

## Throwing Athlete Protocol

**Goal: To return to activity for the overhand throwing athlete.**

### Phase 1

#### Goals:

1. Minimize/Eliminate symptoms that are keeping the athlete from participation
2. Maintain/Improve Cardiovascular fitness of the athlete while protecting injury
3. Maintain/Improve the strength and ROM of the uninvolved limbs and trunk specific to the throwing athlete
4. Eliminate restrictions/limitations to the normal throwing activity including Cervical/Thoracic/Lumbar Spine, SIJ dysfunction, hypomobilities throughout the Costovertebral joints, Scapulothoracic joint, hip/knee/ankle.
5. Initiate/Progress therapeutic exercises and ROM specific to rehabilitating athlete's injury including HEP
6. Full mobility restored

#### Treatment:

1. Modalities and procedures indicated for treating the pathologies involved with the injury
2. Manual Therapy to restore normal physiologic motion
3. CV exercise including exercise bike, elliptical, TM, Stairstepper (protecting involved limb)
4. ROM/Therapeutic exercise program LE's and trunk (core) with protection of involved limb.
5. Static and dynamic stability through the LE's
6. Focus on elimination of Posterior Capsule tightness, Pec Minor tightness, Upper Trap and Levator scapulae tightness, Cervical/Thoracic/Lumbar segmental hypobilities, costovertebral hypomobilities, SIJ Innominate rotations, Hip flexor/extensor/rotator/adductor/abductor tightness, hamstring/quadriceps tightness, and Plantar Flexor tightness
7. Initiate scapular strengthening program (retractors and depressors primarily. Protractors if tolerated)

### Phase 2

#### Goals:

1. Initiate/progress throwing specific Therapeutic exercise program (i.e. thrower's 10) including HEP
2. Pain Free AROM and 5/5 strength
3. Initiate Interval Throwing Program (ITP)

#### Treatment:

1. Modalities/Procedures for symptomatic relief
2. Manual Therapy to continue for optimal mobility of involved joints
3. Initiate throwing specific stretching program. This will be the stretching program utilized with the athletes warm up program prior to throwing:

- a. Cervical
  - b. UE's (to include posterior capsule, Bicep, Tricep, wrist flexor/extensor)
  - c. Trunk
  - d. LE's (to include hip flexors/extensors, Hamstrings, hip rotators, ITB)
4. Initiate Throwing Specific Therapeutic exercises
    - a. Thrower's 10 program
    - b. Progress into T-Band in standing of all exercise
    - c. Progress to perturbations with the PNF patterned exercises and the abducted ER and IR ther ex
  5. Consider Bodyblade in slow motion of pitching form for stabilization training
  6. When tolerated begin weight bearing stability exercises with swiss balls, balance pads
  7. Initiate eccentric work with weighted ball catching and slowing down a ball tossed from behind athlete while they are in half kneel position
  8. Continue to progress trunk work. Stability and functional strength including rotation
  9. Continue LE work progressing into plyometrics applicable to the throwing movement
  10. Initiate ITP. Give handout on ITP including instructions. Reinforce progression, soreness rules, and to follow program implicitly.

### **Phase 3**

#### **Goals:**

1. Independent HEP
2. Asymptomatic return to participation

#### **Treatment:**

1. Modalities/procedures for symptomatic relief
2. Address any sensed restrictions/limitations
3. Reinforce following of ITP

When athlete is able to complete all steps of the ITP specific to their age group when starting without symptoms or restrictions and with the approval of the treating physician(s), may the athlete return to participation without restrictions.