

Concerns regarding greater occipital nerve blockade as a substitute for withdrawal in medication-overuse headache

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We read with great interest the article by Karaođlan and Kılınç,^[1] “The comparative clinical effectiveness of withdrawal treatment with greater occipital nerve block at the C2 level with dexamethasone or bupivacaine in medication-overuse headache,” published in the Turkish Journal of Neurology. The authors are to be commended for exploring new therapeutic strategies in this difficult-to-treat disorder. Nevertheless, we wish to highlight two important concerns that, in our view, limit the interpretation of the study’s findings.

First, the design compared a standard withdrawal protocol (Group A) with two groups (Groups B and C) that did not undergo withdrawal but instead received single or repeated greater occipital nerve (GON) blocks. However, withdrawal of the overused medication remains the established first-line treatment for medication-overuse headache, as emphasized in the International Classification of Headache Disorders, third edition, and international consensus guidelines.^[2,3] Previous randomized controlled trials have evaluated GON blockade as an adjunct to withdrawal, not as a replacement.^[4] Therefore, the present design conflates fundamentally different treatment strategies, making it difficult to ascribe benefit directly to the injection. Second, the concentration of bupivacaine used in Groups B and C (0.125%) is

substantially lower than that commonly reported for GON blocks, where 0.25 to 0.5% bupivacaine or 1 to 2% lidocaine are typical.^[5] Without a clear rationale for this subtherapeutic dose, it is uncertain whether the reported effects reflect a true nerve block or instead placebo responses, systemic corticosteroid activity, or natural variation in headache frequency.

In summary, while this study contributes to discussion of medication-overuse headache management, we suggest that future trials should assess GON blockade as an adjunct to standardized withdrawal, using established anesthetic concentrations and longer follow-up to clarify both efficacy and safety.

Data Sharing Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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