

# **Shoulder & Elbow Surgery**

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# REHABILITATION PROTOCOL

(INFORMATION FOR PHYSIOTHERAPISTS)

## SHOULDER DEBRIDEMENT +/- BICEPS TENODESIS OR TENOTOMY

#### 1. General Guidelines

- This is a GENERAL rehabilitation protocol. Any SPECIFIC instructions that differ from this protocol should be followed (see below).
- Timelines are approximate. If the physiotherapist feels the patient is not ready for progression (due to pain, swelling, inadequate ROM or strength), the time line should be extended to suit the patient.
- In general, regaining ROM is the first (and most important) priority, followed by strengthening.
- Supervised physiotherapy begins 1-2 weeks post-op and continues for 3-6 months, as necessary, depending on patient's progress, activity level and goals.
- Patients are to be discharged after completion of all appropriate functional progressions and adequate performance on strength and functional tests.
- In addition to formal physiotherapy, patients should be encouraged to exercise independently 3-5 times/day during Phases I and II and 3-5 times per week during Phases III and IV.
- <u>Functional Milestones</u> common functional activities the patient is expected to perform during each rehabilitation phase.
- <u>Advancement Criteria</u> objective criteria used to judge whether or not a patient is ready for progression to the next phase of rehabilitation (see Rehabilitation Progression below).

## 2. General Precautions

- The sling can be discontinued as comfort allows.
- No heavy lifting for at least 6 weeks.
- Surgery Specific Precautions:
  - ☐ Biceps Tenodesis or Tenotomy: Avoid resisted **Elbow Flexion** for 6 weeks.

#### 3. Rehabilitation Progression

- The following is a guideline for progression through the rehabilitation process.
- Progression is based on achieving advancement criteria for the next phase of rehabilitation and should take into account the patient's status and the surgeon's advisement.
- If the patient achieves the advancement criteria early, the physiotherapist may choose to advance the patient only AFTER 6 weeks post-op.
- If the patient does NOT meet the advancement criteria, extend the time in the current phase.
- If there is ANY uncertainty concerning the patient, please contact the surgeon.

4.	Specific Instructions

## Phase I: Immediate Post-Op → 2 Weeks Post-Op

# 1. Objectives

- Protect the shoulder repair.
- Decrease post-op pain and swelling (can utilize Cryo-cuff for 8-12 hours/day x 2 weeks).
- Begin general activities of daily living (ADL's) (i.e. feeding, bathing, and dressing).
- Increase shoulder ROM with passive and active-assisted ROM exercises.
- Begin cross-training to maintain general fitness.
- Educate patient on rehabilitation progression.

## 2. Sling:

- Can be discontinued as comfort allows.
- Patient to be taught proper removal and reapplication of sling.

## 3. Therapeutic Exercises

- Ice after exercise program x 15 min.
- · Pendulum shoulder ROM exercises.
- Begin passive and active-assisted ROM exercises (i.e. supine, pulleys, wall crawls, and cane exercises) - forward elevation, abduction, external rotation, internal rotation (behind back) and internal rotation in abduction.
- Wrist/elbow ROM.
- General fitness may use stationary bike (arm MUST be kept in sling . . . NO weight bearing through arm).

#### 4. Functional Milestones

- Proper removal and reapplication of sling.
- No pain with pendulum exercises.

#### 5. Advancement Criteria for Phase II

No active signs of inflammation.

# PHASE II: 2 Weeks Post Op → 6 Weeks Post-Op

## 1. Objectives

- Protect the shoulder repair.
- Achieve full active ROM in all planes.
- Return to work: modified duties (avoid heavy lifting and overhead activity).

## 2. Sling

Discontinue.

#### 3. Therapeutic Exercises

- Begin active ROM and continue passive/active-assisted ROM exercises in all planes as necessary to achieve full ROM.
- Begin GENTLE isometric strengthening exercises all shoulder movements, biceps limited as per section 2.
- Begin manual glenohumeral and scapular mobilization.
- May begin aquatic shoulder therapy.
- Can weight-bear through arms.
- General fitness continue to use stationary bike to maintain general fitness (sling no longer required).
- Begin peri-scapular muscle strengthening: postural work, scapular retraction, protraction, elevation and depression.
- Continue wrist/elbow ROM (as necessary).

## 4. Functional Milestones

- Full ROM.
- Full use of shoulder for all general activity without pain.
- · Light bimanual or modified occupational duties.

#### 5. Advancement Criteria for Phase III

Full active ROM.

# Phase III: 6 Weeks Post Op → 12 Weeks Post-Op

## 1. Objectives

- Maintain/improve shoulder ROM.
- Increase shoulder strength.
- Return to work: for manual and overhead occupations.

## 2. Sling

Already discontinued.

## 3. Therapeutic Exercises

- Begin Theraband strengthening exercises for RTC and biceps, progressing to strengthening exercises with free weights for all planes. Increase repetitions before increasing weight (↑ endurance > ↑ strength).
- Begin overhead activity.
- Begin swimming to increase shoulder strength at low resistance.
- · Begin putting and chipping for golf.
- General fitness may begin running.
- May begin driving.

## 4. Functional Milestones

- Full ROM.
- Full use of shoulder for sporting activity.

## 5. Advancement Criteria for Phase IV

• Full use of shoulder for all general activity without pain.

# PHASE IV: 12 Weeks Post-Op → 6 months Post Op

# 1. Objectives

- Maintain/improve shoulder ROM.
- Increase shoulder strength.
- Progressive return to sport.

## 2. Sling

Already discontinued.

## 3. Therapeutic Exercises

- Begin sport-specific strengthening exercises.
- Begin low speed throwing / controlled racket sports / non-contact hockey at 3 months.
- Progress to competitive throwing / racket sports / contact sports at 6 months.
- Progressive return to golf: begin with irons progressing to full swings with all clubs at 6 months.

## 4. Functional Milestones

- Full ROM.
- Full use of shoulder for sporting activity.

#### References

- Bardana D, Rehabilitation Protocols, Queen's University Sports Medicine.
- General Rehabilitation Guidelines, Bone and Joint Center, University of Washington Medical Center.