# Thumb Carpometacarpal Joint Arthroplasty



# **POSTOPERATIVE PHASE I:**

# Inflammation/Protection (0-3 Weeks)

### **GOALS**

- Protect the arthroplasty through splinting and activity modification/joint protection
- Reduce edema and pain
- Maintain full AROM of uninvolved joints

## **PRECAUTIONS**

- No ROM of thumb MP or CMC joints
- No ROM of wrist unless specifically prescribed by MD
- No strong pinching or other resistive activities

# TREATMENT STRATEGIES

- Splinting: thumb spica splint when postoperative splint is discharged by MD
- Joint protection: avoid strong pinch and any aggravating activities; use hand for light ADL to tolerance only
- Edema and pain reduction: elevation, cold modalities, retrograde massage (avoiding surgical incision until fully closed)
- ROM exercises for uninvolved joints: fingers, thumb IP joint, elbow, forearm and shoulder

# **CRITERIA FOR ADVANCEMENT**

- Edema and pain controlled (minimal)
- Patient cleared by surgeon for thumb and wrist AROM, typically at 3-4 weeks postoperatively
- Note: if Kirschner wire is used, phase II does not begin until its removal, at 4 weeks following LRTI arthroplasty and at 5 weeks following HDA

# **POSTOPERATIVE PHASE II:**

# Fibroplasia (4-8 Weeks)

### **GOALS**

- Protect the arthroplasty through continued splinting and activity modification/joint protection
- Reduce residual edema and pain
- Minimize scarring
- Restore stable AROM of thumb CMC and MP joints and wrist within tolerance

# **PRECAUTIONS**

• No resistive activities or exercises

#### TREATMENT STRATEGIES

- Splinting: thumb spica splint is removed for therapeutic exercises and hygiene, until discharged by surgeon
- Phase I edema treatments continue; contrast baths and light compression wrapping, avoiding overly tight application
- Scar management when incision has healed: scar massage, silicone pad
- A/AAROM of thumb MP and CMC joints and wrist;
  PROM to regain functional motion
- Light, functional activities to encourage use of hand to tolerance, avoiding forceful pinch and any aggravating activities

# **CRITERIA FOR ADVANCEMENT**

- Minimal pain with light activities and motion exercises
- Patient cleared by surgeon for strengthening exercises and discharge of splint

## **POSTOPERATIVE PHASE III:**

# Scar Maturation (8-12 Weeks)

#### **GOALS**

- Restore functional, pain-free ROM in thumb and wrist
- Achieve functional strength for pinch, grip and wrist
- Restore independent activities of daily living (ADL) while maintaining joint protection

# **PRECAUTIONS**

 Avoid pain-provoking activities and overaggressive, resistive exercises

### TREATMENT STRATEGIES

- · Gradual weaning from splint
- Scar management until scar is pale and flat
- Thumb and wrist ROM exercises continue, with emphasis on functional motion versus extreme end range motion
- Light resistance for wrist and grip strengthening for return to independent ADL
- Light resistance for pinch strength for return to independent ADL

# **CRITERIA FOR ADVANCEMENT**

- Independence in home program
- Understanding and use of joint protection principles
- · Functional thumb and wrist ROM
- · Functional hand and wrist strength
- Independence in ADL with minimal discomfort

(JeMe Cioppa-Mosca, Janet B. Cahill & Carmen Young Tucker, 2006)

