ORTH-ATI™ POST INJECTION GUIDE

The Ortho-ATI™ post procedure rehabilitation guide is designed to support tendon repair and facilitate the regenerative process. The document provides guidance to patients as well as health professionals providing follow-up care. It may be adapted as necessary to meet each individual patient’s situation and needs. The rehabilitation guide was developed in collaboration with clinicians and allied health professionals who are experienced in post-treatment care following the Ortho-ATI™ treatment.

Rehabilitation guidelines below are presented in a criterion based progression. General time frames have been provided based on historical averages, but individual patients and differing anatomical regions will progress at different rates depending on age, associated injuries, pre-injury health status, rehabilitation compliance and injury severity.

POST INJECTION

- Apply cold pack as required to the injection site
- Pain medication as required
- Non-steroidal anti-inflammatory medication should be avoided (e.g. Nurofen, Voltaren)
- Do not repeat the activities that caused the initial injury for up to 12 weeks

PHASE I: 0 to 1 week (0-7 days) after procedure

| Rehabilitation Goals | • Protection of the affected tendon  
|                      | • Pain control where required |
| Precautions          | • No activity that causes pain |
| Suggested Therapeutic Exercises | • Gentle active range of motion (AROM) exercises |
| Progression Criteria | • 7 days after procedure |
| Appointments         | • No appointments during this time as rehabilitation appointments begin during phase III |

PHASE II: 1-4 weeks (7-28 days) after procedure

| Goals | • Increase tendon tolerance to daily activities |
| Precautions | • No overstressing of the tendon through exercise, lifting, or impact activity |
| Suggested Therapeutic Exercises | • Continue with active range of motion exercises 3 times a day for 5 minutes per session.  
| | • Lower body exercise for upper body procedures and upper body exercise for lower body procedures are allowed. Discuss these parameters with your physician, physical therapist or athletic trainer |
| Progression Criteria | • 28 days after procedure |
| Appointments | • No appointments during this time as rehabilitation appointments begin during phase III |
### PHASE III: 4-8 weeks (28-56 days) after procedure

**Rehabilitation Goals**
- Attain full range of motion
- Improve strength and endurance
- Improve balance and proprioception

**Precautions**
- Avoid high velocity/amplitude/intensity exercise such as throwing, running, jumping, plyometrics or heavy weight lifting
- Avoid post-activity pain

**Suggested Therapeutic Exercises**
- Stretching exercises for the affected muscle-tendon unit at least once a day, 3-4 reps, holding for 20-30 seconds
- Joint mobilization as needed to restore normal joint mechanics
- Strengthening with emphasis on isometric and concentric activities initially and with eccentric progression as symptoms allow: theraband drills for the rotator cuff, dumbbell exercises for the wrist and elbow, single leg press for the knee, heel raises for the ankle - 3-4 sets of 6-12 reps at moderate intensity
- Balance and proprioception activities: joint reposition drills for the upper extremity; single leg stand and balance board drills for the lower extremity
- Core strengthening

**Cardiovascular Exercises**
- Non-impact activities with progressive resistance, duration, and intensity: upper body ergometer, elliptical trainer, stationary bike, deep water running

**Progression Criteria**
- Full range of motion
- No pain with activities of daily living
- Pain free 5/5 manual muscle testing of affected muscle-tendon unit
- Symmetric proprioception of the affected limb

**Appointments**
- Rehabilitation appointments once every 1 to 2 weeks if possible
- Physician clinic appointment 1 month after procedure

### PHASE IV: Begin after meeting Phase III criteria, usually no sooner than 6-8 weeks (42-56 days) after procedure

**Rehabilitation Goals**
- Good eccentric and concentric multi-plane strength and dynamic neuromuscular control to allow for return to work/sports

**Precautions**
- Post-activity soreness should resolve within 24 hours

**Suggested Therapeutic Exercises**
- Continued strengthening of the affected area with increases in resistance, repetition, and/or frequency
- For the upper extremity: progressive training in provocative positions and work/sport specific positions - including eccentric, endurance, and velocity specific exercises
- For the lower extremity: impact control exercises with progression from single plane to multi-planar landing and agility drills with progressive increase in velocity and amplitude
- Sport/work specific balance and proprioceptive drills
- Continued core strengthening
- Return to sport programs (throwing, running, etc.) with symptom/criteria based progressions

**Cardiovascular Exercises**
- Replicate sport or work specific energy demands

**Progression Criteria**
- Return to sport/work criteria
- Good dynamic neuromuscular control with multi-plane activities and without pain
- Approval from the physician and/or sports rehabilitation provider

**Appointments**
- Rehabilitation appointments are approximately once every 1 to 3 weeks if possible
- Physician clinic appointment 2-3 months after procedure