

Trigger Finger: A1 Pulley Release

This protocol is intended to provide the clinician with a guideline for the postoperative rehabilitation course of a patient who has undergone **A1 pulley release due to trigger finger**. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, comorbidities, pre-surgical range of motion, strength, health/functional status, rehabilitation compliance, learning barriers and complications. Specific time frames, restrictions and precautions are given to protect healing tissues and surgical reconstruction.

Trigger finger (trigger thumb when involving the thumb) is the inhibition of smooth tendon gliding due to mechanical impingement at the level of the A1 pulley that causes pain, clicking, catching, and locking of the digit. This is due to either or both thickening of the tendon and/or inflammation and narrowing of the A1 pulley. The most common fingers are the ring, middle and thumb to be affected. Limiting triggering of the finger will decrease inflammation using orthoses and activity modifications for conservative management. If conservative management fails, seeing a hand surgeon for a steroid injection to the A1 pulley has been shown 75% affected to cure the trigger finger. If the trigger finger comes back after the injection. Surgery to release the pulley is advised.

Postoperative Guidelines

Surgical Indication

- Grade III and IV trigger finger
- Post injection with return of symptoms

Green Classification

Grade I	Palm pain and tenderness at A1 pulley
Grade II	Catching of digit, no locking
Grade IIIA	Locking of digit, actively correctable
Grade IIIB	Locking of digit, passively correctable
Grade IV	Fixed, locked digit

Return to Work

The timeline for returning to work can vary depending on the type of work performed, various accommodations that may be available within your work environment, and any postoperative complications. Your surgeon will discuss the timeline for returning to work after consideration of

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Phase I (surgery to 10 days after surgery)

Rehabilitation appointments	<ul style="list-style-type: none"> As needed
Rehabilitation goals and priorities	<ul style="list-style-type: none"> Post-surgery dressings in place and removed after 3 to 5 days. Patient will perform hand hygiene with running water and soap and keep incision and sutures clean and dry. Activities of daily living (ADLs) per restrictions Maximize finger AROM Edema management
Suggested therapeutic exercises	<ul style="list-style-type: none"> AROM of the fingers and wrist PROM finger flexion
Precautions	<ul style="list-style-type: none"> No lifting, pushing, or pulling more than 2-5 pounds with involved upper extremity No weightbearing with involved upper extremity No aggressive gripping.
Orthotic management	<ul style="list-style-type: none"> None
Progression criteria	<ul style="list-style-type: none"> Per pain tolerance

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Phase II (10-14 days after surgery)

Rehabilitation appointments	<ul style="list-style-type: none"> As needed
Rehabilitation goals and priorities	<ul style="list-style-type: none"> Sutures removed, scar management Activities of daily living per restrictions
Suggested therapeutic exercises	<ul style="list-style-type: none"> Unrestricted ROM of fingers
Precautions	<ul style="list-style-type: none"> No lifting, pushing, or pulling more than 2-5 pounds with involved upper extremity No weightbearing with involved upper extremity No aggressive gripping.
Orthotic management	<ul style="list-style-type: none"> Dynamic or static progressive orthosis as needed
Progression criteria	<ul style="list-style-type: none"> Per pain tolerance

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Phase III (4-6 weeks)

Rehabilitation appointments	<ul style="list-style-type: none"> As needed
Rehabilitation goals and priorities	<ul style="list-style-type: none"> Regain full ROM of digit(s) Progressive return to all activities of daily living Desensitization
Suggested therapeutic exercises	<ul style="list-style-type: none"> Strengthening and functional activities as needed
Precautions	<ul style="list-style-type: none"> No restrictions
Orthotic management	<ul style="list-style-type: none"> As needed
Progression criteria	<ul style="list-style-type: none"> Per pain tolerance If triggering is present, consider conservative management with limited (trigger-free) ROM of digit and orthosis to decrease inflammation

References

Huisstede, B. Hoogvliet, P., Coert, H., Friden, J. (2014). Multidisciplinary consensus guideline for managing trigger finger: Results from the European handguide study. *Journal of Physical Therapy* 94 (10) 1421-1433.

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Lu, Szu-Ching et al. (2015). Finger movement function after ultrasound-guided percutaneous pulley release for trigger finger: Effects of postoperative rehabilitation. *Archives of Physical Medicine and Rehabilitation* 96 91-97

These rehabilitation guidelines were developed collaboratively between UW Health and UnityPoint Health - Meriter Rehabilitation and the UW Health Orthopedic Surgeons.

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