

Highlands Ranch Hospital (720) 516-4090 Inverness (303) 694-3333 Anschutz Medical Campus (720) 848-1900

# <u>Rehabilitation Protocol</u> <u>Chronic Triceps Tendon Rupture Repair</u>

### Phase I: Protect Repair (0 to 6 weeks)

- Splint
  - o Maintain splint placed in OR for 2 weeks until first follow-up
  - At first post-op visit, transition to custom removable splint to be worn at all times (except showering) until 6 weeks.
- Precautions
  - Elbow immobilized in splint at 30° elbow flexion for 1st 6 weeks
  - No active elbow extension 6 weeks
- ROM
  - Gradual ↑ Active/Passive ROM of shoulder in all planes while in splint
  - o Wrist/hand/finger full AROM in splint
- Strength
  - Scapular retractions
  - Shoulder shrugs
- Modalities
  - Hot pack before treatment
  - E-stim, TENS as needed
  - Ice 10-15 minutes after treatment
- Goals of Phase I
  - Control pain and inflammation
  - Protect repair
  - Independent in HEP



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### **Phase II: Progress Protected ROM and Function** (6-12 weeks)

#### • Precautions

- Elbow placed in a *hinged ROM brace* allowing 30°-45°
- o Brace to be worn at all times except during exercise or bathing
- *Passive* ROM ONLY for elbow extension
- ROM
  - Hinged Brace Range of Motion Progression (ROM progression may be adjusted base on Surgeon's assessment of the surgical repair.)
  - Week 6-7: 30°-45°
  - Week 7-8: 15°-60°
  - Week 8-9: 10°-90°
  - Week 9-10: 0°-110°
  - Week 10-11: 110°-125°
  - Forearm: Initiate AAROM pronation and supination
  - Progress to active pronation and supination (wk 6)
  - Shoulder AROM as needed in brace

#### • Strength (in brace)

- Isometric shoulder exercises
- Supine/standing rhythmic stabilizations
- Wrist/hand: grip strengthening
- o Standing flexion and scaption
- Side-lying ER
- Isometric biceps pain free (week 8)

#### • Manual

- Scar mobilization
- Passive elbow extension
- Joint mobs as needed
- Modalities
  - Heat/hot pack before therapy
  - US to incision as needed
  - Ice 10-15 minutes



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- Goals of Phase II
  - Protection of repair
  - o Gradual increase in ROM
  - Initiate strengthening to surrounding tissues
    - Improve scapular stability

### Phase III: Reach full ROM (12-16 weeks)

- ROM
  - Week 12 progress to full ROM of elbow; discontinue brace if adequate motor control
  - Initiate UBE light resistance
  - Exercises
  - o Ball roll outs on table
  - o Wall walk
  - o Pulley

#### • Strength

- Tricep/elbow extension progression
- 6 weeks: initiate AROM
- o 8 weeks: initiate light Theraband resistance
- Theraband IR/ER shoulder
- Theraband bicep extension
- Prone dumbbell Therex
- Rhythmic stabilization

#### • Manual

- Passive elbow extension if lacking
- Joint mobs as needed to regain full flexion
- Week 14: Passive or contract relax to gain full flexion if still lacking

## Phase IV: Full ROM and Strength (>16 weeks)

- Strength
  - Progress strengthening program with increase in resistance and high-speed repetition



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