Provincial Dupuytren's Disease Primary Care Clinical Pathway

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

Dupuytren's Disease is a progressive fibroproliferative disorder condition that is benign, relatively common, and a progressive tissue disease that results in flexion contraction of the fingers. Surgical eligibility is based on a positive Hueston's tabletop test.

1. History

- Most common in Caucasian males, >50, and those who have a family history of Dupuytren's contracture
- Progressive, painless contracture of digits
- Palmar nodules (typically not tender)

Associated Conditions

- Patient may report skin nodules on soles of feet (Ledderhose Disease / plantar fibromatosis)
- Patient may report penile curvature (Peyronie's Disease)

2. Assessment

- Thickening of palmar fascia
- Pitting of skin
- Tight bands stretching across palmar surface
- Firm, palpable masses fixed to palmar fascia

Hueston Tabletop Test to Determine Need for Surgical Referral

- Patient lays hands on flat surface, palms down
- Positive test if patient cannot flatten palms / fingers against flat surface (indicates the presence of a flexion contracture)

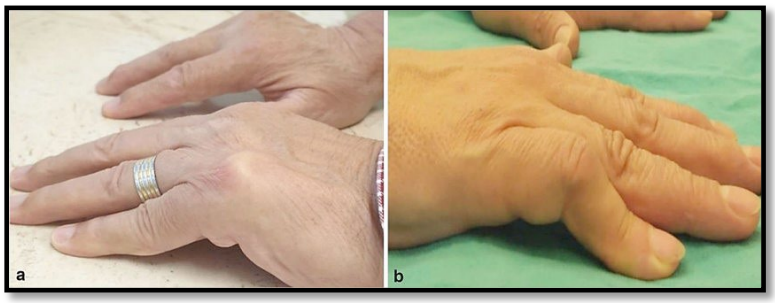

Image 1: Hueston Tabletop Test [7]

Clinical Pearl:
Flexion contracture occurs more commonly at the MCP joint, followed by the PIP, and least frequently at the DIP

Dupuytren's Contracture Diagnosed

Note: Dupuytren's is diagnosed clearly with history and exam of palmar region. **Ultrasound not required.**

Negative Hueston Tabletop Test

Positive Hueston Tabletop Test and/or
Limitations to work/ life activity and/or
Tender nodules (consider steroid injection only for tender nodules, and refer if ineffective)

3. Monitoring Management Strategies

- **Monitor patient** and **coach to return** for referral to surgery if home tabletop test becomes positive or work life activities become limited due to condition – refer to specialty.
- **For tender nodules only:** Consider **single** steroid injection only for tender nodule(s) (**not curative**):
  - Triamcinolone 40mg/ml with plain 1% lidocaine (no epinephrine)
  - 0.5cc injected superficially in tender nodules
- **Reassure** that their activities are not contributing to the condition.
- **No evidence** for splinting, stretching, or physiotherapy.

4. Referral

Refer to hand and wrist surgeon (plastic or orthopedic) depending on zone practices

An optimal referral letter includes a description of:

- Tabletop Test results, limitations to ADLs
- What treatment has been trialed and effectiveness **– highlight steroid injections**

Primary Care Alberta

Call to Action: 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

Dupuytren's contracture is a benign condition that affects approximately 5% of North Americans, particularly those of European descent [1]. It is more common in people assigned male at birth, those over 50, and individuals with a family history of the disease [1]. Management in the primary care setting is limited, as there is no evidence to support physiotherapy, splinting, rest of the hand. Definitive treatment is surgical intervention with one or more of the following:

- **Positive** Hueston Tabletop Test
  and/or
- **Limitations** to work/life activity
  and/or
- **Tender** nodules (consider steroid injection only for tender nodules, and refer if ineffective)

1. History

Patients will typically report painless nodules on their palm that progress to tight bands, and finally to contracture of the digits (often the ring and small finger, or 4th & 5th digits). Patients may be uncomfortable to report associated conditions such as penile curvature, but literature suggests that Peyronie's Disease (curvature of penis) is present up to 25% of patients with Dupuytren's [2]. Further, patients may also complain of nodules on the soles of their feet.

