

CLINICAL PROTOCOL FOR CMC ARTHROPLASTY

FREQUENCY: One to two times per week.

DURATION: Average estimate of formal treatment 1-3 times per week up to 12 visits over 6-8 weeks based on Occupational Therapy evaluation findings.

DOCUMENTATION: Progress Note to physician at each follow-up appointment. Follow treatment calendar for daily requirements. Discharge Summary within two weeks of discharge.

--TREATMENT GUIDELINES--

VISIT ONE – 6-8 WEEKS POST-OP:

GOALS:

1. Splint fabrication: Long thumb spica splint with IP free.
2. Educate patient regarding precautions and splint wear.
3. Initiate home exercise program of gentle active range of motion exercises.
4. Brief evaluation if time allows (see Visit #2).

If patient presents with the following **Self-Management Criteria:**

- Minimal edema.
- Minimal to no pain at rest;
- Apparent adherence to precautions;

then patient can be placed on a home exercise program with weekly to bi-weekly rechecks until Discharge Criteria has been met. If patient does not meet above criteria, then a course of formal rehabilitation will be initiated 2-3 times per week until above criteria has been met.

DISCHARGE CRITERIA:

- Able to perform light functional activities with involved upper extremity.
- Independent with home exercise program.
- Failure to progress.
- Failure to comply.

VISIT ONE OR TWO – Brief Evaluation:

- Pain statement/scale.
- Functional scale.
- Active range of motion measurements: Forearm, wrist, fingers, and thumb.
- Edema assessment.
- Scar assessment.
- Patient education and home exercise program for scar massage/desensitization and precautions.

WEEKS 8-10 POST-OP:

- Grip strength assessed.
- Home exercise program upgraded to include putty exercises for grip strength (no use of thumb).
- Patient comes out of splint for light functional activities, but not writing.
- If needed, weighted stretch for palmar flexion can be initiated.

- Patient education for joint protection.

WEEK 12 POST-OP:

- Pinch strength assessed.
- Putty exercises initiated for pinch strengthening if deemed appropriate by physician.
- Patient weans from use of splint.
- Patient education for joint protection.

3-6 MONTHS POST-OP TO DISCHARGE:

- Discontinue splint.
- More aggressive functional activities.

References

1. Roberts, Robyn A. PT, OT, CHT; Jabeley, Michael E. MD., FACS; Nick, Todd G. Phd.; *Results Following Trapeziometacarpal Arthroplasty of the Thumb*; Journal of Hand Therapy; July – Sep 2001;14,3; Nursing and Allied Health Database, pg. 202-207.
2. Ataker, Yaprak MD; Gudemez, Eftal PT; Comert Ece, Sibel, MD; Canbulat, Nazan MD; Gulgonen, Ayan MD; *Rehabilitation Protocol After Suspension Arthroplasty of Thumb Carpometacarpal Joint Osteoarthritis*. Journal of Hand Therapy, Oct – Dec 2012; 25; pg. 374-383.
3. Bielefeld, Terim, PT, CHT; Neumann, Donald A. PT, PHD, FAPTA; *Therapist's Management of the Thumb Carpometacarpal Joint with Osteoarthritis; Rehabilitation of the Hand and Upper Extremity, 6th ed.*; Vol 2; Chapter 102; pg. 1374-1375.