



Limitations of VAS-Only Pain Evaluation in Carpal Tunnel Syndrome Studies

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Dear Editor,

We read with interest the recent article by Badıl Gülođlu et al. [1] evaluating ultrasound-guided 5% dextrose prolotherapy and corticosteroid injection in mild to moderate carpal tunnel syndrome (CTS). Their study adds important clinical insight into two commonly used injection techniques and demonstrates symptomatic improvement supported by ultrasonographic evaluation, an approach consistent with prior imaging-based CTS work in the literature, including that of Bulut and Yıldırım [2], who highlighted the diagnostic usefulness of ultrasonography in mild–moderate CTS.

While these contributions are valuable, the exclusive use of the visual analogue scale (VAS) for pain assessment limits interpretation. VAS reflects overall pain intensity but does not distinguish between nociceptive pain and neuropathic sensory disturbances (burning, tingling, dysesthesia, or electric-shock–like sensations), which constitute a primary symptomatic component of CTS rather than nociceptive complaints and therefore may underestimate treatment-related changes in neuropathic symptom domains rather than treatment efficacy itself.

This issue becomes even more relevant given the biological differences between the two treatments compared by Badıl Gülođlu et al. [1]. Dextrose prolotherapy is proposed to support perineural repair, whereas corticosteroids primarily reduce local inflammation and swelling. These mechanisms may influence neuropathic and nociceptive components differently. Without structured neuropathic assessment, potential differential effects of intervention on neuropathic symptoms may not be adequately captured.

To our knowledge, this is one of the few letters emphasizing the limitation of VAS-only assessment in comparative CTS injection studies. From a clinical standpoint, evidence from our prospective work evaluating local corticosteroid therapy in CTS showed significant improvements in DN4 and LANSS scores, even when reductions in VAS were modest [3]. This finding suggests that neuropathic symptom responses may demonstrate a differential clinical pattern compared with global pain intensity. Incorporating validated neuropathic pain tools into future CTS injection trials would therefore enrich interpretation, clarify treatment-specific sensory effects, and support more individualized management strategies.

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We congratulate the authors for their valuable contribution and hope this methodological perspective encourages broader adoption of comprehensive sensory assessment in CTS research.

Yours sincerely,

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