

Peer Review File

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Reviewer A:

Thank you for the opportunity to review " Nerve And Ganglion Blocks In The Management Of Headache Disorders: A Narrative Review." A few suggestions below may improve the quality of your manuscript. Some comments are questions for thought and do not necessarily need to be implemented.

Comment 1. This is a very thorough review of common peripheral nerve blocks with respect to anatomy and physiology, mechanism of action, techniques to block, their adverse events and pharmacology. The authors provide a strong rationale for considering nerve blocks over drug therapies. This review provides guidance on performing nerve blocks which will bring more awareness to these procedures in the medical community.

Reply 1: Thank you for the words of appreciation

Comment 2. Reference is made to the "sphenopalatine nerve block." Please change this to "sphenopalatine ganglion block" as this is commonly referred to in the literature. The sphenopalatine is a ganglion (i.e. bundle of nerves) and not a single nerve.

Reply 2: Acknowledged and reconciled

Comment 3. 3.4 Technique: For the sphenopalatine ganglion block, no reference was made to the "Method of Barré" which simply involves intranasal lidocaine to block the sphenopalatine ganglion. The patient simply lies in a supine position with their head turned 30 degrees to the side of the headache and a trained physician administers intranasal droplets of lidocaine. This technique has been used in several clinical trials and may be the simplest and least invasive. Please consider mentioning this technique.

Reply 3: Acknowledged and reconciled. We also have included a very brief description of the timeline of how the techniques evolved. (Within the limits of the word count)

Comment 4. Is there a reason you do not include trigger point injections in your review? Trigger point injections are used in emergency medicine and some clinic practice to alleviate headache pain by blocking nerves surrounding the muscle at various trigger points in the head and neck region.

Reply 4: Trigger point injections (myofascial) are not considered as traditional "nerve blocks" in the orofacial pain/headache literature. We believe that this entity is a separate topic in our current JOMA special edition series.

Comment 5. In your literature review, did you find any reviews which study the effectiveness of any of these nerve blocks? i.e. effectiveness for pain relief at various

time points. This may be useful information to include.

Reply 5: As much as the authors could see, the indications and efficacy rates for individual blocks varied wildly. Eg: SPG blocks (PMID: 21956040)

Comment 6. Which setting does your review appeal to? Is this targeted towards emergency physicians or outpatient clinics which manage headache disorders, or a variety of specialties which may see headache presentations?

Reply 6: The review is meant for clinicians, pain management physicians in the context of the new specialty of Orofacial Pain. It certainly can apply to emergency physicians in a hospital setting.

Comment 7. Headache classification: consider adding reference to primary headache disorders (tension, migraine, cluster) in the background section.

Reply 7: The IHS classification is referenced in the introduction session.

Reviewer B:

This review is needed for payors and healthcare systems to understand the need and benefit of nerve blocks.

Edits recommended:

Comment 1: In abstract, Background and Objective:

Sentence 11-12 - please refine your primary objective instead of "look at" , review the evidence, risks, techniques, landmark of nerve blocks for headache disorders and neuralgias (and/or others)

Reply 1: Acknowledged and reconciled

Comment 2: For methods in abstract: Please state that this is a narrative review, and those databases were "searched" instead of the databases used were....

Reply 2: Acknowledged and reconciled

Comment 3: Introduction sentence 14-15, please revise your objective to be more specific and clear - we evaluated the technique, pharmacology, adverse reactions of each nerve block through our literature search...

Reply 3: Acknowledged and reconciled

Great adding neuralgia and the topic of convergence.

Comment 4: Thank you for writing this.

Reply 4: Thank you for the words of appreciation