



Early and Progressive Rehab after TKA Optimizes Range of Motion

Cross Fire Debates – Total Knees

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Disclosures

- Enovis: Consultant

Position Statement

- Early mobilization (POD 0–1) + progressive, structured PT optimizes knee ROM after TKA.
- Benefits extend to faster function, shorter LOS, and fewer immobility-related complications.
- Feasible and safe within ERAS pathways and multimodal analgesia.

Practical Protocol

- POD0–1: Sit-to-stand, ambulation WBAT, active-assisted ROM, quad sets, heel slides
- Weeks 1–4: Supervised PT 2–3 × /week, progressive strengthening, gait normalization
- ROM goals: $\geq 90^\circ$ @ 2 weeks, $110\text{--}120^\circ$ @ 4–6 weeks, and full extension ASAP
- Adjuncts: NMES, cryotherapy, multimodal analgesia

Why Range of Motion Matters

- Range of motion (ROM) serves as a key indicator of long-term satisfaction and functional outcomes.
- Limited early ROM can lead to arthrofibrosis, the need for manipulation under anesthesia (MUA), and decreased gait efficiency.
- Patients often require 105 - 110° for ADLs

Mechanism of Benefit



Prevents intra-articular adhesions and capsular contracture

Enhances quadriceps activation and neuromuscular control

Promotes confidence and independence in early recovery phase

Safety and Risk Management



Modern analgesia enables safe early mobilization

No increase in wound complications, falls, or readmissions with early rehab

Tailored protocols mitigate risk in frail or comorbid patients

Early Progressive Rehabilitation

- High intensity vs low intensity rehab after TKA improves strength and functional performance without harm to ROM (Bade et al J Orthop Sports Phy Th 2011)
- Start rehab <24 hours: shorter LOS, better pain, and flexion vs 48 – 72 hour start (Labraca et al Clin Rehab 2011)

Common Concerns

“Pain will be too severe.”

- Multimodal analgesia enables tolerable early PT; motion reduces stiffness-related pain.

“Risk to wound/healing.”

- Early supervised rehab not associated with higher adverse events and LOS and function improve

“Swelling will worsen.”

- Activity + elevation/ice improve lymphatic return; transient swelling is outweighed by functional gains.

“We can catch up later.”

- Early weeks are a critical window; delaying increases risk of persistent flexion deficits and MUA. ROM plateaus at 3 months

The Verdict: Move Early, Move Strong



Early rehab = equivalent
ROM, faster recovery

Safe, effective, and
patient-centered

Tailored approach
important

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A photograph of the Hoag Orthopedic Institute building, a modern multi-story structure with a prominent arched entrance. Several tall palm trees are visible in the foreground and background. The image is overlaid with a semi-transparent dark blue filter.

Thank You

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