

# Sports & Orthopaedic Specialists Conservative UCL Injury Protocol

This protocol provides appropriate guidelines for the rehabilitation of patients with a UCL injury. The protocol draws evidence from the current literature and accounts for preferences of the providers at Sports & Orthopaedic Specialists. The program may be modified by the referring provider for an individual patient. If questions arise regarding the utilization of the protocol or the progress of the patient, contact Sports & Orthopaedic Specialists:

Main line: (952) 946-9777 Physical therapy: (952) 914-8631

#### **PRECAUTIONS**

-Avoid valgus stress to the elbow for 12 weeks

#### PT FREQUENCY & DURATION

-Six to ten physical therapy visits over 4-6 months

#### **REHAB PRINCIPLES**

- -Focus on <u>active engagement of the patient</u> through patient education and therapeutic exercise. Establish a home exercise program that can be progressed gradually throughout the postoperative period.
- -Respect tissue healing. The surgeons at Sports & Orthopaedic Specialists uniformly prefer a slow progression of postop patients with minimal postoperative pain.
- -Postoperative pain may be experienced. However physical therapy, including the home exercise program, should result in <u>minimal to no symptom exacerbation</u>. The patient should call the PT for recommendations if pain increases during or after exercise.
- -The therapeutic exercises listed in this protocol convey the appropriate load for the shoulder given the time elapsed since surgery in regards to tissue healing. It is acceptable for a patient to <u>progress more slowly</u>. However, it is not acceptable for a patient to progress more quickly unless directly indicated by the surgeon.
- -Recommended max of 6 exercises for home exercise program. Select a <u>well-rounded program</u> that targets each area of insufficiency identified during physical exam.

#### **MODALITIES**

Cold Therapy / Ice: Instruct patient to use ice daily until pain free.

Ensure that ice is NOT placed directly over the ulnar nerve.

Other Modalities: DO NOT USE



#### **MANUAL THERAPY**

- -No passive range of motion (physiologic/long arc).
- -Joint mobilization to address shoulder hypomobility ONLY if prescribed by referring provider
- -Soft tissue techniques to upper trapezius/levator scapula/pect minor are permitted

#### THERAPEUTIC ACTIVITY AND PATIENT EDUCATION

Patient education is very important in getting the patient to take an active role in therapy and recovery. Educate the patient at the appropriate level regarding:

- -Anatomy of the elbow
- -Influence of shoulder on elbow mechanics
- -Avoidance of pain provoking activities and valgus stress to the elbow

#### THERAPEUTIC EXERCISE

-<u>Free Weights</u>: Use the following age guidelines to establish a maximum weight for rotator cuff strength/conditioning ONLY when the protocol calls for the use of free weights.

## For patients over 60 years old:

No external weights for rotator cuff strength/conditioning (Ex: Side lying external rotation, full can)

#### For patients aged 40-60:

Progress from two ounces to four, then a max of eight ounces for rotator cuff strength/conditioning.

## For patients under 40 years old:

Progress from two ounces to four, then eight ounces. A <u>max of 16 ounces</u> can be used for rotator cuff strength/conditioning.

## -Exercise Band: DO NOT USE

The use of Yellow Theraband®, the least resistive color in the Theraband series, results in 2.9 pounds of resistance when elongated by 100%. In addition, length-tension principles of muscle function do not align with exercise band properties; the muscle is asked to provide maximum force at a shortened and inefficient length. Therefore, exercise band use is not permitted for use during rotator cuff conditioning.

## -Pulleys: **DO NOT USE**

## **Conservative UCL Injury Protocol**

#### **PHASE I**

#### 0-8 WEEKS POST-INJURY OR UNTIL PHASE I GOALS ARE ACHIEVED

## Goals:

- -Resolution of pain and swelling
- -Controlled return to full elbow ROM
- -Pain free elbow with self-care and ADL's

#### Brace:

Day 0 – 3 weeks: Brace locked at 90°

4 weeks – 5 weeks: Brace unlocked from 45° to 90° 6 weeks – 7 weeks: Brace unlocked from 20° to 110°

8 weeks: Discontinue use of brace

## **Physical Therapy**:

- -Controlled elbow ROM (brace settings dictate ROM progression)
- -Basic scapular stability
- -Rotator cuff strengthening
- -Wrist/forearm AROM
- -Grip strengthening (submaximal and pain free)
- -Core and lower extremity strengthening
- -Cryotherapy

#### **PHASE II**

#### 9-12 WEEKS POST-INJURY OR UNTIL PHASE II GOALS ARE ACHIEVED

#### Goals:

- -Pain free palpation of UCL
- -Negative valgus stress test, milk sign, bounce test
- -Normal scapular mechanics
- -Rotator cuff strength 5/5 in all planes
- -Sleeper stretch 50+ degrees

## **Physical Therapy**:

- -Advanced scapular stability
- -Rotator cuff strengthening (see external resistance guidelines on page 2)
- -Posterior shoulder stretching (sleeper stretch, cross body stretch)
- -Wrist/forearm strengthening with focus on flexor carpi ulnaris
- -Grip strengthening
- -Core and lower extremity strengthening
- -Neuromuscular training in preparation for return to throwing program
- -Cryotherapy





## **PHASE III**

## 13+ WEEKS POST-INJURY WITH RETURN TO SPORT ONCE CLEARED BY REFERRING PROVIDER

## Goals:

- -Return to sport
- -Establish ongoing maintenance program for shoulder and elbow
- -Avoid overuse and re-injury

## **Physical Therapy**:

- -Maintain rotator cuff and scapular strength as well as scapular mechanics during return to sport
- -Initiate return to throw / sport program