

Protocol W4
Physical or Occupational Therapy Protocol for
Trapeziectomy and Suspension-Interposition Arthroplasty
w/Tendon Autograft

Phase I: Protection Phase (weeks 0-6)

GOALS:

- Protect basal thumb arthroplasty.
- Reduce hand and finger swelling.
- Prevent shoulder, elbow and finger stiffness.

ANCILLARY MEASURES:

- Use pain medication as needed.
- Keep operated hand elevated in foam arm cradle for 3-5 days.
- Wrist and thumb are immobilized in short-arm thumb spica splint for 6 weeks. Splint is changed every two weeks.

EXERCISES:

- **Active and Passive Finger Motion:** Actively bend the fingers into the palm, making a tight fist, and extend the fingers straight. May use the non-operated hand to help fully fingers into palm if necessary. Repeat 5-6 times per day.
- **Shoulder and Elbow Range of Motion:** Begin progressive active range of motion in all planes of shoulder and elbow. Complete 10 repetitions, 3 times per day.

PRECAUTIONS:

- Keep splint clean and dry. Cover with protective plastic bag for bathing.
- Do not push off with operated hand.

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Phase II: Motion Phase (weeks 7-12)

GOALS:

- Full active wrist and thumb range of motion.
- Promote use of hand for activities of daily living.

ANCILLARY MEASURES:

- Discontinue plaster thumb spica splint.
- Use removable short-arm thumb spica splint intermittently weeks 7 and 8 postop. Removable thumb spica splint may then be discontinued.
- Sensitive scars may require scar massage or fluidotherapy under the supervision of a therapist.

EXERCISES:

- **Continue all Phase I exercises.**
- **Wrist Range of Motion:** Begin active and active-assisted wrist range of motion (ROM) in all planes (flexion and extension, radial and ulnar deviation). Progress to gentle passive wrist ROM to address expected wrist stiffness. Add forearm rotation, rolling palm upward and then palm downward, as tolerated.
- **Thumb Range of Motion:** Begin active and active-assisted thumb ROM in flexion, extension, abduction and opposition. Oppose the tip of the thumb first to the tip of the index finger, then middle finger, then ring finger and then small finger. Gradually advance the tip of the thumb down to the base of the small finger. You may help bring the thumb tip to the small finger with the opposite hand.
- **Grip Strengthening:** Initiate gentle strengthening by squeezing a rubber ball, Silly Putty or Nerf ball.
- **Progressive Strengthening:** Wrist curls with 1-3 pound dumbbell weights may be started at 12 weeks postop. However, these formal strengthening exercises are not required by most patients. Grip and forearm strength usually improve over time with activities of daily living.

PRECAUTIONS:

- Avoid thumb injury. Avoid pushing off with operated hand.
- Avoid heavy lifting and sports activity.
- Full, unrestricted activity is not permitted until 6 months postop.