2. Assessment / Physical Exam

Assessment of the hands for the presence of nodules, bands, and digital contracture is the primary method of diagnosis. Differentiating factor for referral is the Hueston's Tabletop Test, which confirms digital contracture, limitations of work life activities and persistent tender nodules. Ultrasound imaging is not required for diagnosis.

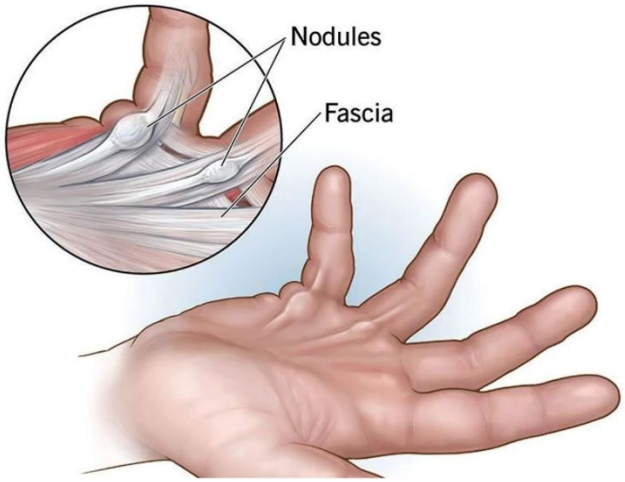

Image 2: Dupuytren Contracture [3]

SPECIAL CONSIDERATIONS

It is important to note that presence of these associations does not change the monitoring, management and referral points for Dupuytren's Contracture. These associations do not accelerate or change the progression of Dupuytren's disease.

Several associations exist with Dupuytren's contracture. These include [4]:

Disease Associations

- Diabetes mellitus (correlates with both age and duration of Type 1 and 2 DM)

Extrinsic Associations

- Palmar injury
- Vibration injury (white-finger disease)
- Alcoholism
- Cigarette smoking (literature estimates a threefold risk over non-smokers)
- Anticonvulsant therapy

3. Monitoring/ Management Strategies

There is no evidence for the use of non-surgical interventions (e.g., splinting, rest, and physiotherapy) in the management of Dupuytren's Contracture.

Steroid Injections

There is a lack of clinical evidence about the effectiveness of steroid injections for Dupuytren's nodules [5]. It is important to note that steroid injections, if elected, do not improve contracture and are not curative. Observation alone should be the approach taken for non-tender nodules to minimize the risk of complications (e.g., risk of dermal atrophy, late tendon rupture with multiple injections) [6]. If nodules are tender, patients could be given the option of a single steroid injection [5].

Specialty Care

If the patient is referred to a hand and wrist specialist, management options will be discussed at the specialist appointment. Xiaflex (collagenase) is no longer available in Canada.

Disease Progression

Patients should be reassessed for disease progression. Patients should be coached to return if any of the following are true:

- Progression of the disorder causes limitations to work/life activity.
- Hueston's Tabletop Test positive. Note: patients can be taught this simple test and return if the test becomes positive.
- Nodules are, or become, tender: Consider a trial of one steroid injection into each tender nodule:
    - Triamcinolone 40mg/ml with plain 1% lidocaine (no epinephrine)
    - 0.5cc injected in tender nodules
    - If no clinical response in subjective tenderness after 4 weeks, consider referral to specialty if tenderness persists

4. Referral Process

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.

- 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.

