Provincial Trigger Finger Primary Care Clinical Pathway

Quick Links: Primer & Expanded details | Provider resources | Patient pathway | Provide feedback

Trigger finger is diagnosed primarily by history and physical exam. For patients who present with hand pain, assess for history of triggering. If there is no history of triggering, differential diagnoses need to be considered. Trigger finger ranges from mild to severe.

1. History of Present Illness:

- Presence of palmar tenderness/pain at the A1 pulley
- Triggering, locking, catching, or clicking reported (i.e., history of finger getting caught in flexion at the PIP joint)
- Onset, frequency, severity (pain, stiffness, ROM)
- Treatments to date and effectiveness

Relevant Medical History:

- Diabetes Mellitus
- Inflammatory arthritis

2. Physical Exam

- Resting posture of the digit (full extension vs flexion contracture of PIP joint).
- Palpation along the flexor (palmar) surface of the fingers: Tenderness, pain and/or nodule over A1 pulley
- Active and Passive flexion/extension of finger:
  - Triggering/catching during motion
  - Unable to extend the digit

Not all need to be present for trigger finger diagnosis

Other Considerations

- Dupuytren's contracture: Painless; palpable cord (line of nodules) and/or pitting along the palm or fingers.
- Unclear clinical picture.

Yes → Manage as per usual practice. Consider specialty advice or referral to hand and wrist surgeon* or physiatry.

No

Trigger Finger Diagnosed

Note: Most trigger fingers are diagnosed clearly with history and exam. **Ultrasound not required.**

No locked digits

3. Non-Operative Management Strategies

- **Time and Rest:** Approximately 50% will begin to resolve after 3 months of rest.
  - Avoid symptom exacerbating activities as much as possible.
- **Splinting** the MCP or PIP joint of the affected digit(s) in full extension while sleeping for a trial of 2 months. Additional information on types of splints in expanded details.
  - Splinting during awake hours is not needed.
- **Steroid injection** within or over the flexor tendon sheath may resolve triggering in most of patients.
  - Steroid injections should be administered at least 3 months apart for a maximum of 3 injections (lifetime maximum per digit). It may take up to 2 weeks for clinical improvement.

One or more digit in locked position

4. <u>High priority</u> referral to hand and wrist surgeon*

- Initiate concurrent steroid injections if not already started
- Advise patient to report any changes post steroid as improvement may negate need for surgery

If there is no improvement after 3 steroid injections or if symptoms worsen (especially if a flexion contracture develops), or if steroids are declined/not tolerated.

Referral to hand and wrist surgeon*

An optimal referral letter includes a description of:

- Symptoms (digit involvement)
- What treatment has been trialed and effectiveness – **highlight steroid injections**
- Refer to QURE guidelines

***hand and wrist surgeon** includes plastic and orthopedic surgeons, depending on zone

Primary Care Alberta

<u>Call to Action</u>: We need your feedback during this **new** pathway's initial testing phase!

Alberta's Pathway Hub | Background

This primary care pathway was co-designed provincially by Primary Care Providers, Specialist Physicians (Hand and Wrist specialists including plastic surgeons and orthopedic surgeons; rehabilitation medicine), Patient and Family Advisors, and the Provincial Pathways Unit. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home.

EXPANDED DETAILS

Pathway Primer

Trigger finger (stenosing tenosynovitis) can happen in fingers and thumbs and occurs when there is impaired tendon gliding at the level of the A1 digital pulley [1]. This results in pain in the palmar region and digit catching/locking. The overall incidence of developing trigger finger is 2-3% in the general population and 10-20% for those with diabetes mellitus [2]. The condition is six times more common in women and usually occurs in 5th and 6th decades of life [2].

Trigger finger can be diagnosed by history, symptoms and a physical exam. Trigger finger is one of the most common reasons for referral for hand surgery (Trigger finger: Symptoms and Anatomy Video) but can usually be managed in primary care and most cases will resolve with non-operative management [3].

