Jones Fracture Fixation

Physical Therapy Protocol · Intramedullary Screw Fixation, 5th Metatarsal

Modeled on the Illinois Bone & Joint Institute Jones fracture rehabilitation protocol after intramedullary screw fixation, with return-to-play benchmarks informed by a 22-year collegiate athlete series (Orthopaedic Journal of Sports Medicine, 2020). Progression should be correlated with radiographic healing.

AT A GLANCE

TIMELINE	10-16+ weeks of structured rehab; full recovery 6-12 months, and swelling may persist 6-12 months
WEIGHT BEARING	NWB ~2 weeks post-op (foot may rest on floor for balance); graded WB in boot from week 2-3; FWB in regular shoe by ~6 weeks
KEY MILESTONES	Suture removal 10-14 days; boot-free gait ~6 weeks; low-impact conditioning weeks 7-10; hopping/skipping drills deferred to ~16 weeks
RETURN TO ACTIVITY	Sport-specific rehab from week 10; return to sport commonly 8-12+ weeks with radiographic healing and surgeon clearance; earlier return increases refracture risk

KEY PRECAUTIONS

- Refracture and nonunion risk is real in zone II/III fractures: do not accelerate impact loading ahead of radiographic healing, and report any recurrence of lateral border foot pain immediately.
- Limit dorsiflexion stretching to the first point of resistance during early resistance band work; avoid aggressive lateral-column loading (cutting, pivoting) until cleared.
- A stiff-soled shoe or carbon plate/orthosis offloading the lateral column is commonly used during return to impact, per surgeon.
- Monitor gait for compensations (e.g., knee hyperextension) during boot weaning and retrain as needed.

PHASED REHABILITATION

PHASE 1 — PROTECTION & EARLY MOTION	Weeks 0-3
GOALS	• Protect fixation • Edema and pain control • Maintain hip, knee, and ankle mobility
INTERVENTIONS	• NWB with crutches ~2 weeks; foot may rest on floor when sitting or standing • Elevation and edema management; suture removal 10-14 days • Ankle AROM as tolerated (pumps, circles) • Hip and knee ROM and strengthening exercises (SLR program, hamstring curls) • Upper body and uninvolved-limb conditioning
CRITERIA TO ADVANCE	• Incision healed, sutures removed • Pain and edema controlled • Surgeon clearance to begin WB in boot

PHASE 2 — GRADED WEIGHT BEARING IN BOOT	Weeks 3-6
GOALS	• Progress weight bearing in boot to full • Restore ankle ROM and initiate resisted work
INTERVENTIONS	• Graded WB progression in boot, initiated ~2 weeks post-op, advancing toward FWB • AROM ankle in all planes; gentle resistance band strengthening with DF limited to first point of resistance • Light foot massage and retrograde edema techniques • Foot intrinsic work and arch doming • Stationary bike in boot for conditioning (per surgeon)
CRITERIA TO ADVANCE	• FWB in boot without pain • Minimal edema response to WB progression • Radiographic evidence of interval healing per surgeon

PHASE 3 — SHOE TRANSITION & STRENGTHENING	Weeks 7-10
GOALS	• FWB in regular shoe with normalized gait • Progressive foot/ankle and proximal strengthening • Low-impact conditioning
INTERVENTIONS	• Transition to regular (stiff-soled) shoe by ~6 weeks; gait retraining out of boot • Ankle strengthening in PF, DF, inversion, and eversion; calf raise progression • Core, hip, and knee strengthening • Manual mobilization including subtalar joint mobilization as needed • Low-impact conditioning: swimming, biking • Balance and proprioceptive training (single-leg stance, wobble board)
CRITERIA TO ADVANCE	• Normalized gait in shoe on all surfaces • Pain-free single-leg heel raise progression • No lateral column pain with daily activity

Guideline only — individualize per intraoperative findings and patient response. Questions: contact Dr. Pettit's office.

PHASE 4 — RETURN TO IMPACT & SPORT	Weeks 10-16+
GOALS	• Sport/recreation-specific rehabilitation • Graded return to impact with refracture-risk management
INTERVENTIONS	• Sport-specific drills and progressive dynamic loading from week 10 • Wobble board progressions and eccentric ankle work • Interval walk/jog program, then running progression per symptoms and healing • Hopping and skipping drills deferred to ~16 weeks; then cutting and change-of-direction work • Continue stiff-soled shoe/orthosis strategy for lateral column offloading per surgeon
CRITERIA TO ADVANCE	• Radiographic union or advanced healing per surgeon • Hop testing and heel-rise symmetry approaching >=90% LSI • No pain over the 5th metatarsal with impact drills • Surgeon clearance for unrestricted sport (commonly 8-12+ weeks)

GUIDING PRINCIPLES

This protocol follows criterion-based progression over rigid time-based advancement; phased rehabilitation balancing tissue healing with controlled stress application; objective milestones (ROM, strength LSI, functional testing) to guide phase transitions; individualization based on surgical findings, tissue quality, and patient factors; and ongoing surgeon–therapist communication throughout recovery.

REFERENCES

1. Illinois Bone & Joint Institute. Jones Fracture Rehabilitation Protocol. https://www.ibji.com/uploads/editor/doctors/33774e3b91adfd1103f49ae8b236ffefa3ec03c7.pdf

2. Early Return to Play After Intramedullary Screw Fixation of Acute Jones Fractures in Collegiate Athletes: 22-Year Experience. Orthop J Sports Med. 2020;8(4). https://journals.sagepub.com/doi/pdf/10.1177/2325967120912423

For clinical use by licensed physical therapists treating patients of Robert Pettit, MD. This document is a rehabilitation guideline, not a substitute for clinical judgment. Progression must be individualized based on intraoperative findings, tissue quality, and patient response. Scan the QR code for the current version of this protocol.