

BICEPS TENODESIS POST OPERATIVE PROTOCOL

This rehabilitation protocol has been developed for the patient following a biceps tenodesis surgical procedure. The biceps tenodesis procedure is normally the result of clinical diagnosis of shoulder biceps tendonitis, a SLAP tear, or biceps tear. The protocol is divided into phases. Each phase is adaptable based on the individual and special circumstances. Following a biceps tenodesis, the patient should avoid ACTIVE ELBOW FLEXION AND SUPINATION for six weeks post-op to decrease the stress on the healing tissues.

Early passive range of motion is highly beneficial to enhance circulation within the joint to promote healing.

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

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

The physical therapy should be initiated within two weeks following surgery. The supervised rehabilitation is to be supplemented by a home fitness program where the patient performs the given exercises at home or at a gym facility.

Important post-operative signs to monitor include:

- Swelling of the shoulder and surrounding soft tissue
- Abnormal pain, hypersensitive—an increase in night pain
- Severe range of motion limitation
- Weakness in the upper extremity musculature

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 a biceps tenodesis requires both a strenuous strengthening and range of motion program along with a period of time to allow for tissue healing. Symptoms such as pain, swelling, or instability should be closely monitored by the patient.

PHASE ONE-Weeks 1-2

EXERCISE GOAL

RANGE OF MOTION:

Gradual Increase

Wand exercises-in all planes as tolerated

Rope/Pulley (flex, abd, scaption)

Posterior capsule stretch

Towel internal rotation stretch

Pendulum exercises

Passive range of motion of the elbow

Manual stretching and mobilization of post capsule of the shoulder

STRENGTH:

Initiate scapular stabilizer strengthening

Shoulder shrugs and retractions

Supine rhythmic stabilization at 60°, 90°, 120° flexion

MODALITIES:

E-stim as needed

Ice 15-20 minutes

BICEPS TENODESIS POST OPERATIVE PROTOCOL (page two)

PHASE ONE (cont'd)

GOALS OF PHASE ONE:

- Promote healing of tissue
- Control pain and inflammation
- Gradual increase in ROM of shoulder and elbow, NO ACTIVE FLEXION OR SUPINATION OF THE ELBOW
- Enhance upper extremity strength
- Independent in HEP

PHASE TWO—Weeks 2-6

EXERCISE GOAL

RANGE OF MOTION:

Full ROM

Posterior capsule stretch Week 6

Towel internal rotation stretch

Manual stretching and joint mobs to reach goal

Wand exercises-in all planes

Rope/Pulley (flex, abd, scaption)

STRENGTH:

Initiate UBE for warm-up

Initiate forward flexion, scaption, empty can

Prone abduction with ER, extension

Side lying ER, prone ER at 90° abduction

NO ACTIVE FLEXION OR SUPINATION OF THE ELBOW

Progress scapular stabilizer strengthening

Progress rhythmic stabilization exercises to standing

MODALITIES:

Ice 15-20 minutes

GOALS OF PHASE TWO:

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

BICEPS TENODESIS POST OPERATIVE PROTOCOL (page three)

PHASE THREE—Weeks 6-12

EXERCISE GOAL

RANGE OF MOTION:

Continue all ROM activities from previous phases
May begin active range of motion of the elbow
Posterior capsule stretch
Towel internal rotation stretch
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 pull downs and bench press
Progress PNF to high speed work
Initiate plyball figure 8 stabilizations

MODALITIES:

Ice 15-20 minutes

GOALS OF PHASE THREE:

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

PHASE FOUR: Weeks 12-24

EXERCISE GOAL

RANGE OF MOTION:

Continue all ROM activities from previous phases
Posterior capsule stretch
Towel internal rotation stretch
Grade III-IV joint mobs as needed to reach goal

STRENGTH:

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

MODALITIES

Ice 15-20 minutes as needed

GOALS OF PHASE FOUR:

- Maximize upper extremity strength