



When Should Headache Specialists Hold a Needle? The Role of Botulinum Toxin Injections and Occipital Nerve Blocks

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The management of patients with primary headaches, particularly migraines, involves taking a detailed history, accurately diagnosing the condition, evaluating the patient, confirming the diagnosis with tests, and selecting appropriate acute and prophylactic medications. Injectable treatments are typically reserved for patients who have not responded to pharmacological treatments or for those for whom injectable therapies have proven more effective. Therefore, when should injection therapy be recommended?

The absolute indication for botulinum toxin injections is chronic migraine. This issue features the article “What a neurologist should know about functional anatomy for botulinum toxin injections in the head, face, and neck: a practical perspective,” which thoroughly explains the complexity of the muscles and associated target nerves in the frontal, temporal, and occipital areas, as well as the basic functional anatomy.¹ The diagnostic criteria for chronic migraine include experiencing headaches for at least 3 months, with 15 or more headache days per month, and at least 8 of those days meeting the criteria for migraine. Additionally, botulinum toxin injections may be considered for patients with trigeminal neuralgia, short-lasting unilateral neuralgiform headache attacks, and high-frequency

episodic migraine, but only after a thorough explanation and consent, and if other pharmacological therapies prove ineffective or cause severe adverse effects.²

The absolute indications for occipital nerve blocks with local anesthetics are cluster headaches (sometimes with a steroid) and occipital neuralgia. Nerve blocks can also be performed with local anesthetics on the trigeminal nerve or its branches, such as the supraorbital and auriculo-temporal nerves, to manage trigeminal neuralgia, herpes zoster, migraine, or various headache and cranial pain disorders.³ Compared to botulinum toxin injections, nerve blocks are less expensive, require fewer injections, and can be administered more frequently—weekly or monthly, depending on the patient’s needs. The article “Bilateral greater occipital nerve block for preventing the onabotulinumtoxinA wear-off phenomenon in the treatment of chronic migraine: a case series of 12 patients” discusses the use of an additional greater occipital nerve block in the 2nd month following botulinum toxin injections to mitigate the wear-off phenomenon.^{4,5} Therefore, nerve blocks and botulinum toxin injections can be administered either on the same day or on separate days.⁵

What are some strategies to alleviate the pain of injections or to encourage patient acceptance of them? Patients

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who experience anxiety, allodynia, or who are at a high risk of seizures or fainting may be reluctant to undergo injectable treatments. Nonetheless, injectable treatments can improve the overall effectiveness of the therapy and provide a quiet moment to converse with the patient.

Simple warnings before the injection, such as “It’s going to sting,” and conversation during the injection are common techniques professionals use to alleviate the discomfort associated with injections. They also emphasize careful monitoring for hemostasis and ensuring the patient is relaxed to minimize the risk of bleeding or bruising. Once patients experience the benefits of nerve block therapy, they may be more open to considering botulinum toxin or other injectable treatments. A headache specialist might frequently use a needle in their practice, especially for patients without contraindications.

AVAILABILITY OF DATA AND MATERIAL

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