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| **Table 1. General post-procedural recommendations per phase of healing** | | |
| **Phase of healing** | **Timeframe** | **Restrictions/rehabilitation** |
| Phase I: Inflammatory phase | Days 0-5 | * Relative rest * Avoid excessive loading, consider NWB or PWB * Consider bracing to minimize ROM and provide protection * Avoid NSAIDs; use alternative pain management |
| Phase II: Proliferative phase | Day 5 – Week 6 | Early proliferative phase (day 5 – week 2)   * Full WB with or without protection * Active ROM * Initiate gentle stretching program * Avoid NSAIDs; use alternative pain management   Late proliferative phase (weeks 2-6)   * Full WB without protective device * Stretching program: adding “dynamic” stretching and passive ROM * Progressive strengthening program starting with high-repetition isometric exercises and progressing to eccentric exercises closer to the end of this phase * Avoid NSAIDs; use alternative pain management |
| Phase III: Remodeling phase | Week 6 and beyond | * Proprioceptive training and sport-specific exercises * Return to sport/activity |
| *NWB*, non-weight bearing;  *PWB*, partial weight bearing; *WB*, weight bearing;  *ROM*, range of motion; *NSAID*, Nonsteroidal anti-inflammatory drug | | |

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| **Table 2. Achilles tendinopathy (insertional or mid-substance): rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * NWB with crutches in CAM boot * Avoid stretching into ankle dorsiflexion (for insertional tendinopathy) | * Rest * Begin gentle active ankle ROM * Gait training with crutches |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * PWB with crutches in CAM boot (pain-limited) | * Rest * Continue gentle active ankle ROM * Begin core strengthening * Initiate lower limb strengthening in NWB * Gait training for PWB with crutches * Upper body aerobic and strength exercises |
| Weeks 2-4 | * No use of NSAIDs or ice for 4 weeks * Week 2: WBAT, CAM boot for community ambulation * Avoid Painful exercises with pain >3/10 | * Continue active ankle ROM and joint mobilization as needed * Initiate gentle ankle dorsiflexion stretching * Begin isometric ankle strengthening * PWB 🡪 WBAT, gait training for WBAT in CAM boot without crutches * Continue core strengthening * Begin non-impact aerobic exercise (stationary bike, anti-gravity treadmill or pool for walking once incision is healed and cleared by physician) |
| Weeks 4-6 | * Avoid abrupt increases in tendon stress with exercise, lifting, or high-impact activity, such as running, jumping, and heavy weightlifting * Avoid extreme dorsiflexion (for insertional tendinopathy) | * Progressive ankle strengthening with resistance bands * Gait training progressing to independent * Global lower limb strengthening: bridges, mini-squat, step-ups * Double and single limb balance/proprioception exercises * Continue core strengthening * Aerobic training: stationary bike, walking program when gait mechanics have returned to normal |
| Phase III: Remodeling phase | Weeks 6+ | * Avoid painful activities/exercises of pain >3/10 * Avoid extreme dorsiflexion (for insertional tendinopathy) | * Increase loading capacity for lower limb strengthening exercises and core exercises * Continue balance/proprioceptive training * Begin double and single limb strengthening on leg press * Plyometric, agility, and work/sport-specific training * Gradual return to work/sport progression |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *NWB*, non-weight bearing; *CAM,* Controlled Ankle Movement; P*WB*, partial weight bearing; *ROM*, range of motion | | | |

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| **Table 3. Plantar fasciitis: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * NWB with crutches in CAM boot * Avoid stretching into dorsiflexion | * Rest, elevate foot above heart * Begin gentle active ankle ROM * Day 4: may begin isometric exercises (toe crunches) |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * PWB with crutches in CAM boot (pain limited) | * Continue gentle active ankle ROM * Begin core strengthening * Initiate lower limb NWB strengthening * Can begin upper body aerobic and strengthening exercises |
| Weeks 2-4 | * No use of NSAIDs or ice for 4 weeks * Week 3: WBAT in CAM boot, use crutches as needed | * Continue active ankle ROM and joint mobilization as needed * Initiate gentle ankle dorsiflexion stretching * Begin isometric ankle strengthening * Lower limb strengthening, PWB 🡪 WBAT * Begin non-impact aerobic exercise (stationary bike, anti-gravity treadmill or pool for walking once incision is healed and cleared by physician) * Continue core strengthening |
| Weeks 4-6 | * Avoid pain >3/10 during exercise or prolonged walking | * Progressive strengthening * Gait training progressing to independent * Continue aerobic training * Begin functional strengthening * Begin balance and proprioception exercises * Continue core strengthening |
| Phase III: Remodeling phase | Weeks 6+ | * Avoid pain >3/10 during exercise or prolonged walking | * Increase loading capacity for lower limb strengthening exercises and core exercises * Continue balance/proprioceptive training * Begin double and single limb strengthening on leg press * Plyometric, agility, and work/sport-specific training * Gradual return to work/sport progression |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *NWB*, non-weight bearing; *CAM,* Controlled Ankle Movement; *PWB*, partial weight bearing; *WBAT*, weight bearing as tolerated; *ROM*, range of motion | | | |

