

# Rehabilitation Guidelines: Distal Biceps Repair.

## Indications:

- Acute traumatic total distal rupture of the biceps at the elbow managed surgically.
- Partial traumatic distal rupture of the biceps at the elbow managed conservatively.

## Goals:

- Soft tissue healing.
- Reduce pain/inflammation
- Oedema management
- Restore passive range of motion (ROM)
- Ensure minimal functional ROM restored (30-130° / 1000 arc, 600/600 forearm) or as per post op note.
- Scar management
- Restoration of strength
- Restoration of proprioception
- Facilitate functional use ADL and independence in line with post operative precautions.
- Restoration or adaptation of key interests, roles and functional requirements.

## Precautions

Patients to follow specific Controlled Active Motion (CAM) and Early Active Motion (EAM) exercise guidelines for first 7 weeks post op (see below for details).

No loading of elbow in flexion until week 6-8. Graduate increase thereafter

No resisted Supination until week 6-8. Graduate increase thereafter

No driving until week > 6/52 for manual, >2/52 for Auto.

## Stage 1: Inpatients (Day 0 to removal of POP at 1/52)

Post-Op: Check postop note and medical notes for team instructions

Plaster Room	Occupational/Hand Therapy	Physiotherapy (inpatient)
<ul style="list-style-type: none"><li>• Plaster of Paris or Locked Don Joy</li><li>• elbow flexed to 90 degrees</li><li>• mid-prone</li></ul>	<ul style="list-style-type: none"><li>• Discharge facilitation as necessary</li></ul>	<ul style="list-style-type: none"><li>• AROM of neck, shoulder and fingers</li></ul>

## Occupational/Hand Therapy

### Splint: Don Joy IROM Elbow resting at: 90°

- o CAM arc as below.
- o +/- Static Progressive night extension splint @ 7/52 if not achieving expected gains

### EAM: in splint

- Introduce 2° elbow stabilisers (flexors and extensors) @ 2/52.

### CAM: commence @ 1/52 on commencement of dynamic splinting x 6/52.

- In mid-prone for extension – 5-7 times/day (8-10 reps).
  - o 1st 2/52: 60° to full flexion – passive ROM only.
  - o 2nd 2/52: 30° to full flexion – A/ROM in supine/gravity eliminated.
  - o 3rd 2/52: 0° to full flexion (remove elastic splint component) – A/ROM gravity resisted.
- Progressive pronation and supination at >90° of elbow flexion – 5-7 times/day (8-10 reps).
  - o 1st 2/52: P/S 45° /45°
  - o 2nd 2/52: P/S 70° /70°
  - o 3rd 2/52: P/S full 85/90

### General ROM.

- Full ROM to fingers, wrist and shoulder.

### Posture:

- Reinforce good posture esp. scapular retraction.
- Position in neutral shoulder rotation with aid of...
  - o Don Joy sling component for functional mobility.
  - o Pillows/table/cushions for rest/sleep.

### Oedema management:

- Commence @1/52

### Scar Management:

- as per medical team for wound care
- Commence @ 2/52.

### Function:

- Commence @ 1/52.
- Progressive use in splint from very light to light function as allowed and tolerated.
- Adaptive equipment to facilitate ADL independence as necessary.
- Adapt ADLs to avoid loaded elbow flexion.

### Psychosocial:

- Screen for low mood and difficulty coping
- Cosmetic loss of anterior elbow contours noted by some patients.

### Physiotherapy:

- Refer patient for follow-up at 6/52 in OPD

### Stage 3: Week 7-12

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Occupational Therapy	Physiotherapy
<ul style="list-style-type: none"><li>• Discontinue Don Joy Splint.</li><li>• Splint as necessary to address ROM deficits (Liaise with physiotherapy regarding plan)</li><li>• Progress to light to medium functional use as tolerated<ul style="list-style-type: none"><li>- avoid heavy elbow loading in flexion.</li></ul></li><li>• Return to driving.</li><li>• Return to work on light to moderate duties.</li></ul>	<ul style="list-style-type: none"><li>• Progressive strengthening, conditioning and proprioceptive retraining.</li></ul>

### Stage 4: Week 12 to discharge

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Occupational Therapy	Physiotherapy
<ul style="list-style-type: none"><li>• Progress towards normal personal/domestic functional use with phased introduction of full elbow loading in flexion.</li><li>• Phased return to full work/productive ADLs including manual labour in consultation with orthopaedic consultant &gt;12/52</li><li>• Phased return to full leisure ADLs including DIY in consultation with orthopaedic consultant &gt;12/52.</li><li>• Scar management - ongoing.</li></ul>	<ul style="list-style-type: none"><li>• On-going rehab.</li></ul>

