

## Hemi-Cap Humeral Head Replacement Post-Operative Rehabilitation Program

The goal of the rehabilitation process is to provide greater mobility to the patient than before the surgery. In addition, stability of the shoulder is vital and essential to normal non-painful shoulder function. The key to the success of the rehabilitation following total shoulder replacement is compliance to your exercise program.

### **I. PHASE ONE - IMMEDIATE MOTION PHASE (Week 0-4)**

**Goals:** Allow early healing of capsule  
 Increase passive range of motion  
 Decrease shoulder pain  
 Retard muscular atrophy and prevent RTC inhibition

#### **WEEKS 1-2**

Sling for Comfort and Sleep

Exercises:

- Pendulum Exercises
  - Passive Range of Motion
    - Flexion (0-75 degrees)
    - ER (in scapular plane at 10 to 15 degrees)
    - IR (in scapular plane at 20 degrees to 25 degrees)
  - Elbow/Wrist ROM
  - Gripping Exercise for Hand
  - Ice & Modalities
  - Isometrics (Day 10)
    - Abductors
    - ER
    - Elbow flexors
- \*No IR isometrics for 2-4 weeks  
 \* Electrical Muscle Stimulation (if needed)
- Rope and Pulley (POD 5-7) – Flexion to 70/90 degrees with bent elbow to 90 degrees

#### **WEEK 2:**

Passive Range of Motion  
 Flexion to tolerance (at least 125 degrees)  
 ER/IR @ 30 degrees abduction

- ER to 20 degrees
- IR to side

#### **WEEKS 3-4**

Sling as Needed

Exercises:

- Continue all ROM exercises
  - Initiate AAROM & PROM exercises
  - Progress flexion to tolerance (at least 145 degrees)
  - ER @ 45 degrees abduction to 25-30 degrees
  - IR @ 45 degrees abduction to 50 degrees

- Initiate AAROM ER/IR supine with L-bar
- Initiate rhythmic stabilization exercises
  - Flex/Ext
  - ER/IR in scapular plane
- Isometrics
  - ER
  - Flex
  - Ext
  - Abd
  - Initiate IR
- Able to perform tubing ER/IR
- Able to perform AROM shoulder flexion (supine)
- Scapular exercises
  - prone rowing
  - prone extension
- Rope and Pulley

## **II. PHASE TWO - ACTIVE MOTION PHASE (Week 5-10)**

**Goals:** Improve dynamic stabilization and strength  
Improve Range of Motion  
Decrease pain/inflammation  
Increase Functional Activities

- WEEK 5:** Passive Range of Motion
- Flexion to 160 (at least)
  - ER/IR @45 degrees abduction
    - ER to 50 degrees
    - IR to full

### **WEEKS 6-8:**

Exercises:

- Active Assisted ROM Exercises with L-Bar (Begin week 2)
  - Flexion to tolerance
  - ER in scapular plane at 90 degrees abduction (ER to 55-60 degrees)
  - IR in scapular plane at 90 degrees abduction ( IR to full)
  - All motions to tolerance
  - Rope and Pulley
    - Flexion
- Pendulum Exercises
- AROM Exercises
  - Supine Flexion if unable sidelying flexion
- Strengthening Exercises
  - Tubing ER/IR
  - Rhythmic stabilization Flex/Ext and ER/IR
  - Sidelying ER
  - Sidelying flexion
  - Scapular strengthening exercises
  - Prone rowing

- Prone extensions
- Biceps/triceps
- Full can
- Lateral raises

### **WEEKS 9-12**

- Continue all exercises listed above
- Prone goal:
  - Flexion 180 degrees
  - ER at 90 degrees Abd: 75-80 degrees (or to tolerance)
  - IR at 90 degrees Abd: 60-65 degrees
- Continue to emphasize AROM and strength
- Progress strengthening exercises
  - Fundamental Shoulder Exercises
- Able to initiate light golf swings (week 10-12)

### **III. PHASE THREE - ACTIVITY PHASE (WEEKS 13-26)**

- Initiation of this phase begins when patient exhibits:
  - PROM:
    - Flexion 0-160 degrees
    - ER 75 degrees
    - IR 60 degrees
  - Strength level 4/5 for ER/IR/ABD

Goals: Improve strength of shoulder musculature  
Neuromuscular control of shoulder complex  
Improve functional activities

Exercises:

- \*AAROM and stretching exercises
  - Flexion with L-bar
  - ER/IR at 90 degrees abduction
- \*Strengthening exercises
  - ER/IR tubing
  - Full Can
  - Lateral raises
  - Prone rowing
  - Sidelying ER
  - Prone extension
  - Biceps
  - Initiate interval sport program if appropriate (weeks 20-26)