Sutter Health

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Distal Biceps Repair:

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after a distal biceps repair. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:

ELBOW ROM IN BRACE
Week 2: 45-100°
Week 4: 30-115°
Week 6: 15-130°
Week 8: discontinue brace (0-145°)

PHASE I (Weeks 1-3)

Goals

- NO ACTIVE ELBOW FLEXION OR SUPINATION
- Elbow ROM from 45° of extension to 100° of flexion
- Maintain minimal swelling and increase soft tissue healing
- Achieve full forearm supination and pronation

Brace

- Wear brace continuously for 8 weeks

Therapeutic Exercises

- Six times per day the patient should set the hinged brace at 45° of extension and

100° of flexion and perform passive elbow flexion and active assisted elbow extension within the brace. Two sets of 10 are performed.

- The brace is then reset at 90°, the forearm straps are loosened, and the patient performs 2 sets of 10 forearm rotations (passive supination and active assisted pronation). The straps should then be secured.
- Wrist and hand gripping exercises
- Ice after exercise, 3-5 times per day
- A sling should be worn only as needed for comfort with the patient maintaining shoulder ROM. Avoid excessive shoulder extension.
- Shoulder exercises (rotator cuff) and scapular strengthening
- See above brace settings for ROM restrictions

PHASE II (Weeks 3-8)

Goals

- Full elbow and forearm ROM by 8 weeks
- Scar management

Brace

- Use brace continuously until week 8

Therapeutic Exercises

- 4 weeks
    - The extension limit in the brace is changed to 30°. Flexion limit at 115°, but patient may remove brace to allow full flexion 2 times per day. The brace stays on at all other times except when washing the arm
    - Scar massage 3-4 times per day
    - Putty may be used 3 times per day for 10 minutes to improve grip strength
- 6 weeks
    - The extension limit in the brace is changed to 15°. Flexion limit at 130°, but Patient may remove brace to allow full flexion 2 times per day. The brace stays on at all other times except when washing the arm
- 8 weeks
    - The brace is discontinued, unless needed for protection
    - Passive elbow extension exercises are initiated if needed.
    - Light triceps isotonic strengthening
    - Isotonic wrist flexors/extensors
    - Continue rotator cuff and scapular exercises
    - Progress weight 1 lb per week

PHASE III (Weeks 8-12)

Goals

- The strengthening program is gradually increased so that the patient is doing bicep isometric training starting at Week 12
- It may be as long as 6 months before a patient returns to heavy work

Therapeutic Exercises

- Elbow ROM exercises are performed if ROM is not within normal limits
- Biceps isometrics @ week 12
- Continue flexibility exercises
- Week 10-12, initiate UBE

PHASE IV (Weeks 12-26)

- Week 16 - light biceps isotonics
- Plyometrics
  - Two handed @week 16
  - Progress to one-handed at week 20
  - Week 26 and beyond: Return to activity (sport-specific training)