1. History

Present illness

- Presence of palmar tenderness/pain at the A1 pulley site (base of each digit where the digit meets the palm [16]): **Pain at the base of the affected finger or thumb is often the initial symptom**. Pain is initially felt only when activities like gripping are performed but may progress and occur without hand use [5].
- Triggering, locking, catching, clicking reported: Even though pathology is at the A1 pulley site (MCP), patients report the catching/locking/clicking at the PIP joint (finger) or IP joint (thumb).
- Stiffness or loss of motion: Loss in ability to bend and/or straighten finger [5]. Digit may be fully flexed to the palm upon waking and then relax throughout the waking hours.
- History of finger getting caught in flexion at the PIP joint.
- Treatments to date and their effectiveness.

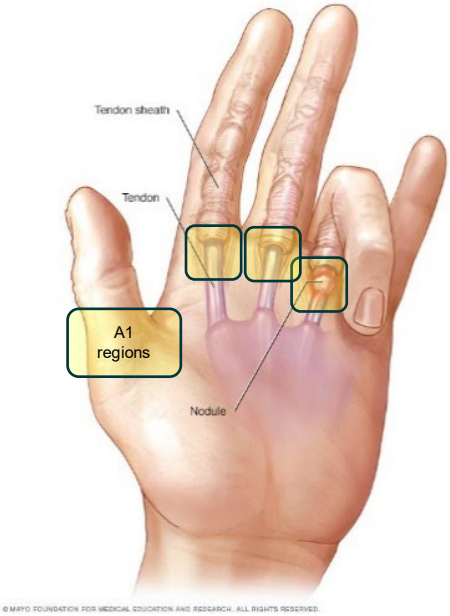


Image 1: Adapted from Mayo Clinic [4]

Relevant medical history:

Although the cause of trigger finger is not usually known, there are conditions that have been shown to increase one's risk [5].

- **Diabetes Mellitus:** Refer early as the condition is often more profound and impacts multiple digits. Patients with diabetes and multiple digit involvement are less likely to get permanent symptom relief from conservative management. Good glycemic control is imperative to reduce symptoms and the risk of infection if surgical management is ultimately undertaken.
- **Inflammatory Arthritis:** Treat underlying cause and consult rheumatology as necessary. Patients with inflammatory arthritis may be less likely to respond to conservative management unless arthritis is well controlled.
- **Carpal Tunnel Syndrome** has been associated with multiple trigger fingers (see Provincial Carpal Tunnel Syndrome (CTS) Primary Care Clinical Pathway). Multiple trigger fingers are a reason for early referral.

2. Physical Exam

- Resting posture of the digit: Full extension vs flexion contracture of PIP joint.
- Palpation along the flexor (palmar) surface of the fingers: Tenderness, pain and/or nodule over A1 pulley.
- Triggering over A1 pulley (may not be present at time of examination)
    - Edema, pain and/or nodule at the A1 pulley.
    - Ask the patient to make a fist while applying pressure over the affected tendon. This will often elicit pain and clicking [3].
    - Patients may have difficulty extending the digit and may require the use of their opposite hand to obtain full range of motion [1].
    - The most painful finger can overshadow the others. All affected digits should be treated at the same time regardless of severity [1].
- Locked digits: If flexion contracture is noted upon initial exam or develops while non-operative measures are being trialed, the patient should be referred urgently to a hand and wrist surgeon. If steroids have not yet been trialed, refer the patient for steroid injections as this treatment may downgrade the severity of trigger finger while the patient awaits appointment with a specialist.
- Trigger finger severity: This information may help triage referrals. Patients with locked trigger fingers should be referred most urgently.

Note: History of triggering is sufficient. The patient does not need to be able to demonstrate triggering during the in-office exam.

Other considerations

- Dupuytren's contracture: Painless; palpable cord (line of nodules) and/or pitting along the palm or fingers. See Provincial Dupuytren's Disease Primary Care Clinical Pathway.
- Unclear clinical picture: Imaging is not necessary unless the diagnosis is uncertain, exam findings are atypical or to rule out other pathology. Ultrasound **may** be beneficial in some cases (where uncertainty exists, not for routine cases).

