

Phase I: Protect Repair (0 to 2 weeks)

- Precautions
 - o Elbow immobilized in posterior splint at 60° elbow flexion for 1st 2 weeks
 - o No active elbow extension 6 weeks
- ROM
 - o Gradual ↑ Active/Passive ROM of shoulder in all planes while in splint
 - o Wrist/hand/finger full AROM in splint
- Strength
 - o Scapular retractions
 - o Shoulder shrugs
- Modalities
 - o Hot pack before treatment
 - o E-stim, TENS as needed
 - o Ice 10-15 minutes after treatment
- Goals of Phase I
 - o Control pain and inflammation
 - o Protect repair
 - o Independent in HEP

Phase II: Progress Protected ROM and Function (3-6 weeks)

- Precautions
 - o Elbow placed in a hinged ROM brace allowing 30°-60°
 - o Brace to be worn at all times except during exercise or bathing
 - o Passive ROM ONLY for elbow extension
- ROM
 - o Hinged Brace Range of Motion Progression (ROM progression may be adjusted base on Surgeon's assessment of the surgical repair.)
 - o Week 2-3: 30°-60°
 - o Week 4-5: 15°-90°
 - o Week 6-7: 10°-110°
 - o Week 8: 0°-125°
 - o Forearm: Initiate AAROM pronation and supination
 - o Progress to active pronation and supination (wk 4)
 - o Shoulder AROM as needed in brace
- Strength (in brace)
 - o Isometric shoulder exercises
 - o Supine/standing rhythmic stabilizations
 - o Wrist/hand: grip strengthening
 - o Standing flexion and scaption
 - o Side-lying ER
 - o Isometric biceps pain free (week 6)
- Manual
 - o Scar mobilization
 - o Passive elbow extension
 - o Joint mobs as needed
- Modalities
 - o Heat/hot pack before therapy

- o US to incision as needed
- o Ice 10-15 minutes
- Goals of Phase II
 - o Protection of repair
 - o Gradual increase in ROM
 - o Initiate strengthening to surrounding tissues

§ Improve scapular stability

Phase III: Reach full ROM (7-12 weeks)

- ROM
 - o Week 8 progress to full ROM of elbow; discontinue brace if adequate motor control
 - o Initiate UBE light resistance
 - o Exercises
 - o Ball roll outs on table
 - o Wall walk
 - o Pulley
- Strength
 - o Tricep/elbow extension progression
 - o 6 weeks: initiate AROM
 - o 8 weeks: initiate light Theraband resistance
 - o Theraband IR/ER shoulder
 - o Theraband bicep extension
 - o Prone dumbbell Therex
 - o Rhythmic stabilization
- Manual
 - o Passive elbow extension if lacking
 - o Joint mobs as needed to regain full flexion
 - o Week 10: Passive or contract relax to gain full flexion if still lacking

Phase IV: Full ROM and Strength (>12 weeks)

- Strength
 - o Progress strengthening program with increase in resistance and high speed repetition
 - o Bicep curls with dumbbells
 - o Initiate IR/ER exercises at 90° abduction
 - o Progress rhythmic stabilization activities to include standing PNF patterns with tubing
 - o Initiate plyotoss – double arm progress to single arm
 - o Initiate sport specific drills and functional activities
 - o Initiate interval throwing program week 16-20
 - o Initiate light upper body plyometric program week 16-20
 - o Progress isokinetics to 90° abduction at high speeds
- Modalities
 - o Ice 15-20 minutes
- Goals of Phase IV
 - o Full painless ROM
 - o Maximize upper extremity strength and endurance
 - o Maximize neuromuscular control
 - o Optimize shoulder mechanics/kinematics
 - o Optimize core stability
 - o Initiate sports specific training/functional training