Postoperative Care For FDS-4 Opponensplasty-- Dr. Trueblood

Indications: Low median nerve palsies secondary to trauma or to compression neuropathy may result in severe loss of thenar muscle strength. This can significantly compromise fine motor function of the hand by limiting prehension. FDS-4 is a common donor choice for restoration of prehension strength in patients with a stable, supple thumb CMC and functional weakness in opposition.

Technique: A transverse incision is placed in the distal palmar crease over the ring finger ray. The A1 pulley is exposed and released and the ring finger PIP flexed 90 degrees to maximize available FDS tendon in field. The FDS is then isolated and transected. A second longitudinal incision is then made at the distal edge of the carpal tunnel and the FDS is retrieved through a split in the superficial aponeurosis. The FDS4 is then tunneled superficial to the palmar aponeurosis to the glabrous border of the thumb at the MCP. A short, longitudinal incision is placed over the APB insertion and a three-ply, Pulver-Taft weave is used to secure the FDS to the APB. Wounds are irrigated copiously and closed with 5-0 chromic gut sutures. Wounds are dressed steriley with a thumb spica splint in palmar abduction.

Postoperative Precautions:
- Full time splinting.
- No lifting, pushing, or pulling with operative hand.
- Patient encouraged to not drive or operate heavy machinery.

1st postoperative visit at 2 weeks after surgery--
- Wound Assessment.
- Pain Assessment. Refill pain medications as needed.
- Therapy Prescription. Start Phase 1.
- Schedule Followup at 6 weeks after surgery.
- Work Note, if needed: No lifting, pushing, or pulling. <5# weight lifting in splint. Must wear splint. May type and write.
- Expected return to work:
  - Cognitive/ Sedentary: 3-4 days
  - Medium Labor: 6 weeks
  - Heavy labor 8-10 weeks.

Phase 1 Therapy (Protect transfer, motor retraining)
- Splinting: Forearm based thumb spica splint in palmar abduction. Wear at all times when not doing ROM therapy. Cut splint down to hand based at 4 weeks after surgery.
ROM:
  - AROM/AAROM
  - Motor retraining
  - NO PROM

No strengthening/resisted activity.

modalities prn

HEP

2nd office visit 6 weeks after surgery--
- Pain Assessment. Refill pain medications as needed.
- Therapy Prescription. Start Phase 2
- Schedule Followup at 12 weeks after surgery.
- Work Note, if needed: 20# weightlifting for 2 weeks, then unlimited weight bearing at 8 weeks after surgery.
- Expected return to work:
  - Cognitive/Sedentary: 3-4 days
  - Medium Labor: 6 weeks
  - Heavy labor 8-10 weeks.

Phase 2 therapy (Regain full ROM and normalize functional use of hand)
- Splinting: Wean from splint as tolerated. Most patients will be out of their splint full time by 8 weeks after surgery.
- ROM:
  - AROM/PROM
  - Motor retraining. May use NEMS for motor retraining if needed.
- Strengthening:
  - Wrist and grip strengthening. Majority of therapeutic exercise comes from resuming normal, daily activities.
- Modalities prn
- HEP
  - Transition to HEP full time when patient has full, smooth range of motion without hesitation.

Final followup at 3 months after surgery--
- Functional assessment-- DASH score
- Work Note: no limitations
- Followup prn