

## **Rehabilitation program following Tommy John procedure**

### **Postoperative Phase 1**

#### **Weeks 1–4 Goals:**

1. Promote healing: Reduce pain, inflammation, and swelling
2. Begin to restore range of motion to 30–90°
3. Independent home exercise program
  - a. Precautions: Brace should be worn at all times
4. No passive range of motion of the elbow
5. Treatment strategies :
  - a. Brace set at 30° to 90° of flexion
  - b. Elbow, active range of motion in brace
  - c. Wrist, active range of motion
6. Scapula isometrics
7. Gripping exercises
8. Cryotherapy
9. Home exercise program

#### **CRITERIA FOR ADVANCEMENT:**

- ❖ Elbow, range of motion: 30°–90°
- ❖ Minimal pain or swelling

### **Postoperative Phase 2**

#### **Weeks 4–6 Goals:**

1. Range of motion: 15°–115°
2. Minimal pain and swelling
  - a. Precautions: Continue to wear brace at all times
3. Avoid passive range of motion
4. Avoid valgus stress
5. Treatment strategies :
  - a. Continue active range of motion in brace
  - b. Begin pain-free isometrics in brace (deltoid, wrist flexion/extension, elbow flexion/extension)
  - c. Manual scapula stabilization exercises with proximal resistance
  - d. Modalities as needed
6. Modify home exercise program

**CRITERIA FOR ADVANCEMENT:**

- ❖ Range of motion: 15°–115°
- ❖ Minimal pain and swelling

**Postoperative Phase 3**

**Weeks 6–12 Goals:**

1. Restore full range of motion
2. All upper extremity strength:5/5
3. Begin to restore upper extremity endurance
  - a. Precautions: Minimize valgus stress
4. Avoid passive range of motion by the clinician
5. Avoid pain with therapeutic exercise
6. Treatment strategies:
  - a. Continue active range of motion
  - b. Low-intensity/long-duration stretch for extension
  - c. Isotonics for scapula, shoulder, elbow, forearm, wrist
7. Begin internal/external rotation strengthening at 8 weeks
8. Begin forearm pronation/supination strengthening at 8 weeks
9. Upper body ergometer (if adequate range of motion)
10. Neuromuscular drills
11. Proprioceptive neuromuscular facilitation patterns when strength is adequate
12. Incorporate eccentric training when strength is adequate
13. Modalities as needed
14. Modify home exercise program

**CRITERIA FOR ADVANCEMENT:**

- ❖ Pain-free
- ❖ Full elbow range of motion
- ❖ All upper extremity strength 5/5

## Postoperative Phase 4

### **Weeks 12–16 Goals:**

1. Restore full strength and flexibility
2. Restore normal neuromuscular function
3. Prepare for return to activity
  - a. Precautions: Pain-free plyometrics
4. Treatment strategies:
  - a. Advance internal/external to 90/90 position
  - b. Full upper extremity flexibility program
  - c. Neuromuscular drills
  - d. Plyometric program
5. Continue endurance training
6. Address trunk and lower extremities
7. Modify home exercise program

### **CRITERIA FOR ADVANCEMENT**

- ❖ Complete plyometrics program without symptoms
- ❖ Normal upper extremity flexibility

## Postoperative Phase 5

### **Months 4–9 Goals:**

1. Return to activity
2. Prevent reinjury
  - a. Precautions: Significant pain with throwing or hitting
3. Avoid loss of strength or flexibility
4. Treatment strategies:
  - a. **Begin interval throwing program at 4 months**
  - b. Begin hitting program at 5 months
  - c. Continue flexibility exercises
  - d. Continue strengthening program (incorporate training principles)

### **CRITERIA FOR DISCHARGE**

- ❖ Pain-free
- ❖ Independent home exercise program
- ❖ Independent throwing/hitting program