Northwest Ohio Orthopedics and Sports Medicine
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NWO Therapy Department

Rehabilitation Guidelines for Distal Biceps Tendon Repair

The intent of this protocol is to provide the clinician with a guideline to establish and progress a patient through post operative rehabilitation. It is not intended to be a substitute for one's clinical decision making. The plan of care should be based upon the patients clinical exam and individual goals. Prior to initiation of interventions the therapist needs to check with the surgeon/operative report regarding progression. The therapist needs to take into consideration multiple variables including: mechanism of injury, repair type, tissue quality, and patient characteristics including comorbidities, age, goals, and expectations. Based upon these variables, wide variations of progressions and patient outcomes may exist, however the following is a basic guideline that can be used to reference.

- Notify the surgeon ***immediately*** of any concerns for infection, edema, or significant variation in expected progression/outcomes.

- **Phase I: 0-6 weeks**

  - Goals:
    - Maintain integrity of repair
    - Decrease pain and inflammation
    - Promote tissue healing
    - Progressively increase range of motion
    - Prevent muscle inhibition
    - Patient education of precautions and progression

  - Precautions:
    - No active biceps contraction 8 weeks
    - No quick movements
    - No lifting of objects
    - No excessive stretching
    - No supporting body weight by hands
    - PROM that is too aggressive or provokes muscle guarding
    - Keep incisions dry and clean

  - 0-2 weeks
    - Immobilized in post-op splint at 90 degrees flexion
    - Check incision

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- 2-4 weeks
  - At 2 weeks, place patient in IROM and lock at 90 degrees
    - If IROM not appropriate then may use dynamic flexion assisted brace
  - At 3 weeks
    - Unlock brace with theraband flexion assist and blocked at 30 degrees
    - Initiate ROM
      - Passive elbow flexion and active extension limited to 30 degrees
      - Active/passive wrist, finger, and shoulder range of motion as tolerated (no active supination)
      - Incision check
      - Modalities as needed
      - NO active biceps contraction
    - Initiate scar massage if healed

- 4-6 weeks
  - Continue passive flexion/active extension and incrementally increase extension by 10 degrees weekly with goal of full extension by 6 weeks
  - Initiate triceps isometrics
  - Initiate wrist and submax grip strengthening

Phase II: 6-12 weeks

- Criteria to progress to phase II.
  - Appropriate healing by adhering to precautions in phase I
  - Staged ROM goals achieved
  - Minimal pain and effusion

- Goals for Phase II
  - Allow healing of soft tissue
  - Do not overstress healing tissue
  - Restore full PROM by week 12
  - Normalize AROM
  - Begin to increase strength and endurance
  - Initiate gradual return to functional activities and light work activities

- 6-8 weeks
  - Initiate PROM elbow extension to tolerance (no aggressive stretching)
    - Grade III/IV Joint mobilizations
  - Continue/advance AROM wrist/shoulder

- 8-12 weeks
  - Initiate AROM elbow flexion/supination

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- Initiate isotonic strengthening shoulder
- Advance strengthening wrist/grip
- Discontinue brace at 9 weeks post operative unless otherwise directed by physician

❖ **Phase III: 12+ weeks**

➢ Criteria to progress to phase III
- Minimal to no pain/effusion
- Full ROM elbow without pain
- Full shoulder/wrist strength

➢ Goals for phase III
- Gradual restoration of strength and endurance
- Advance neuromuscular control
- Return to full ADLs/work

➢ 12+ weeks
- Initiate biceps strengthening
- Initiate and advance functional activities based upon patient needs

❖ Each patient is an individual and should be treated as such. Work together with the referring orthopedic for optimal patient outcome.

References:

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