

## REVIEWER'S REPORT

Manuscript No.: IJAR-51815

Date: 24-05-2025

**Title:** ☐ **Efficacy of Transcutaneous Electrical Nerve Stimulation and Soft Splint Therapy in the Treatment of Patients with Temporomandibular Joint Disc Displacement with Reduction** ☐ **A Comparative Study** ☐

### Recommendation:

**Accept as it is.....YES.....**

Accept after minor revision.....

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality			√	
Techn. Quality		√		
Clarity			√	
Significance		√		

**Reviewer's Name:** Dr Aamina

**Reviewer's Decision about Paper:** **Recommended for Publication.**

**Comments** (*Use additional pages, if required*)

### Reviewer's Comment / Report

#### 1. Relevance and Importance

The study addresses an important clinical issue related to temporomandibular joint (TMJ) disorders, specifically disc displacement with reduction (DDWR), a common condition affecting patients' quality of life. By comparing two treatment modalities—Transcutaneous Electrical Nerve Stimulation (TENS) and soft splint therapy—the research provides valuable insights for optimizing management strategies in this area.

#### 2. Abstract Content

The abstract clearly outlines the study's background, aims, methodology, and key findings. It identifies the existing variability in treatment approaches as the motivation and succinctly presents the comparative results favoring TENS therapy. The concise presentation of objectives, methods, and outcomes enables quick comprehension of the study's scope and significance.

#### 3. Study Design and Methodology

The use of a randomized controlled trial design strengthens the study's validity and the reliability of its

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conclusions. The inclusion of relevant clinical parameters—pain intensity, mouth opening, and masticatory muscle tenderness—as outcome measures aligns well with the therapeutic goals for DDWR. Weekly monitoring over four weeks provides a reasonable follow-up period to observe treatment effects.

### 4. Statistical Analysis

The application of independent t-tests for inter-group comparisons and ANOVA for intra-group analyses is appropriate for the data and research questions. This statistical approach allows for both the evaluation of differences between groups and the assessment of changes within groups over time.

### 5. Results and Interpretation

The results highlight the superior efficacy of TENS therapy compared to splint therapy, with significant improvements noted in all measured clinical parameters. The minimal change observed in the splint therapy group adds credibility to the conclusion favoring TENS. The findings are clinically relevant and have potential implications for treatment protocols.

### 6. Clarity and Presentation

The abstract is well-written and logically structured, facilitating easy understanding of the study's context and outcomes. Terminology is precise and appropriate for the target clinical and academic audience.

### 7. Contribution to Clinical Practice

By identifying TENS therapy as a promising treatment modality for TMJ disc displacement with reduction, this study contributes practical knowledge that can guide clinicians in selecting effective interventions. The focus on non-invasive therapy options aligns with patient-centered care priorities.

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### Overall Assessment

This study offers a well-conducted and clearly reported comparison of TENS and splint therapy for TMJ disc displacement with reduction. The randomized controlled design, relevant outcome measures, and appropriate statistical analysis strengthen the credibility of the findings. The clear demonstration of TENS therapy's benefits supports its use in clinical practice and adds to the existing body of evidence in TMJ disorder management. The manuscript is suitable for publication in journals focusing on dentistry, physical therapy, pain management, or orofacial disorders.