

## Letters to the Editor



## Comments on the Role of Ultrasound-Guided Injection in the Management of Meralgia Paresthetica

**TO THE EDITOR:**

With great interest I read the article recently published in *Pain Physician* journal in the May 2020 issue entitled ‘Conservative Treatment Versus Ultrasound-Guided Injection in the Management of Meralgia Paresthetica: A Randomized Controlled Trial’ by Selda Kılıç (1). I want to congratulate the authors for their valuable contributions. The study aims to evaluate the efficacy of ultrasound (US)-guided lateral femoral cutaneous nerve (LFCN) injections in the management of meralgia paresthetica (MP) by comparing it with transcutaneous electrical nerve stimulation (TENS) therapy and sham TENS therapy. MP may result from either an entrapment neuropathy or a neuroma of the LFCN. The disease process can be either spontaneous or iatrogenic. Iatrogenic MP has been found to occur after a number of orthopaedic procedures, such as anterior iliac-crest bone-graft harvesting and anterior pelvic procedures. Prone positioning for spine surgery has also been implicated (2).

In the present study, authors have included LFCN entrapment confirmed by clinical (Tinel sign and sensory examination) and electrophysiological findings. Patients with secondary entrapment neuropathy (e.g., diabetes, inflammatory arthritis, hypothyroidism) were excluded. It would be prudent to know whether authors encountered any patients of iatrogenic MP and MP due to neuroma and were these patients included in the study.

The technique of US guided LFCN blocks used by authors has been described previously by Tagliafico et al (3) in which the anterior-superior iliac spine (ASIS) is the reference point examined and visualized by the US probe. It has been mentioned by authors that the LFCN is seen as a small structure in the short axis view lateral to the ASIS. The same has been described as figure legend of Fig. 1. However, there is no labelling of muscular planes of sartorius and tensor fasciae latae

in the figure. We agree with the authors that position of LFCN is subject to anatomical variations as numerous studies related to variability in the anatomy of the LFCN have been reported in the literature (4). One such study by Lee et al (5) concludes that most of the LFCNs (90.3%) passed under the inguinal ligament from the pelvis to the thigh medial to the medial tip of the ASIS and lateral to the femoral artery. The mean distance from the medial tip of the ASIS to the LFCN was 8.8 mm (range -4.3 to 40.2 mm). In approximately 90% of cases, the LFCN lay < 2 cm from the medial tip of the ASIS, whereas, in 76% of cases, it was < 1 cm away. Also, in about 10% of cases, the LFCN was located lateral to the medial tip of the ASIS, passing under the lateral end of the inguinal ligament, but near to the midpoint of the ASIS (5). In the present study, it is not clear whether LFCN was located “lateral” to ASIS in all 17 patients who received US-guided LFCN injections (Group 1). The visualization of LFCN lateral to the ASIS is a relatively rare anatomical variation (6). Since the study highlights the importance of US-guided LFCN injections, it is pragmatic to mention various anatomical variants encountered by authors during the intervention.

The authors mentioned positive electrophysiological findings in addition to clinical signs as their inclusion criteria. It would be greatly helpful if the parameters and cut-off values of these electrophysiological findings are mentioned. It would help in clinical correlation of its importance in patient selection for conservative treatment or alternative modalities.

The authors have used a combination of local steroid and local anesthetic, prilocaine 2%, for US-guided LFCN blocks. They have diligently explained the mechanism of action of steroid and local anesthetic. It will be appreciable if the basis of selection of the intermediate acting local anesthetic Prilocaine and its implication on duration of pain relief at time points 15th day and 1

month is explained. Can we negate the possibility of variation in results if long acting agents like bupivacaine or ropivacaine were used instead?

The conclusion of this study as given is that US-guided LFCN injections and TENS may be therapeutic options for MP treatment; however, for patients with neuropathic pain symptoms, US-guided LFCN injection might be a safe and an alternative treatment option to conservative treatment. We thank authors for their recommendations with few points to be considered. Firstly, US-guided LFCN injections may be a safe and alternative option for patients with neuropathic pain, but is it better in terms of pain relief as there was no statistical difference in inter-group visual analog scale (VAS) score analysis? Also the PainDETECT questionnaire has 4 questions out of 7 that quantify pain in relation to neuropathic symptoms (7). Secondly, intragroup analysis suggests that there was improvement in VAS scores and PainDETECT scores in all 3 groups. It means

that group 3 patients, who received sham-TENS, also experienced statistically significant pain relief since it has been mentioned that conservative therapy is successful in 4 to 6 months in 85% of cases (8-10). It is not clear whether any group of patients, especially group 3 received conservative therapy, such as nonspecific physical therapy or any pharmacological therapy.

The authors state that longer-term randomized controlled trials with evaluation of local corticosteroid injections at different time points and longer follow-up should be performed in the future. We agree with their opinion and understand the limitations of present study.

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