

# **Shoulder & Elbow Surgery**

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## **REHABILITATION PROTOCOL**

(INFORMATION FOR PHYSIOTHERAPISTS)

## **ANATOMIC SHOULDER ARTHROPLASTY**

#### 1. General Guidelines

- This is a GENERAL rehabilitation protocol. Any SPECIFIC instructions that differ from this protocol should be followed (see below). For revision surgery, this protocol will often be delayed.
- 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.
- 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.

#### 2. General Precautions

- No forward elevation beyond 140° or external rotation beyond 0° (may vary depending on subscapularis tendon repair) – for 6 weeks.
- No resisted internal rotation for 12 weeks.
- No pushing, pulling, or heavy lifting for at least 6 weeks.
- Long term: Limit forceful, jerking movements (i.e. starting outboard motor) and repetitive impact loading (i.e. chopping wood).
- Surgery Specific Precautions:
  - Revision Surgery: Delay entire protocol 4 weeks (i.e. NO shoulder PT until 4 weeks post-op).

#### 3. Specific Instructions

## PHASE I:Immediate Post-Op $\rightarrow$ 2 Weeks Post-Op

#### 1. Objectives

- Protect the shoulder repair.
- Decrease post-op pain and swelling (can utilize ice/cooling devie 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.

#### 2. Sling

• Should be worn at all times, except when under the supervision of the physiotherapist and when bathing.

#### 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) limits of forward elevation of 140° and external rotation of 0°.
- Wrist/elbow ROM.

## PHASE II: 2 Weeks Post Op $\rightarrow$ 6 Weeks Post-Op

#### 1. Objectives

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

#### 2. Sling

- May discontinue when sitting with arm at the side.
- Otherwise, should be worn at all times, except when under the supervision of the physiotherapist and when bathing.
- Should be worn for sleeping.

#### 3. Therapeutic Exercises

- Begin active ROM and continue passive and active-assisted ROM exercises in all planes as necessary to achieve full ROM limits of forward elevation of 140° and external rotation of 0°.
- Begin GENTLE isometric strengthening exercises (except IR).
- Begin manual glenohumeral and scapular mobilization.
- May begin aquatic shoulder therapy.
- General fitness may use stationary bike.
- Begin peri-scapular muscle strengthening: postural work, scapular retraction, protraction, elevation and depression.
- Continue wrist/elbow ROM.

## PHASE III:6 Weeks Post Op $\rightarrow$ 12 Weeks Post-Op

#### 1. Objectives

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

#### 2. Sling

• May discontinue.

#### 3. Therapeutic Exercises

- Begin Theraband strengthening exercises, progressing to strengthening exercises with free weights for all planes (except IR). Increase repetitions before increasing weight (↑ endurance > ↑ strength).
  - No resisted internal rotation for 12 weeks.
- Begin overhead activity.
- Begin swimming to increase shoulder strength at low resistance.
- Begin putting and chipping for golf.
- General fitness may begin running.

## PHASE IV: 12 Weeks Post-Op $\rightarrow$ 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 internal rotation strengthening.
- 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.