# Brennen Lucas, M.D.

Advanced Orthopaedic Associates

2778 N. Webb Rd. Wichita, KS 67226

316-631-1600 Fax: (316) 631-1674 1 (800) 362-0591



# ARTHROSCOPIC ACROMIALCLAVICULAR JOINT RECONSTRUCTION REHABILITATION PROTOCOL

# **INTRODUCTION**

The purpose of the exercise program below is to more effectively treat patients after an arthroscopic AC joint reconstruction. This post-surgical rehabilitation program addresses anatomical, biomechanical, and healing time concerns. The treatment plan includes rest at the appropriate time (relative rest) and the use of non-steroidal anti-inflammatories. The attainment of full range-of-motion, proper training of the rotator cuff muscles for balance and to provide good scapulohumeral rhythm and conditioning of the rotator cuff and scapular muscles is critical for a successful outcome.

The procedure is an arthroscopic variant of the Weaver-Dunn procedure, which reconstructs the conoid and trapezoid ligaments of the coraco-clavicular ligament complex.

This rehabilitation program is designed in phases. Each phase has a list of goals to be attained during that phase and there are concomitant precautions in each phase to avoid the inability to achieve the goals set for each phase. Along with the goals and precautions are some suggested exercises in order to achieve the goals within the limits of the precautions.

# PHASE I - ACUTE PHASE

#### Goals:

- Limit pain (relative rest avoid pain provoking positions and movements)
- Reduce swelling
- Restore motion

#### Treatment Recommendations:

- Ice
- Sling
- E-Stim
- Gentle mobilization (Grade 1, Grade II)
- Pendulum exercises
- ROM (passive and active assisted pain free)
- Non-steroidal anti-inflammatory medication

# Precaution:

• Relative rest is important - reduce inflammation

#### PHASE II - SUBACUTE PHASE

# Goals:

- Eliminate pain
- Restore full passive motion in internal and external rotation at neutral
- Restore good glenohumeral and scapulohumeral rhythm
- 4/5 strength of upper extremity muscles including scapular muscles

# **Treatment Recommendations:**

- Continue to use modalities as needed
- Pulleys for passive ROM return are encouraged early
- Start with passive range-of-motion through the available range
- Add isometrics below shoulder level
- Flexibility of the cervical, shoulder and scapular muscles
- Non-involved upper extremity and bilateral lower extremity exercises
- SLING is used for six weeks post op to protect fixation
- This phase ALWAYS LASTS UNTIL POST OP WEEK 6 UNLESS SPECIFICALLY ADDRESSED BY PHYSICIAN

#### **Precautions:**

- All active and isometric exercises should be muscle specific
- All movements and activity increasing symptoms should be eliminated
- Isometrics are to be modified (position change) if patient's symptoms are made worse

# PHASE III - STRENGTHENING PHASE

# **Goals:**

- Attain full pain free range-of-motion
- Achieve 5/5 strength in all shoulder girdle muscles, including distal extremity muscles
- Full pain free resistive range-of-motion
- Negative Neer sign
- Negative Hawkins sign
- Perfect symmetrical scapulohumeral rhythm

#### **Treatment Recommendations:**

- Continue with the use of ice as necessary
- Continue with previous exercises
- Progress resistance to overhead and above horizontal
- Add resistance to scapular exercises
- Work on quality of motion, not just resistive training

- Work on balance of the rotator cuff muscles
- Start sport specific/work specific exercises
- Weightbearing upper extremity
- Water resistive activities

#### **Precautions:**

• Do not forget entire body

# PHASE IV - CRITERIA FOR RETURN TO NON RESTRICTED WORK/SPORT

#### **Goals:**

- Full pain free range-of-motion
- 5/5 strength in all upper extremity and scapular muscles
- Normal scapulohumeral rhythm with and without resistance
- Good trunk strength
- Good lower extremity strength
- Able to complete throwing sport specific or work tasks without pain, signs of instability or impingement

Full Return to unrestricted sports and or work is not anticipated until four to six months post op.

# **Precautions:**

- It should be noted that time frames for these phases and overlap time frames for these phases cannot be given. It is based on exercise intensity, pain, underlying instability, acute vs. chronic conditions, healing time and strength.
- Rehabilitation should be progressive, always achieving a pain free state and always acutely aware of the patient safety.
- This protocol is a guideline and individual adjustments may be necessary for each individual.