3. Non-Operative Management Strategies

Treatments can be trialed simultaneously. Goal of conservative management is to reduce swelling and inflammation to allow smooth and painless motion of the finger(s) and/or thumb(s). Recovery is best achieved with early diagnosis and treatment [5] [6]. The European Handgroup recommends that the main factors to be considered when choosing treatment options are: 1) severity, 2) duration, and 3) previous treatments trialed [7].

Treatment can include one or all of the approaches below based on patient circumstances and preference.

- **Time and rest**
  - Resting the hand will reduce inflammation. This on its own may improve/resolve symptoms. There have been limited studies conducted to evaluate the natural history of trigger finger and the rate of spontaneous recovery. A study by McKee et al., reported complete spontaneous resolution ("no treatment") of trigger finger symptoms in 52% of the patients they evaluated (mean time 8 months post initial consult) [8].
  - Limit triggering/exacerbating activities (e.g., forceful, repetitive or sustained gripping) [5].
- **Splinting**: Suitable for patients with mild symptoms/early presentation of trigger finger or those who decline corticosteroid injections. Splint with either the MCP or PIP in full extension during sleep only for a trial of 2 months. Splinting during waking hours is not needed. Splints can be purchased off the shelf or be custom fit by hand therapist.
  - Splinting is an efficacious treatment for trigger finger. A study by Colbourn et al., demonstrated that 53% of their participants experienced complete resolution of symptoms, and 39% had partial resolution of symptoms after 6 to 10 weeks of wearing a custom fit MCP blocking splint. This resulted in 92.9% of their participants had improved symptoms, which they reported to be consistent with current literature [9].
  - Due to a high proportion of non-compliant day time splinting, Drijkoningen et al. (2017) assessed patients who wore their splints at night for 6 weeks. They showed that a resolution of symptoms occurred in 55% of patients presenting with mild trigger finger of 3 months or less in duration [10].

Table 2: Trigger finger splint options

Velcro trigger splint	Trigger Oval	Alumifoam trigger splint	MCP extension trigger
			

- **Referral for steroid injections: Should be considered as first line treatment.**
  Steroid injections within or over the flexor tendon sheath should be trialed prior to referral to a hand and wrist surgeon. Intermediate acting steroids (methylprednisolone or triamcinolone) are recommended [1]. It is important to note that steroid injections for trigger finger have limited systemic impacts.
    - It may take up to 2 weeks for clinical improvement.
    - There should be an interval of 3 months between steroid injections.
    - **Lifetime maximum of 3 steroid** injections per digit. If trigger finger does not resolve or symptoms return after the third steroid injection, the patient should be referred for surgery. Tendon rupture has been associated with additional steroid injections.

  Effectiveness of steroid injections
    - Administering steroids early (symptoms ≤ 3 months) has been shown to promote symptom resolution [6].
    - Symptoms resolve in a significant number of patients after a single steroid injection. Evidence suggests that the success rate of steroid injections decreases with multiple trigger fingers and increased trigger finger symptom severity [11].
    - A second injection may be effective in up to 50% if first has little to no effect. Second and third injections increase the likelihood of overall remission without increasing morbidity [6] [12].
    - Steroid injection(s) have been shown to offer permanent symptom resolution for some patients [6].
    - Patients with diabetes and multiple digit involvement are less likely to get permanent symptom relief from a steroid injection.

- **Consider privately funded hand therapy** (physiotherapists or occupational therapists with **specialized** training in hands) may be considered for patients with mild symptoms/early presentation of trigger finger or those who decline corticosteroid injections [1]. Specialized hand therapists can offer support with the assessment and diagnosis of the severity of trigger finger and can custom design splints. Active physiotherapy (exercises and range of motion maneuvers) is not recommended for trigger finger. Evidence about the effectiveness of hand therapy for trigger finger is limited and it can be costly for patients. Accessing hand therapy should not delay other treatments.

4. Referral Process (Surgery)

Surgery can result in the immediate resolution of symptoms and is associated with minimal risk. Use of hand may be restricted for a few weeks post-operatively and driving may be restricted while in dressings.

