

REVIEWER'S REPORT

Manuscript No.: IJAR-53710

Date: 06/09/2025

Title: *Outcome of High Tibial Osteotomy for Medial Compartment Osteoarthritis Knee*

Recommendation:

- ✓ Accept as it is
 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. S. K. Nath

Date: 06/09/2025

Reviewer's Comment for Publication:

The study concludes that medial opening wedge high tibial osteotomy is a safe and effective joint-preserving surgical option for patients with medial compartment osteoarthritis, particularly in younger, active individuals with varus deformity. The procedure results in significant pain relief, functional improvement, and correction of limb alignment, with minimal complications. This supports OWHTO's role in delaying the progression of osteoarthritis and postponing or avoiding total knee arthroplasty.

Reviewer's Comment / Report

Strengths

- **Clinical Relevance:** Addresses a common orthopedic issue (knee osteoarthritis) in a relatively young population, emphasizing joint preservation.
- **Methodology:** Prospective design with clear inclusion and exclusion criteria, thorough preoperative planning, and standardized surgical and rehabilitation protocols.
- **Outcome Measures:** Utilizes validated scoring systems (VAS, KSS, JOA) alongside radiological assessments to evaluate both clinical and structural results.
- **Follow-up and Data Collection:** Multiple postoperative follow-up points (6 weeks, 3 months, 6 months, 12 months) provide a comprehensive view of recovery and outcomes.
- **Radiological and Functional Correlation:** Demonstrates significant improvements in alignment and knee function, supporting the efficacy of OWHTO.

Weaknesses

- **Sample Size:** The study involves only 30 patients, which limits the generalizability of the findings.
- **Control Group:** Absence of a comparison group (e.g., patients undergoing lateral closing wedge osteotomy or non-operative management) reduces the strength of conclusions regarding relative efficacy.
- **Short-term Follow-up:** Although improvements are evident within a year, longer-term outcomes such as durability of correction and progression of osteoarthritis are not addressed.
- **Limited Diversity:** The majority of patients had a BMI under 30 and were within a narrow age range, which may not represent the broader population affected by MCOA.
- **Complication Reporting:** While some complications are listed, the overall complication rate appears low; more detailed discussion on long-term complications or revision rates would strengthen the study.