

Comments on the Article Efficacy of High Intensity Laser Versus Ultrasound Therapy in the Management of Patients with Lateral Epicondylitis

Stasinopoulos Dimitrios*

Department of Physiotherapy, University of West Attica, Greece

*Corresponding Author: Stasinopoulos Dimitrios, Department of Physiotherapy, University of West Attica, Member of Laboratory of Neuromuscular and Cardiovascular Study of Motion (LANECASM), Athens, Greece.

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I read very carefully the article "Efficacy of high intensity laser versus ultrasound therapy in the management of patients with lateral epicondylitis" by Ali., et al. [1] and I would like to report the following:

- 1. They used the term lateral epicondylitis (LE). However, lateral elbow tendinopathy (LET) seems to be the most appropriate term to use in clinical practice because terms such as LE make reference to inappropriate etiological, anatomical, and pathophysiological terms [2].
- 2. They reported that physiotherapy includes ultrasound (US), low level laser therapy (LLLT), extracorporeal shockwave, transcutaneous electrical nerve stimulation (TENS) or pulsed electromagnetic fields [1]. Physiotherapy includes not only the above reported electrotherapeutic modalities but also non electrotherapeutic modalities such as exercise programs, soft tissue techniques, acupuncture and manual therapy [3].
- 3. Patients with local tenderness on palpation over the lateral epicondyle were participated in the study [1]. However, LET patients complain of pain on the facet of the lateral epicondyle when palpated [4].
- 4. They did not mention the method of randomization.
- 5. They did not mention why patients were treated day after day for 12 sessions.
- 6. The effectiveness of ultrasound therapy is based on its parameters [5]. The authors did not mention the following about the ultrasound parameters:
 - The delivery mode.
 - Which transducer was used?
 - The movement or not of the transducer.
 - The coupling medium.
 - The treatment interval.

- The effective radiated area.
- The energy density, the total energy and the dose per treatment [6].
- Why they used this intensity (1.5W/cm²).
- Why they used this duration of treatment (5 minutes).
- 7. High Intensity Laser Therapy (HILT) has a wavelength of 1064 nm [7]. The HILT had 808 and 915 nm in the present study [1].
- 8. HILT is used for analgesic and for biostimulative effects [8]. They did not mention the effect of HILT in the study.
- 9. They did not mention why HILT was used with these parameters. There are no guidelines on the parameters (dose, frequency, duration) of HILT [9].
- 10. The Patient-Rated Tennis Elbow Evaluation (PRTEE) Questionnaire is a reliable and valid measure when administered to patients with LET [10]. It should be explained in the discussion section why the authors of the study did not use it as an outcome measure.
- 11. The most effective and promising physiotherapy treatment for LET is an exercise program. Electrotherapeutic modalities such as HILT and therapeutic ultrasound have also been recommended in the management of LET. Electrotherapeutic modalities do not use as a substitute for exercise but as a supplement to exercise program [11].

A debate on the above topics is most welcome as existing aspects may contribute to misunderstanding and inappropriate treatment.

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39

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