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Letter to the Editor

The effect of Tecar therapy on neurological disorders and nerve conduction velocity of lower limbs in peripheral neuropathy of type 2 diabetic patients: A six-week follow-up study

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Diabetes mellitus is the most prevalent metabolic disorder occurring in individuals across the globe.[1] The neurological complications associated with diabetes mellitus are severe and require effective treatment measures to prevent the extent of such complications affecting the health-related quality of life of individuals.[2]

We read the article by Niajalili et al.[3] with attention and would like to congratulate them for their valuable research, which includes the effectiveness of infrared radiations and Tecar therapy on neurological disorders and tibial nerve conduction velocity among patients with diabetic peripheral neuropathy. Although the study was well planned, there are a few ambiguities we would want to address.

First, the authors should focus on the hypothesis of the study, which was not mentioned in the article. In our view, the authors should use a two-tailed hypothesis, for which "the effect of Tecar therapy might have significant differences in improving neurological disorders and nerve conduction velocity of lower limbs in individuals with type 2 diabetic peripheral neuropathy" would be an alternative hypothesis, and the null hypothesis would be "the effect of Tecar therapy might not have significant differences in improving neurological disorders and nerve conduction velocity of lower limbs in individuals with type 2 diabetic peripheral neuropathy."[4]

Second, the range of age (18 to 78 years) is vast in inclusion criteria, which reduces the probability of recording accurate effects of the intervention. Moreover, peripheral diabetic neuropathy takes about five to seven years to develop in diabetes mellitus; the authors included individuals with a minimum of one year of diabetic peripheral neuropathy, which was not significant.[5]

Furthermore, in sample size estimation, the value of effect size (f) should be mentioned, as it is important to calculate the sample size for future studies. In addition, the reader cannot understand the blinding of the individuals and whether it was the therapist who was blinded or the participants. The authors claim justification based on other literature and state the clear limitations of their study in the discussion session.

Nonetheless, the information provided by the authors regarding the concealment of allocation, method of randomization, methodology, and reporting of results is clear and structured. Finally, we believe that addressing the concerns raised in our letter could help shed light on the findings of the current investigation. We acknowledge the challenges involved in conducting experimental research investigations and congratulate the authors on their incisive study.

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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