Salina Regional Orthopedic Clinic
Salina Regional Health Center

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PHYSICAL THERAPY PROTOCOL DISTAL BICEPS REPAIR

Procedure

Date of Surgery/Injury: _____ R L B/L [ ] Distal Biceps Repair [ ] Distal Biceps (Non-operative)

Plan

Physical Therapy for R L B/L Elbow 2-3x per Week x 8 Weeks

General Guidelines

Goal: Regain full pain-free ROM of elbow and prevent shoulder and wrist stiffness.
Please read and follow guidelines below. Progression is both criteria-based and patient specific. Phases and time frames are designed to give the clinician a general sense of progression. Phases and time frames are designed to give the clinician a general sense of progression. Concomitant injuries may alter the guidelines.
Follow physician's modifications as prescribed

Phase I (Weeks 0-2)

- No rehabilitation appointments during this phase
- Goals are protection of healing repair and avoiding overstressing the fixation site
- Begin to restore motion after first postoperative visit

Phase II (Weeks 2-4)

- Appointments are 1-2x per week
- Rehab goals:
  - Protect repair
  - Avoid overstressing the fixation site
  - Begin to restore motion
- Precautions
  - The initial elbow extension block will be determined based on the tension of the repair - the elbow flexion angle needed for re-attachment during the surgery. The surgeon will prescribe and document the extension block and set the hinged brace at the first physician post-op visit. The patient will start physical therapy very soon after that appointment. The extension block can be progressed 10° each week by the therapist until they reach full extension. For example if it was set at 40° 14 days after surgery, then the PT can progress that to 30° at day 21 assuming there are no symptomatic restrictions.
  - In some cases, such as acute tears of healthy tendons, the tendon can be repaired without tension, thus almost full extension. In these cases a hinge brace will not be necessary. The patient may have a soft sling for comfort but this can be weaned from as soon as they start physical therapy.
  - Avoid shoulder extension.

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- Suggested therapeutic exercise
  - Passive range of motion (PROM) for elbow flexion and supination, within current ROM limits above
  - Active range of motion (AROM) for elbow extension and pronation, within current ROM limits above
  - Sub-maximal, pain-free isometrics for triceps
  - Sub-maximal, pain-free isometrics for biceps with forearm neutral, up to lifting 5 lbs.
  - Active shoulder motion with 5 pound lifting restriction
- Cardiovascular Exercise:
  - Stationary bike • Outdoor walking (no treadmill or uneven surfaces)
- Progression Criteria
  - 4 weeks post-op

Phase III (Weeks 5-12)

- Rehabilitation appointments as needed. Usually 1 time per week
- Rehabilitation Goals:
  - Achieve full elbow motion
  - Adherence to home exercise program (HEP)
- Precautions:
  - Avoid shoulder extension and eccentric biceps activity
  - Hinged Brace: continue to progress as described in phase 2
- Suggested Therapeutic Exercises
  - Single plane AROM for elbow flexion, extension, supination and pronation.
  - Progress single plane motions to multi-planar motions at 8 weeks post-op if good control with single plane motions
  - Progress isometrics to light isotonics at 8 weeks if progressive isometrics are pain-free
  - Progress to more aggressive interventions for ROM if full range has not been achieved by 8 weeks post-op
- Cardiovascular Exercise:
  - Stationary bike with moderate resistance
  - Deep water running and swimming
  - Elliptical trainer at moderate intensity
- Progression Criteria:
  - 12 weeks post-op
  - Full elbow AROM
  - Good control with multi-planar elbow movement

Phase IV (Begin after meeting Phase III criteria, usually at 12 weeks after surgery)

- Rehabilitation appointments as needed
- Rehabilitation Goals :
  - Normal multi-planar high velocity movements without side to side differences or compensations

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  - Normal strength without side to side differences or compensations
  - Adherence to HEP
- Precautions
  - No active reactive swelling or pain that lasts more than 12 hours
  - Must meet strength test requirements for sport/work
- Suggested Therapeutic Exercises:
  - Progress multi-planar motions to include upper quarter, as well as appropriate resistance and velocity
  - Ensure supination strength is regained
  - Progress isotonics to eccentrics. Initiate eccentrics in mid-range and ensure strength and tolerance prior to progressing toward end of range
  - Strength and control drills related to sport specific movements
  - Sport/work specific balance and proprioceptive drills
  - Hip and core strengthening
  - Stretching for patient specific muscle imbalances
- Cardiovascular Exercise:
  - Design to use sport specific energy systems
- Progression Criteria:
  - Return to unrestricted sport/work after receiving clearance from the orthopedic surgeon and the physical therapist/athletic trainer. Patient should have less than 15% difference in strength test