

CMC Arthroplasty (Suspensionplasty) Rehabilitation Protocol, +/- Volar plate reconstruction

5-7 Days Postop

- The patient sees therapy for splint removal. The patient is fitted with a removable hand-based thumb static splint with the IP joint free. The thumb is positioned midway between palmar and radial abduction. A light compressive dressing is applied to the hand and forearm prior to fabricating the splint
- Note: The thumb must not be positioned in radial abduction. This would risk stretching out the reconstruction.
- Note: if a volar plate reconstruction is performed, take care to place the thumb MPJ in at least 30 degrees of flexion and avoid MPJ hyperextension for 6 weeks
- The below exercises may be initiated

10-14 days Postop

- Sutures are removed
- Scar massage initiated
- Silicone pad may be used

1-6 Weeks Postop

- Active and self passive ROM exercises are Initiated to the thumb and wrist 6 - 8 times a day for 10 minute sessions. Exercises should emphasize:
 - palmar & radial abduction
 - thumb circumduction
 - flexion/ extension
 - wrist flexion/extension
 - wrist radial/ulnar deviation
- The CMC joint should be supported during self passive exercises.
- The hand-based thumb static splint is worn between exercise sessions and at night for protection of the surgery and for comfort.
- Scar management is initiated at 3 weeks. It is critical to emphasize scar mobilization as dense adhesions are common. Scar massage with lotion, scar retraction using a piece of dycem, and use of a scar remodeling product such as Rolyan 50/501M, OtoformK™, or Elastomerm are recommended.
- Initiate manual desensitization techniques as the area is often hypersensitive along the surgical site, as well as due to superficial sensory branch of radial nerve neuritis.

6 Weeks Postop

- Unrestricted PROM exercises may be initiated. Continue to support the CMC joint
- On rare occasion, it becomes necessary to add dynamic flexion splinting for the MP and IP Joint of the thumb. Any dynamic splint must be form fitting and provide maximal support of the CMC joint.
- Continue with the wrist and thumb static splint between exercise sessions and at night
- Persistent and dense scars may benefit from ultrasound. The ultrasound can enhance the vasoelasticity of the soft tissues, thus increasing mobility.

8 Weeks Postop

- Gentle strengthening may be initiated between 6 and 8 weeks postop. If edema and/or pain are persisting, delay strengthening until 8 weeks.
- The wrist and thumb static may be discontinued. Patients who require use of their hand in repetitious, heavy lifting or pinching activities may be more comfortable in a short opponens splint. The splint will provide external support. Depending on the level of need, either a thermoplastic or neoprene splint can be used.
- Persistent hypersensitivity along the surgical site typically responds well to high rate, conventional TENS worn continuously until the pain dissipates. Fluidotherapy can be beneficial in reducing the hypersensitivity, as well.

10-12 Weeks Postop

- The patient may resume normal use of their hand in daily activity. Patient education is important. The basic guidelines outlined in conservative management of CMC arthritis should be reviewed once again. Simple suggestions such as using non-skid pads to remove jar lids, etc. should be reinforced.

CONSIDERATIONS

- The inability to flatten the palm after the procedure is typical. Often this is a concern to the patient. Activities such as cleaning the windows, wiping down a countertop, etc. can be frustrating. Patients need to understand this is to be expected to a degree because this positioning is maintaining stability at the CMC joint.
- The patient should be encouraged to practice functional activities and prehension of small, lightweight objects to regain dexterity and minimize frustration. To begin this when the patient begins AROM exercises is encouraged.
- Patients will typically indicate their thumb and hand have restored functional use within 6 months.