

Thumb UCL Injury: Conservative

This protocol is intended to provide the clinician with a guideline for the conservative rehabilitation course of a patient who has had a UCL injury. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, comorbidities, pre-injury 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.

Guidelines

Indication:

- Grade 1 and 2 UCL injury
- No Sterner lesion present

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 these factors.

Goal:

Stable, pain-free thumb MP ROM

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Phase I (initial visit- 3-5 days)

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| Rehabilitation appointments | <ul style="list-style-type: none"> • Seen for initial appointment and most likely follow up in 3 weeks |
| Rehabilitation goals and priorities | <ul style="list-style-type: none"> • Fabricate orthosis for immobilization of MCPJ for 3 weeks • ROM of all other joints • Activities of daily living within in restrictions • Pain management • Edema management |
| Suggested therapeutic exercises | <ul style="list-style-type: none"> • Initiate active wrist, finger, and thumb IP AROM • No thumb MCPJ ROM |
| Orthosis | <ul style="list-style-type: none"> • Hand based thumb spica orthosis with IPJ free; MPJ protected from radial/ulnar deviation to be worn at all times except hygiene |
| Precautions | <ul style="list-style-type: none"> • No lifting, pushing, pulling more than 5 pounds with involved upper extremity • No weightbearing of involved upper extremity • No aggressive pinching or gripping with involved hand |

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Phase II (3 weeks)

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| Rehabilitation appointments | <ul style="list-style-type: none"> • 1x/week or per therapist discretion |
| Rehabilitation goals and priorities | <ul style="list-style-type: none"> • Activities of daily living within in restrictions • Pain management • Edema management |
| Suggested therapeutic exercises | <ul style="list-style-type: none"> • Initiate gentle thumb MCPJ flexion AROM allowing up to 35° • If ROM painful, consider 1 more week of immobilization and/or refer to physician to re-evaluate |
| Orthosis | <ul style="list-style-type: none"> • Hand based orthosis with MP protected from radial/ulnar deviation to be worn at all times except hygiene and exercises |
| Precautions | <ul style="list-style-type: none"> • No lifting, pushing, pulling more than 5 pounds with involved upper extremity • No weightbearing of involved upper extremity • No aggressive pinching or gripping with involved hand |

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Phase III (4 weeks)

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| Rehabilitation appointments | <ul style="list-style-type: none"> • 1x/week or per therapist discretion |
| Rehabilitation goals and priorities | <ul style="list-style-type: none"> • Activities of daily living within in restrictions • Pain management |
| Suggested therapeutic exercises | <ul style="list-style-type: none"> • Progress thumb MCPJ flexion AROM to 50° |
| Precautions | <ul style="list-style-type: none"> • No lifting, pushing, pulling more than 5 pounds with involved upper extremity • No weightbearing of involved upper extremity • No aggressive pinching or gripping with involved hand |
| Orthosis | <ul style="list-style-type: none"> • Wear at all times except for hygiene and exercises |
| Progression criteria | <ul style="list-style-type: none"> • Per pain tolerance |

Phase IV (6 weeks)

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| Rehabilitation appointments | <ul style="list-style-type: none"> • 1x/week or per therapist discretion |
| Rehabilitation goals and priorities | <ul style="list-style-type: none"> • Activities of daily living within in restrictions – engage in light to moderate activities with orthosis not in place • Pain management • Edema management |
| Suggested therapeutic exercises | <ul style="list-style-type: none"> • Initiate PROM as needed, avoiding lateral stress to MPJ • Initiate pain-free isometric strengthening |
| Orthosis | <ul style="list-style-type: none"> • Wear orthosis all the time except for light-moderate activities, exercises, and bathing |
| Precautions | <ul style="list-style-type: none"> • No lifting, pushing, pulling more than 5 pounds with involved upper extremity • No weightbearing of involved upper extremity • No aggressive pinching or gripping with involved hand |
| Progression criteria | <ul style="list-style-type: none"> • Per pain tolerance |

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Phase V (8 weeks)

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| Rehabilitation appointments | <ul style="list-style-type: none">• 1x/week or per therapist discretion |
| Rehabilitation goals and priorities | <ul style="list-style-type: none">• Engagement in activities that do not strain thumb |
| Suggested therapeutic exercises | <ul style="list-style-type: none">• Initiate pain-free concentric two-point strengthening, grip and pinch |
| Precautions | <ul style="list-style-type: none">• No lifting, pushing, pulling more than 5 pounds with involved upper extremity |
| Orthosis | <ul style="list-style-type: none">• Discontinue orthosis expect for high-risk activity |
| Progression criteria | <ul style="list-style-type: none">• Per pain tolerance |

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Phase VI (10-12 weeks)

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| Rehabilitation appointments | <ul style="list-style-type: none"> As needed |
| Rehabilitation goals and priorities | <ul style="list-style-type: none"> Resume all activities with no restrictions |
| Suggested therapeutic exercises | <ul style="list-style-type: none"> Strengthening as needed Strengthening specific for work and leisure activities |
| Precautions | <ul style="list-style-type: none"> None Per MD for return to specific sports/activities |
| Orthosis | <ul style="list-style-type: none"> Discontinue |
| Progression criteria | <ul style="list-style-type: none"> Per pain tolerance and MD guidance |

References

Brotzman, S. & Novotny, S. (2018). Injuries to the ulnar collateral ligament of the thumb metacarpophalangeal joint (gamekeeper's thumb). *Clinical Orthopedic Rehabilitation: A Team Approach E-Book*, 4th Edition. Elsevier. 29-31

Gil, J., Ebert, K., Blanchard, K., Goodman, A., Crisco, J., & Katarincic, J. (2019). Efficacy of a radial-based thumb metacarpophalangeal-stabilizing orthosis for protecting the thumb metacarpophalangeal joint ulnar collateral ligament. *Journal of Hand Therapy*, 32(1), 80-85. <https://doi.org/10.1016/j.jht.2017.06.002>

Rhee, P., Jones, D., & Kakar, S. (2012). Management of thumb metacarpophalangeal ulnar collateral ligament injuries. *The Journal of Bone & Joint Surgery*, 94(21), 2005-2012. doi: 10.2106/JBJS.K.01024

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

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