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

If you have any problems or questions, please call your doctor’s office (8am-5pm).
Answering service for after hours.
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)