

MCP Silicone Arthroplasty - Traumatic or Osteoarthritis

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Goals of therapy

- Protect surgical reconstruction, including stability of joint replacement
- Maximize range of motion
- Prevent extensor lag at PIP joint
- Minimize dorsal scar adhesions
- Minimize post-operative edema
- Maximize grip and pinch strength

Days 3-7

- Remove post-op dressings
- Using sterile technique, gently cleanse wounds and apply light dressings
- Fabricate dynamic extension splint
 - Wrist at 10 degrees extension with slight ulnar deviation
 - MP's at 0 degrees extension with slight radial deviation. IP joints and thumb are left free
 - Use as necessary: derotational slings to correct digit rotation; radial outriggers to decrease ulnar drift; IP joint blocking splints (Oval-8 or thermoplastic ulnar gutter splints) to transfer forces to MP joint flexion only
- Fabricate static resting splint
 - Wrist at 10 degrees extension and slight ulnar deviation
 - MP's at 0 degrees extension with finger dividers to promote slight radial deviation
 - IP's in comfortable flexion. If PIP swan-neck deformity was present prior to surgery, consider placing PIP joints in greater flexion
 - Thumb included, in resting position
- Begin active MP joint flexion to 30 to 40 degrees to protect extensor tendon repair

- Monitor for full MP joint extension
- Edema reduction techniques

Week 2 (First follow-up visit with PA)

- Sutures removed
- Continue to monitor for extensor lag at MP joints
- Encourage full IP joint motion
- Advance MP joint flexion to 60 degrees
- Begin gentle scar massage
- Continue edema reduction techniques

Week 4

- Increase MP joint flexion to 90 degrees actively
- Continue static and dynamic extension splints, as needed, to prevent extensor lag
- If MP joint flexion is less than 40 degrees, begin flexion strapping/flexion glove intermittently during the day

Week 6

- Discontinue use of splints, based on MP joint range of motion
- Continue use of static night extension splint, if extensor lag at MP joints