

## Postoperative Regimen after surgical Finger Flexor Pulley Plasty

- Week 1-2
- Until wound healing is complete, palmar plaster cast in intrinsic plus position, dressing changes twice a week, suture removal after 2 weeks.
- Week 3-6
- Pulley support ring. Exercise stability; active movement without resistance permitted with pulley support ring. Physiotherapy, occupational therapy (guided movements, avoidance of extension deficit), starting in the third week  
Begin with careful exercises using, for example, the Thera-Handexerciser (yellow) or QiGong balls and beginning of general strength training while protecting the operated finger with H-tape or a pulley support ring. Scar mobilization.
- Week 7-12
- Free movement allowed without pulley support ring
- From week 7
- Careful strengthening of the fingers with pulley support ring with, for example, Gogor (Muskers Climbing) or Tindeq sensor while gradually increasing the resistance.
- From week 9
- Additional light static holding exercises on the fingerboard or finger bar, but no hanging on the finger board yet.
- From week 12
- Careful hanging exercises on the finger board using sloper grips and extra weight relief using elastic bands, pull-ups on the bar.
- From 4 months
- Careful climbing, increasing load to full load over 3 months, pulley protection with H-Tape while climbing or training.
- From 6 months
- Full load, competition readiness and continued taping for at least one year – in some cases permanently.

**As a general rule: Do not climb with the pulley support ring (significant risk of injury!).**

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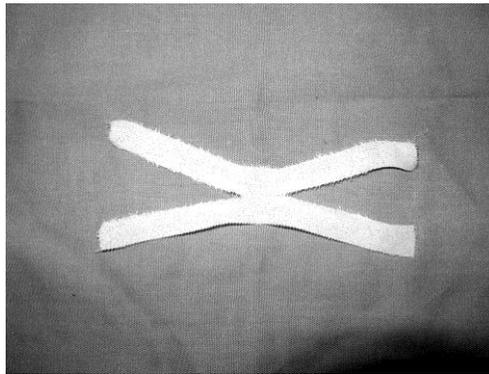
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## Pulley Injury Therapy Regimen

Therapeutic guidelines of pulley injuries in rock climbers (Consensus Statement of Expert Commission Sportsmedicine Bamberg (Volker Schöffl, Isabelle Schöffl, Christoph Lutter, Michael Simon, Yasser El-Sheikh), Bamberg 2019 [36], modified after (Schöffl et al. 2004c))

	Grade I	Grade II	Grade III	Grade IV a	Grade IV b
	Pulley strain	Complete tear of A3 or A4, partial tear of A2	Complete tear of A2	Multiple ruptures: – A2/A3 or A3/A4 rupture if: – No major clinical bowstring – Ultrasound-proven possibility of reposition of the flexor tendon to the bone – Therapy starting <10 d after injury – No contracture	Multiple ruptures: – A2/A3 or A3/4 with obvious clinical bowstring – A2/A3/A4 rupture – Singular pulley rupture with FLIP phenom – Singular rupture with increasing contracture – Singular rupture with secondary, therapy-resistant, tenosynovitis
Therapy	Conservative	Conservative	Conservative	Conservative, if secondary onset of PIP contracture >20° secondary surgical	Surgical
Immobilization	None	optional, <5 days	Optional, <5 days	Optional, <5 days	Postsurgical 14 days
Functional therapy with pulley protection (defined)	2–4 weeks H-tape (during day time) or thermoplastic ring	6 weeks thermoplastic pulley ring	6–8 weeks thermoplastic pulley ring	8 weeks thermoplastic pulley ring	4 weeks thermoplastic ring (after 2 weeks of immobilization)
Easy sport-specific activities	After 4 weeks	After 6 weeks	After 8 weeks	After 10 weeks	After 4 months
Full sport-specific activities	After 6 weeks	After 8–10 weeks	After 3 months	After 4 months	After 6 months
H-taping during climbing	3 months	3 months	3 months	>12 months	>12 months

## H-Tape:



(Schöffl I, Einwag F, Strecker W, Hennig F, Schöffl V (2007)

Impact of „Taping“ after Finger Flexor Tendon Pulley Ruptures in Rock Climbers J Appl Biomech 23(1) 52-62

A strip of tape approximately 1.5 cm wide and 8-10 cm long (depending on finger thickness) is torn from both ends so that a strip approximately 1 cm wide remains in the middle and two 0.75 cm thick strips remain on each side of the middle strip. Two of these strips are then passed around the proximal phalanx and stuck down tightly. The joint is then bent and the two remaining strips are passed distal the joint and stuck down tightly.