Goals for therapy
- Maximize hand ROM while protecting repair/reconstruction
- Minimize risk of scar adhesions
- Pain and edema control
- Return to functional activity by 8-10 weeks

Other considerations
- 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
- Delay strengthening with excessive swelling and pain

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.
- 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
References


This protocol was reviewed and updated by Misty Carriveau, OTR, CHT, Lacey Jandrin, PA-C and Brian Klika, MD December 2018.