Referral to a hand and wrist surgeon should be considered for patients with:

- Trigger fingers that are locked in flexion that cannot be passively corrected [3]
- No improvement after steroid injections or if steroids are declined/not tolerated
- Severe functional disability [3]
- Diabetes mellitus and multiple trigger fingers [3]

Referral pathways are guidelines to help referring providers know what information, labs and diagnostic imaging are required with their referral to a specialty. These pathways are co-designed with Primary and Specialty Care, AHS Operations, and patients to ensure the right amount of information is included throughout the referral process to triage the patient as quickly as possible.

To ensure referring providers have referral information at their fingertips, referral pathways may link to clinical pathways when available. AHS manages referral pathways and extensive work is ongoing as part of the Alberta Surgical Initiative. If you have questions or want to know more about the referral pathway development process, please email access.ereferral@ahs.ca.

- **Urgent Referral –** Call surgeon on call via RAAPID or call 911.
- Follow the provincial referral pathway(s):
  - Plastic Surgery, Adult Referral Pathway
  - Orthopedic & Spine, Adult Referral Pathway
- Alberta Referral Directory is also a helpful resource for all referral information.

Advice Options

If this patient needs to be directed to hospital through RAAPID or the ER, call RAAPID for on-call surgeon or 911.

Non-urgent and urgent specialist advice for wrist concerns (advice provided by orthopedic surgeons) is available in all zones. You can request specialist advice at any point when uncertain about next steps in treatment or resources available.

Zone	Program	Online Request	Phone Number
Urgent Telephone			
All Zones	RAAPID RAAPID Referral, Access, Advice, Placement, Information & Destination	N/A	**North:** 1-800-282-9911 or 780-735-0811 **South:** 1-800-661-1700 or 403-944-4486
Non-Urgent Advice – next page			

Non-Urgent Electronic (online)			
All Zones	Netcare eReferral	Online Request	N/A
Non-Urgent Telephone			
Edmonton, North	ConnectMD	Online Request	1-844-633-2263

BACKGROUND

About this pathway

- This pathway was developed in collaboration with hand and wrist surgeons (orthopedic and plastic surgeons), primary care providers, a physiatrist, patient and family advisors, and the Provincial Pathways Unit (PPU).
- Condition-specific clinical pathways are intended to offer evidence-based guidance to support primary care providers in caring for patients with a range of clinical conditions.

Authors and conflict of interest declaration

The authors represent a multi-disciplinary team. Names of the content creators and their conflict-of-interest declarations are available on request by emailing albertapathways@primarycarealberta.ca.

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Pathway review process, timelines

Primary care pathways undergo scheduled review every three years or earlier if there is a clinically significant change in knowledge or practice. The next scheduled review is **May 2028.** However, we welcome feedback at any time. Please send us your feedback here.

DISCLAIMER

This pathway represents evidence-based best practice but does not override the individual responsibility of healthcare professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified healthcare professional. It is expected that all users will seek advice of other appropriately qualified and regulated healthcare providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.

PROVIDER RESOURCES

Resource	Link
Dynamed	Trigger Finger (Stenosing Tenosynovitis) in Adults
UpToDate	Trigger finger (stenosing flexor tenosynovitis)

PATIENT RESOURCES

This section is intended to list resources that primary care providers may find useful to share with patients to help support self-management and care in the medical home.

Resource	Link
Patient Pathway on MyHealth Alberta > A webpage and two PDF formats are available to allow for easy printing, download, or scanning a QR code with the patient's smart phone for more information at their convenience.	Your Journey with Trigger Finger https://myhealth.alberta.ca/HealthTopics/trigger-finger-pathway/Documents/trigger-finger-pathway-summary.pdf
MyHealth Alberta: Trigger Finger: Care Instructions	Trigger Finger: Care Instructions
MyHealth Alberta: Tigger Finger release: Before your surgery	Trigger Finger Release: Before Your Surgery
MyHealth Alberta: Trigger Finger Release: What to expect at home (your recovery)	Trigger Finger Release: What to Expect at Home
Mayo Clinic: Trigger Finger	Trigger finger - Symptoms and causes

REFERENCES

[1] Dynamed, "Trigger Finger (Stenosing Tenosynovitis) in Adults," EBSCO, 2024.

