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PULLEY RECONSTRUCTION AND REPAIR POST-OP THERAPY PROTOCOL

Goals • Maximize hand ROM while protecting repair/reconstruction • Minimize risk of scar adhesions • Pain and edema control • Return to functional activity by 8-10 weeks	Precautions • Delay strengthening with excessive swelling and pain
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Orthosis

- Pulley ring orthosis is fabricated to serve as external support for the reconstructed pulley and worn continuously for 4-6 weeks. Fabricate a circumferential thermoplastic ring or volar thermoplastic phalanx gutter secured with Velcro dorsally at the level of the pulley repair.
- **At 4-6 weeks**, buddy loops work well for a light Velcro pulley ring support if wrapped around affected digit at the level of the repair
- **After 4-6 weeks**, patient may be transitioned to circumferential Velcro or paper tape pulley support
- Pulley ring is discontinued completely after 1-2 weeks of strengthening and return to functional activities

Edema Management

- Edema control is initiated with edema glove or single finger compression with sleeve or Coban as needed
- Manual Edema Mobilization (MEM) and elevation

Wound Care

- Educate patient in sterile dressing changes as needed
- Dry dressings preferable to prevent maceration under pulley ring orthosis

ROM

- Unrestricted A/PROM and place and hold exercises as needed with pulley ring orthosis on at all times to protect the repaired pulley

Scar Management

- Begin scar massage no sooner than 2 days after suture removal when scar is fully closed with scabbing present. Begin with light massage using lotion.
- Educate patient in scar management and apply scar remodeling products as needed

Strengthening

- **7-8 weeks post-op**: initiate strengthening with pulley ring orthosis in place for first 1-2 weeks of strengthening. Begin with light resistance putty emphasizing slow controlled grip and pinch and progressing to increased resistance and lifting activities to match required job tasks and daily activities.