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| **Table 4. Quadriceps or patellar tendon: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * NWB with crutches for 4 days * Knee immobilizer for 1 week | * Rest * Begin gentle active knee ROM * Gait training with crutches |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks | * Rest * Continue active knee ROM * Begin core strengthening * Initiate lower limb strengthening * Initiate upper body aerobic and strength exercises |
| Weeks 2-4 | * No use of NSAIDs or ice for 4 weeks | * Continue active knee ROM and joint mobilization as needed * Begin isometric knee strengthening and lower limb strengthening * Continue core strengthening * Begin non-impact aerobic exercise: stationary bike, anti-gravity treadmill, pool once incision is healed and cleared by physician |
| Weeks 4-6 | * Avoid exercises where pain >3/10 | * Progressive knee strengthening with resistance bands * Gait training progressing to independent * Global lower limb strengthening: bridges, mini-squat, step-ups * Double and single limb balance/proprioception training * Core strengthening * Aerobic training: stationary bike, walking program when gait mechanics have returned to normal |
| Phase III: Remodeling phase | Weeks 6+ | * Avoid exercises that cause pain >3/10, or post-activity soreness lasting >24 hours | * Progress to high impact/intensity exercises such as running, jumping, and weightlifting * Increase loading capacity for lower limb strengthening exercises, with goal of loading knee tendons * Continue balance/proprioceptive training * Begin low level plyometric exercises * Begin double and single limb strengthening on leg press * Continue core strengthening |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *NWB*, non-weight bearing; *ROM*, range of motion | | | |

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| **Table 5. Hamstring tendinopathy: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * NWB for 4 days, TTWB using crutches until day 7 | * Rest * Begin gentle hip flexion ROM on day 4, perform 4 times per day * Use a seat cushion for comfort |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * Wean off crutches after day 7 * No eccentric strengthening * Avoid painful activities/exercises of pain >3/10 | * Continue AROM and PROM * Begin isometric exercises * Begin straight leg raises and heel slides * Begin core stability exercises * May use pool once wound has healed and cleared by physician |
| Weeks 2-6 | * No use of NSAIDs or ice for 4 weeks * No eccentric strengthening * Avoid painful activities/exercises of pain >3/10 | * Continue AROM as needed * Progressive strengthening: begin active knee flexion and hip extension strengthening * Begin gentle hamstring stretching * Begin balance exercises |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated * Avoid painful activities/exercises of pain >3/10 | * Continue strengthening exercises * Begin sport-specific exercises * May begin soft tissue work with and without tools |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *NWB*, non-weight bearing; *TTWB*, toe touch weight bearing; *ROM*, range of motion; *AROM*, active range of motion; *PROM*, passive range of motion | | | |

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| **Table 6. Gluteal tendinopathy: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * NWB for 4 days, progress to TTWB with crutches starting day 4 | * Rest * Begin gentle hip flexion ROM on day 4, perform 4 times per day |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * Progress to WBAT using crutches * Avoid painful activities/exercises of pain >3/10 | * Continue AROM and PROM * Begin isometric exercises * Begin straight leg raises and clam shells * Begin core stability exercises * May use pool once wound has healed and cleared by physician |
| Weeks 2-6 | * No use of NSAIDs or ice for 4 weeks * Use crutches as needed * Avoid painful activities/exercises of pain >3/10 | * Continue AROM as needed * Progressive hip abductor strengthening * May begin stationary bike |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated * Avoid painful activities/exercises of pain >3/10 | * Continue strengthening exercises * Begin sport-specific exercises * May begin soft tissue work with and without tools (no foam rolling until week 6) |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *NWB*, non-weight bearing; *TTWB*, toe-touch weight bearing; *WBAT*, weight bearing as tolerated; *ROM*, range of motion; *AROM*, active range of motion; *PROM*, passive range of motion | | | |

