

REVIEWER'S REPORT

Manuscript No.: IJAR-53501

Date: 23-08-2025

Title: “ Comparison of the Surgical Outcomes of Variable-Angle Locking Compression Plating and Ligamentotaxis for Intra-Articular Distal Radius Fractures: A Retrospective Study at a Rural Teaching Hospital in India.” ”

Recommendation:

Accept as it isYES.....

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

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

Reviewer Name: Dr Aamina

Reviewer's Comment for Publication.

Abstract Evaluation:

The abstract provides a comprehensive overview of the study. The background establishes the clinical significance of distal radius fractures, linking their rising incidence to aging populations and high-energy trauma. The aim of comparing variable-angle locking compression plating with ligamentotaxis is clearly stated. The methodology is straightforward, describing a retrospective hospital-based study with 40 patients, divided equally into two treatment groups. The results section highlights sex distribution and notes statistically significant outcome differences, with ligamentotaxis yielding superior results at six months. The conclusion reinforces this finding, emphasizing external fixation and ligamentotaxis as more effective for comminuted intra-articular and unstable extra-articular wrist injuries. The keywords are appropriate and capture the study's scope.

Introduction Evaluation:

The introduction clearly identifies intra-articular distal radius fractures as a challenging clinical entity compared to extra-articular fractures. It highlights the importance of anatomical restoration in guiding surgical treatment and references the association between radiographic arthrosis and clinical outcomes. The narrative acknowledges variability in reported outcomes, underscoring the need for careful assessment of fracture displacement, stability, reducibility, and associated soft tissue injuries. The framing is clinically relevant and sets the rationale for comparing surgical modalities.

Study Design and Methodology:

The retrospective study design is explicitly mentioned, and patient grouping is clearly described. The choice of elective ligamentotaxis and variable-angle locking compression plating as interventions is well-

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justified within the scope of intra-articular distal radius fracture management. The study setting at a rural teaching hospital adds contextual significance, particularly for regions with limited access to advanced surgical resources.

Results Evaluation:

The results are concise, noting male predominance across both groups and a statistically significant difference in postoperative outcomes at six months. The finding that ligamentotaxis provided superior functional outcomes compared to variable-angle locking compression plating is central to the study's conclusions.

Conclusion Evaluation:

The conclusion succinctly summarizes the findings, emphasizing that ligamentotaxis offers better anatomical and functional outcomes in comminuted intra-articular and unstable extra-articular fractures. It also contextualizes that outcomes are influenced not only by the surgical method but also by concomitant soft tissue injury and the degree of successful articular repair.

Overall Assessment:

The manuscript is well-structured and clinically relevant, addressing a significant orthopedic challenge in fracture management. The comparison between two established surgical techniques provides valuable insights into treatment planning. The retrospective study, though limited in scale, contributes meaningfully to the literature on distal radius fracture management, particularly in the context of rural healthcare settings.