

**REHABILITATION FOR OPERATIVE TREATMENT
OF RADIAL HEAD FRACTURES**

Preoperative Rehabilitation

- Injury is protected with immobilization through casting, splinting and/or placed in a sling
- Patient is instructed of post-operative rehabilitation goals and plan

Immobilization: (3-5 days post op)

Goals: Control pain and edema

Protect fracture site with posterior splint or compression bandage

Minimize cardiovascular deconditioning

Maintain range in joints around the effected region (shoulder, wrist, and fingers)

Prevent contractures

Patient can don/doff sling independently with elbow at 90 degrees flexion with forearm in neutral

Intervention:

- Modalities, such as TENS and ice, for pain control
- Splint/Sling as direct by MD
- Monitor use and weight bearing instructions per MD
- Cardiovascular conditioning
- Gentle range of motion exercises of the shoulder, wrist, and fingers
- Passive flexion/extension of the elbow
- Passive pronation/supination of the elbow

Phase I maximum protection phase: (7 days - 3 weeks post op)

Goals: Continue to control pain and edema as needed

Minimize deconditioning

Regain range of motion within pain limits

Prevent muscle atrophy

Intervention:

- Active assistive flexion/extension with stick or pulleys
- Active assistive pronation/supination with stick or pulleys
- Cardiovascular conditioning
- Increase mobility to tolerance, prevent stiffness
- CPM

Phase II moderate protection phase: (4-6 weeks post op)

Goals: Regain full range of motion

Actively work within newly gained range of motion

Increase strength

Intervention:

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- Active flexion/extension of the elbow
 - Active pronation/supination of the elbow
 - Active: flexion, extension, pronation, supination with a wand or pulleys
 - Pulleys with eccentric control during flexion/extension
 - Isometrics: flexion, extension, pronation, supination
 - Gentle stretching using inhibition/elongation techniques or joint mobilization to increase range of motion

Phase III minimum protection phase: (12 weeks post op)

Goals: Increase strength (especially at end ranges)

Educate patient on proper joint protection and therapeutic exercises

Gain adequate strength in the forearm flexors and extensors to increase stability at the elbow

Strengthen the elbow flexors and extensors to gain full range of motion

Increase speed and control of limb movement

Intervention:

- Resistive exercises: standing with weights, theraband resisted (flexion, extension, pronation, supination) exercises
- Self-stretching: flexion/extension, pronation/supination, shoulder flexion/extension, and wrist flexion/extension, ulnar deviation / radial deviation
- Advance elbow extension with radial deviation and elbow flexion with ulnar deviation
- Higher speed and high intensity isotonic flexion/extension, pronation/supination while standing or performing ADLs
- Incorporate open and closed-chain exercises