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Trauma • Hand Surgery • Shoulder & Elbow Reconstruction

# **Subacromial Decompression/AC Resection Protocol**

Arthroscopic decompression is normally the result of the clinical diagnosis of shoulder impingement syndrome. The protocol is divided into phases which are adaptable based on the individual and special circumstances. Following an arthroscopic decompression, avoid overhead activities for 4-6 weeks postop to decrease stress on the healing tissues.

Early passive range of motion enhances circulation within the joint to promote healing.

The **overall goals** of the surgical procedure and rehabilitation are to:

• Control pain and inflammation • Regain normal shoulder range of motion • Regain normal upper extremity strength and endurance • Achieve the level of function based on the orthopedic and patient goals

Exercises should be initiated within the first week following surgery. The supervised rehabilitation (outpatient physiotherapy) started after 2 weeks is to be supplemented by a home fitness program where the patient performs the given exercises at home or at a gym facility.

**Return to activity** requires both time and clinical evaluation. To most safely and efficiently return to normal or high level functional activity, the patient requires adequate strength, flexibility, and endurance. Functional evaluation including strength and range of motion testing is one method of evaluating a patient's readiness to return to activity. Return to intense activities following shoulder surgery requires both a strenuous strengthening and range of motion program along with a period of time to allow for tissue healing.

#### Returning to work - Acromioplasty

- •For most sedentary jobs, I recommended a week off work.
- •When you return to work your arm will be sore but you should be able to manage as long as you do no heavy lifting, pushing, pulling or carrying.
- •Work at waist level and 5-10 pounds of lifting is started 1 week after surgery.
- Heavier lifting and work at or above shoulder level starts one to two months after surgery.
- •You will generally need 3-6 months before recovery is complete and return to heavy lifting or prolonged overhead use may require 6-12 months.

### Prehabilitation

• Apply ice (PolarCare if available) as much as tolerated within a 24 hour period for first week. If using ice packs, encourage icing 20-30 minutes every 3-4 hours while awake. This is also useful after therapy.

• Sling used for 5-10 days

# Home Exercise Program Phase 1: (Weeks 1 - 2)

Follow pictorial exercises illustrated in Shoulder Surgery- Initial Postoperative Exercises

### Outpatient Physiotherapy Phase 2: (Weeks 2-3)

Instruct in basic progression of rehabilitation program and expectations for time course to recovery **ROM** 

- Pendulum exercises
- •Wand exercises- in all planes as tolerated
- •Rope/Pulley (flexion, abduction)
- Towel internal rotation stretch
- •Posterior capsule stretch
- •Manual stretching and mobilization of posterior capsule

# Strength

- •Initiate IR/ER, biceps, triceps with tubing
- Initiate scapular stabilizer strengthening
- Shoulder shrugs and retractions
- \*Supine rhythmic stabilization at 60°, 90°, 120° flexion

## Modalities

- Electrical stimulation as needed
- Ice 20 minutes after activities

#### **GOALS OF PHASE:**

Promote healing of tissue
 Control pain and inflammation
 Gradual increase in ROM
 Enhance upper extremity strength
 Independent in Home Exercise Program

# Outpatient Physiotherapy Phase 3: (Weeks 3-6) ROM

Continued from previous phase

#### Strength

- Initiate UBE for warm-up
- •Initiate forward flexion, scaption, empty can
- Prone abduction with ER, extension
- •Sidelying ER, prone ER at 90° abduction
- Progress biceps and triceps work
- Progress scapular stabilizer strengthening
- •Initiate push-up progression, seated rows
- •Initiate chest pass and overhead pass
- Progress rhythmic stabilization exercises to standing

#### **GOALS OF PHASE:**

• Minimize pain and swelling • Achieve full ROM • Progress upper extremity strength and endurance • Enhance neuromuscular control

# Outpatient Physiotherapy Phase 4: (Weeks 6-12)

#### ROM

- Continue all ROM activities from previous phases
- Manual stretching and Grade II-III joint mobs to reach goal

#### Strength

- Continue all strengthening from previous phases increasing resistance and repetitions
- \*UBE for strength and endurance
- •Initiate isokinetic IR/ER at 45° abduction at high speeds
- Progress push-up from wall, to table, to floor
- Initiate ER with 90° abduction with tubing
- Progress overhead plyotoss for dynamic stabilization
- Progress rhythmic stabilization throughout range of motion
- Initiate lat pulldowns and bench press
- •Initiate plyoball figure 8 stabilizations

# **GOALS OF PHASE:**

• Full painless ROM • Maximize upper extremity strength and endurance • Maximize neuromuscular control • Normalize arthrokinematics • Clinical examination with **no** impingement signs

# Outpatient Physiotherapy Phase 5: (Weeks 12-16) if required ROM

- Continue all ROM activities from previous phases
- Grade III-IV joint mobs as needed to reach goal

#### Strenath

- \*Continue with all strengthening exercises from previous phases increasing weight and repetitions
- Continue total body work out for overall strength
- •Initiate light plyometric program
- •Initiate military presses in front of neck
- •Initiate and progress sport specific and functional drills
- Initiate interval throwing program

## **GOALS OF PHASE:**

• Maximize upper extremity strength and endurance • Maximize neuromuscular control and arthrokinematics • Return to sports specific training/functional training