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 post operatively
- Note: if Kirschner’s 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
Thumb Carpometacarpal Joint Arthroplasty

- 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 vs extreme end range motion
- Light resistance for wrist and grip strengthening for return to independent ADL
Thumb Carpometacarpal Joint Arthroplasty

- 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)