Zone	Program	Online Request	Phone Number
Urgent Telephone			
All Zones	RAAPID	N/A	**North:** 1-800-282-9911 or 780-735-0811 **South:** 1-800-661-1700 or 403-944-4486
Non-Urgent Advice – Electronic			
Calgary, Central, Edmonton, North (Plastic surgery) All Zones (Orthopedic surgery)	Netcare eReferral	Online Request	N/A
Non-Urgent Telephone			
Edmonton, North	ConnectMD	Online Request	1-844-633-2263

You can request non-urgent advice at any point when uncertain about next steps in treatment or resources available.

BACKGROUND

About this pathway

- This pathway was developed in collaboration with hand and wrist surgeons (orthopedic and plastic surgeons), primary care providers, 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.

Co-Design Team Project Membership	
Name and Designation/ Post Nominals	**Organization**
Dr. Dalia Abdellatif MBCHB PhD FCFP	Family Physician, Edmonton Zone
Dr. Julia Carter MD FCFP	Family Physician, Calgary Zone
Dr. Michael Lapner MD FRCSC	Orthopedic Surgeon, Edmonton Zone
Dr. Stephen Cassar MD FRCSC	Plastic Surgeon, South Zone
Alison Connors MN BN RN	Clinical Nurse Specialist, PPU
Chris McIntosh DSocSci	Senior Consultant, PPU

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 2025.** However, we welcome feedback at any time. Please send us your feedback here.

Copyright information

This work is licensed under a Creative Commons Attribution-NonCommercial-Share Alike 4.0 International license. You are free to copy, distribute and adapt the work for non-commercial purposes, as long as you attribute the work to Primary Care Alberta and abide by the other license terms. If you alter, transform, or build upon this work, you may distribute the resulting work only under the same, similar, or compatible license. The license does not apply to content for which the Primary Care Alberta is not the copyright owner.

© 2025 Primary Care Alberta

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	Dupuytren Disease
Patient Resources (Various hand pain disorders)	Lippincott® Solutions
Mayo clinic video: Dupuytren's Contracture	Mayo Clinic Minute - Treating Dupuytren's contracture without surgery

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
MyHealth Alberta: Dupuytren's Disease	Dupuytren's Disease
MyHealth Alberta: Should I Have Hand Surgery?	Dupuytren's Disease: Should I Have Hand Surgery?

REFERENCES

[1] Cleveland Clinic, "Dupuytren Contracture," 23 January 2023. [Online]. Available: https://my.clevelandclinic.org/health/diseases/16941-dupuytrens-contracture. [Accessed 2 December 2024].

[2] A. Shindel, G. Sweet, W. Thieu, B. Durbin-Johnson, J. Rothschild and R. Szabo, "Prevalence of Peyonie's Disease-like symptoms in men presenting with Dupeytren contracture," *Sexual Medicine,* pp. 135-141, 2017.

[3] Cleveland Clinic, "Dupuytren Contracture," Cleveland Clinic, 23 January 2023. [Online]. Available: Clevelandclinic.org/healthdiseases/16941-dupuytrens-contracture. [Accessed 18 December 2024].

[4] N. Brown and G. Gilkeson, "Chapter 103: Fibrosing diseases: diabetic stiff hand syndrome, Dupuytren's Contracture, plamar and plantar fasciitis, retroperitoneal bribrosis, and Peyronie's Disease," in *Arthrtis and Allied Conditions: A Textbook of Rheumatology*, Philadelphia, Lippincott, 2005, pp. 2093-2108.

[5] A. Sood, P. Therattil, H. Kim and E. Lee, "Letter to the Editor: Corticosteroid Injection in the Management of Dupuytren Nodules: A Review of the Literature," *ePlasty,* vol. 15, pp. 403-405, 2015.

[6] L. Ketchum and T. Donahue, "The injection of nodules of Dupuytren's disease with triamcinolone acetonide," *J Hand Surg,* vol. 25A, pp. 1157-1162, 2000.

[7] J. Kiel, "Table Top Test," WIKISM, 19 November 2019. [Online]. Available: https://wikism.org/w/index.php?curid=3576. [Accessed 18 December 2024].