

Rehabilitation Protocol: Humeral Shaft Fracture Repair

Phase 1 (Weeks 0-2)

- **Sling:** Sling as needed for support. Remove sling regularly to work on elbow range of motion.
- **Range of Motion:** Active/Passive elbow and shoulder range of motion
- **Therapeutic Exercises:**
 - 1 lb. lifting restriction with operative arm
 - Codman Exercises/Pendulums
 - Elbow/Wrist/Hand Range of Motion and Grip Strengthening
 - Isometric Scapular Stabilization
- Heat/Ice before and after PT sessions

Phase 2 (Weeks 2-8)

- **Sling:** Discontinue sling at 2 weeks post-op
- **Range of Motion:**
 - Continue active/passive ROM for shoulder and elbow
 - Target full range of motion by 6 weeks post-op.
- **Therapeutic Exercises**
 - Continue exercises from Phase 1
 - Maintain 1 lb. lifting restriction until 6 weeks post-op
 - Stationary bicycle/trainer
 - May jog once more comfortable (avoid uneven terrain)
 - At 6 weeks, advance to 5 lb. lifting restriction
- Modalities per PT discretion

Phase 3 (Weeks 8-12)

- **Range of Motion:** Full motion at shoulder and elbow
- **Therapeutic Exercises**
 - Advance resistance/strengthening as tolerated: isometrics → therabands → light weights
- Modalities per PT discretion
- Return to outdoor road cycling, running
 - Avoid mountain biking, trail running, climbing, skiing/snowboarding activities

Phase 4 (After Week 12)

- **Range of Motion:** Full without discomfort
- **Therapeutic Exercises:**
 - Continue to advance strengthening without restriction
- Modalities per PT discretion
- Once cleared by Dr. Gross (usually no earlier than Weeks 12-16), may return to team sports, mountain biking, climbing, skiing/snowboarding, etc.