

REHABILITATION PROGRAM FOR DISTAL BICEPS REPAIR

GENERAL GUIDELINE / PRECAUTIONS

- Wear posterior splint at 90 degrees of elbow flexion.
- Transfer from splint to brace on day 7. Brace will be worn locked at 90 degrees for 6 weeks – only remove for therapy and showering.
- **No active** elbow flexion or supination for 6 weeks
- **Start passive** supination / pronation and flexion to tolerance on day 7. Passive extension of elbow will be progressed over time
- Biceps isometrics initiated in week 12 but not before. Gradually progress to light biceps isotonic week 15-16.
- This protocol, as well as most others, is a general guideline. Individuals have different rates of healing and levels of fitness therefore, it is prudent to assume them having different rehabilitation needs.
- When clinically appropriate, properly assess the whole body and incorporate treatment for loss of mobility and stability. Not doing so can prevent optimal outcomes and increase risks of future injuries.

MAXIMUM PROTECTION PHASE (Weeks 0-6)

- **Goals:**
 - Protect repair and promote healing.
 - Diminish pain and inflammation.
 - Assess and address ROM / stability needs of whole body to safely return to sport or activity.
- **Treatment (Days 1-7)**
 - Posterior splint at 90 degrees of elbow flexion for 7 days
 - Out of splint and into brace on day 7. Brace locked at 90
 - Wrist and hand gripping exercises
 - Passive elbow supination and pronation starting day 7
- **Treatment (Days 8-49)**
 - Elbow ROM brace
 - Week 2 at 45-100 degrees flexion / extension
 - Week 4 at 30-115 degrees flexion / extension
 - Week 6 @ 15-130 degrees
 - Rotator cuff strengthening exercises
 - Extra care for when doing those that place some stress on biceps (i.e., flexion, scaption)
 - Wrist flexor and extension strengthening / stretching
 - Gripping exercises
 - Triceps isometrics by week 5-6
 - Remove brace at 6 weeks.

MODERATE PROTECTION PHASE (Weeks 8-10)

- **Goals:**
 - Restore full elbow ROM
 - Progress strength for the shoulder girdle and the elbow
 - Continue to address mobility / stability needs of whole body to return to sport or activity.
- **Treatment (Weeks 8-10)**
 - Discontinue brace at week 8
 - Full ROM
 - Light isotonic triceps
 - Continue wrist strength / flexibility exercises
 - Progress RC / shoulder girdle strengthening

MINIMAL PROTECTION PHASE (Weeks 10-26)

- **Goals:**
 - Gradually restore full, pain-free PROM
 - Restore scapular stability and improve RC strength
 - Strengthen biceps with isometrics
- Treatment (Weeks 10-16)**
 - Biceps isometrics at week 12
 - Continue flexibility / strengthening UE
 - Continue to address whole body mobility and stability needs.
 - UBE at week 12

RETURN TO ACTIVITY PHASE (Weeks 17-26)

- **Goals:**
 - Gradually restore full, pain-free PROM
 - Restore scapular stability and improve RC strength
 - Strengthen biceps with isotonic
- Treatment**
 - Light biceps isotonic (week 16)
 - Initiate throwing program if applicable
 - Plyometrics
 - Start with 2 handed and progress to one-handed as tolerated

DISCHARGE TESTING / PLANNING (usually done after 6 months)

- Based on a patient's age, sex, specific sport / activity, and level (i.e. recreational, amateur, professional) that they are returning to, a decision is made to endorse their return to sport or to ask that the patient refrain from doing so. Currently we strive for the following criteria before fully endorsing going back to rigorous activities:
 - Demonstrate quality and symmetrical movement throughout the body evaluated with comprehensive movement screen or assessment process
 - Symmetrical and acceptable comprehensive scores on CKC UE testing
- Biomechanical assessment of their performance helps safe return to sport / higher level activity. Patient's may be videoed and analyzed doing activities such as throwing or hitting to see if sound body mechanics are being utilized.
- Not all patients who have undergone distal biceps repair are candidates for functional testing. Those undergoing these tests should be chosen with proper consideration given to what they plan to return to and their general fitness level.
- No matter how well a patient is doing with return to sport testing it is prudent to remember how important time is to full healing and safe return to sport / activity.
- Patients often schedule periodically during this phase to assess their progress and properly change their program until they are deemed safe to return to all activities.