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| **Table 7. Lower extremity joint: rehabilitation protocol post-orthobiologics** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No NSAIDs and ice for 4 weeks * WBAT, use crutches as needed for days 1-2 * No submerging under water for 72 hours post-procedure | * Gentle ROM as tolerated during days 1-2 * Day 3: Can begin low-grade closed chain program including light squats and lunges (body weight only) |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No NSAIDs and ice for 4 weeks * Avoid excessing loading of the joint and impact activities including heavy weightlifting | * Continue ROM * Continue squats/lunges, can add resistance as tolerated starting week 1 * May begin light open kinetic chain exercises including leg curls and leg extensions with light weight starting week 1 * May begin swimming and biking (low resistance) starting week 1 |
| Weeks 2-4 | * No NSAIDs and ice for 4 weeks * Avoid impact activities | * Can increase light aerobic activities such as biking, swimming, and walking * Weightlifting and strength training as tolerated * Light agility training * Proprioceptive exercises |
| Weeks 4-6 | * No use of NSAIDs or ice for 4 weeks * Avoid painful activities/exercises of pain >3/10 | * Establish long-term HEP focusing on injury prevention and long-term functional goals * Correct biomechanical issues that contributed to the original joint pain/injury |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated | * Establish long-term HEP focusing on injury prevention and long-term functional goals * Correct biomechanical issues that contributed to the original joint pain/injury |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *WBAT*, weight bearing as tolerated; *ROM*, range of motion; HEP, home exercise program | | | |

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| **Table 8. Elbow tendinopathy: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * Use sling for 3 days, no driving in sling * May lift up to 5 pounds | * Rest and elevation * Day 3: Begin gentle active ROM 4 times per day |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * May lift up to 10 pounds * Avoid repetitive elbow and hand activities * No sustained gripping (such as opening a jar) | * Continue rest and elevation * Regain full range of motion: perform ROM 3-5 times per day |
| Weeks 2-4 | * No use of NSAIDs or ice for 4 weeks * May lift up to 20 pounds | * Continue active ROM as needed * May begin isometric wrist and elbow strengthening * Week 3: Can add light weight to wrist flexion and extension (starting with 2 pounds) |
| Weeks 4-6 | * Activities as tolerated | * Progressive isotonic strengthening * May begin integrated strengthening (chest press, rows, and hammer curls) * Begin eccentric training |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated | * Continue strengthening * Begin sport-specific activities * Begin progressive loading exercises |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *ROM*, range of motion | | | |

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| **Table 9. Shoulder tendon: rehabilitation protocol post-procedure (tenotomy or orthobiologics)** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * Safe use of sling for first 3 days, including when sleeping, then wean out as tolerated * No sleeping on procedure side * No lifting > 5 pounds * Avoid overhead activity for 2 weeks * No sustained gripping (such as opening a jar) * Discontinue exercise if pain becomes >3/10 | * Rest * Begin gentle active ROM (pendulum exercises) * Begin strengthening with scapular pinch |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * No sleeping on procedure side * No lifting > 10 pounds * Avoid overhead activity for 2 weeks * Discontinue exercise if pain becomes >3/10 | * Continue AROM and PROM * Begin isometric exercises * Begin thoracic mobility exercises |
| Weeks 2-6 | * No use of NSAIDs or ice for 4 weeks * May lift up to 10 - 20 pounds * Avoid eccentric exercises * Discontinue exercise if pain becomes >3/10 | * Continue active ROM as needed, goal of full active ROM * Progressive strengthening |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated * Discontinue exercise if pain becomes >3/10 | * Begin eccentric training/loading * Continue strengthening exercises * Begin sport-specific exercises |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *ROM*, range of motion; *AROM*, active range of motion; *PROM*, passive range of motion | | | |

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| **Table 10. Shoulder joint: rehabilitation protocol post-orthobiologics** | | | |
| **Phase of Healing** | **Timeframe** | **Restrictions** | **Rehabilitation** |
| Phase I: inflammatory phase | Days 0-5 | * No use of NSAIDs or ice for 4 weeks * Safe use of sling for first 3 days, including when sleeping, then wean out as tolerated * No sleeping on procedure side * No lifting > 5 pounds * Avoid overhead activity for 2 weeks * May return to work the following day as tolerated * Discontinue exercises if pain becomes >3/10 | * Rest * Begin gentle active ROM (pendulum exercises) |
| Phase II: Proliferative phase | Day 5 – Week 2 | * No use of NSAIDs or ice for 4 weeks * No sleeping on procedure side * No lifting > 10 pounds * Avoid overhead activity for 2 weeks * Discontinue exercise if pain becomes >3/10 | * Continue AROM and PROM * Begin isometric exercises * Begin thoracic mobility exercises |
| Weeks 2-6 | * No use of NSAIDs or ice for 4 weeks * May lift up to 10-20 pounds * Avoid eccentric exercises * Discontinue exercise if pain becomes >3/10 | * Continue active ROM as needed, goal of full active ROM * Progressive strengthening |
| Phase III: Remodeling phase | Weeks 6+ | * Activities as tolerated * Discontinue exercise if pain becomes >3/10 | * Begin eccentric training/loading * Continue strengthening exercises * Begin sport-specific exercises |
| *NSAID*, Nonsteroidal anti-inflammatory drug; *ROM*, range of motion; *AROM*, active range of motion; *PROM*, passive range of motion | | | |