

Subchondral Insufficiency Fracture Fixation (OssioBar/KneeBar) Rehabilitation Protocol

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Patient: _____ **DOS:** _____

Surgeon Parameters

Site: ☐ Femur ☐ Tibia	Other Precautions:
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Remodeling of the subchondral bone is the rate-limiting factor: weight bearing and strengthening start early, impact waits at least 12 wks, and return to sport follows the surveillance MRI. If a meniscus root repair was performed, the Meniscus Root Repair protocol governs weight bearing and flexion. Therapist to use clinical judgment to individualize exercise selection and pace within each phase.

Phase	Goals	Precautions	Treatment Focus
Phase 1 Weeks 0–2	Goals - Control pain and effusion - Full ROM - Quad activation; SLR without lag	Precautions - WBAT with crutches for 2 wks, then wean as pain and quad function allow - No brace and no ROM limit - No impact	Treatment Focus - Heel slides, extension hangs, patellar mobilization - Bike (high seat → normal height) - Quad sets, SLR (NMES if needed), short-arc → long-arc quads - Leg press, hamstring curls, step-ups at a comfortable height
► Advance to Phase 2 when: minimal effusion, full extension, flexion $\geq 120^\circ$, SLR without lag, walking without crutches.			
Phase 2 Weeks 2–6	Goals - Normal gait and full ROM - Double-leg strength foundation	Precautions - No impact - Weight-bearing pain or effusion → reduce load	Treatment Focus - Squat progression: chair → wall → body-weight squats - Leg press, bridges, calf raises; BFR if available from day 14 - Balance
► Advance to Phase 3 when: normal gait, full ROM, no effusion, double-leg strengthening pain-free.			
Phase 3 Weeks 6–12	Goals - Single-leg strength - Non-impact conditioning	Precautions No running or jumping	Treatment Focus - Step-downs, split squat, single-leg press - Swimming, cycling, elliptical, rowing as swelling and pain allow
► Advance to Phase 4 when: ≥ 12 wks, no pain or effusion with daily activity, quad LSI $\geq 80\%$, surgeon clearance (MRI at ≈ 3 months if ordered).			
Phase 4 Weeks 12–24	Goals - Impact progression: jumping, then running - Plyometrics and scripted sport drills	Precautions - Impact under PT guidance once strength is adequate; return of weight-bearing pain → stop and contact the surgeon - Unpredictable drills and live play not before 24 wks and the 6-month MRI	Treatment Focus - Landing → jogging progression; plyometrics - Agility and scripted sport-specific drills - Heavy strength and power work
► Full Release (typically 5-6 months): no pain or swelling, full ROM, strength $\geq 90\%$ of contralateral, surveillance MRI reviewed by the surgeon, cleared by physician.			

Thank you for taking care of our patient.

This protocol serves as a general guideline and outline only. Our team defers to the clinical judgment and expertise of the treating physical therapist to make appropriate adjustments and modifications based on the individual patient's presentation, progress, and response to treatment. For any questions regarding this protocol, please contact Dr. Wollenman directly at (561) 215 – 0184.