be out of bed, and was an active participant in physical therapy.

Thank you again Dr. Foye for your comments and clarifications, as well as significant contributions to the treatment of coccydynia.

Kerolos Yousef, DO Geisinger Medical Center 100 North Academy Ave Danville, PA 17822 E-mail: kyousefdo@gmail.com

Brian Monroe, MD Geisinger Medical Center 100 North Academy Ave Danville, PA 17822

E-mail: brmonroe@geisinger.edu