[2] J. E. Adams and R. Habbu, "Tenopathies of the Hand and Wrist," *Journal of the American Academy of Orthopaedic Surgeons,* vol. 23, no. 12, pp. 741-750, 2015.

[3] Canterbury Community Health Pathways, "Trigger Finger in Adults," Health Pathways, 2024.

[4] Mayo Clinic, "Trigger Finger," Mayo Foundation for Medical Education and Research (MFMER), 3 December 2022. [Online]. Available: www.mayoclinic.org/diseases-conditions/trigger-finger/symptoms-causes/syc-20365100. [Accessed 1 November 2024].

[5] HANDCARE The Upper Extremity Expert, "Carpal Tunnel Syndrome," American Society for Surgery of the Hand, 2024. [Online]. Available: www.assh.org/handcare/condition/carpal-tunnel-syndrome. [Accessed 2 February 2024].

[6] A. R. Golas, L. R. Marcus and R. S. Reiffel, "Management of Stenosing Flexor Tenosynovitis: Maximizing Nonoperative Success without Increasing Morbidity," *Plastic and Reconstructive Surgery,* vol. 137, no. 2, pp. 557-562, 2016.

[7] B. M. Huisstede, P. Hoogvliet, J. H. Coert, J. Friden and f. t. E. H. Group, "Multidisciplinary Consensus Guideline for Managing Trigger Finger: Results From the European HANDGUIDE Study," *Physical Therapy,* vol. 94, no. 10, pp. 1421-1433, 2014.

[8] D. McKee, J. Lalonde and D. Lalonde, "How Many Trigger Fingers Resolve Spontaneously Without Any Treatment?," *Plastic Surgery,* vol. 26, no. 1, pp. 52-54, 2018.

[9] J. Colbourn, N. Heath, S. Manary and D. Pacifico, "Effectiveness of Splinting for the Treatment of Trigger Finger," *Journal of Hand Therapy,* vol. 21, no. 4, pp. 336-343, 2008.

[10] T. Drijkoningen, M. van Berckel, S. Becker, R. D. and C. Mudgal, "Night Splinting for Idiopathic Trigger Digits," *Hand,* vol. 13, no. 5, pp. 558-562, 2018.

[11] K. Shultz, J. Kittenger, W. Czerwinski and R. Weber, "Outcomes of Corticosteroid Treatment for Trigger Finger by Stage," *Plastic and Reconstructive Surgery,* vol. 142, no. 4, pp. 983-990, 2018.

[12] A. Dardas, J. VandenBerg, T. Shen, R. Gelberman and R. Calfee, "Long-Term Effectiveness of Repeat Corticosteroid Injections for Trigger Finger," *J Hand Surg Am,* vol. 42, pp. 227-235, 2017.

[13] J. A. Gil, A. M. Hresko and A.-P. C. Weiss, "Current Concepts in the Management of Trigger Finger in Adults.," *Journal of the American Academy of Orthopaedic Surgeons ,* vol. 28, no. 15, pp. e642-e650, 2020.

[14] A. Spirig, B. Juon, Y. Banz, R. Rieben and E. Vogelin, "Correlation between Sonographic and In Vivo Measurement of A1 Pulleys in Trigger Fingers," *Ultrasound in Med. & Biol.,* vol. 42, no. 7, pp. 1482-1490, 2016.

[15] S. A. J. S. a. N. H. M. H. N. Salim, "Outcome of Corticosteroid Injection versus Physiotherapy in the Treatment of Mild Trigger Fingers," *The Journal of Hand Surgery (European Version),* vol. 37E, no. 1, pp. 27-34, 2011.

[16] American Academy of Orthopedic Surgeons, "Trigger Finger," American Academy of Orthopedic Surgeons, October 2022. [Online]. Available: https://orthoinfo.aaos.org/en/diseases--conditions/trigger-finger/#:~:text=The%20pulley%20at%20the%20base,to%20treat%20a%20trigger%20finger.. [Accessed 17 January 2025].

[17] S. Ko, D. Kim and T. Lee, "Steroid injection using tendon excursion for trigger finger: introduction to injection methods and analysis of treatment results," *Archives of Hand and Microsurgery,* vol. 27, no. 1, pp. 33-40, 2022.

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