

Diagnosing and Managing Dupuytren's Disease

What is Dupuytren's Disease?

- Dupuytren's disease is a fibrosing disorder that results in slowly progressive thickening and shorting of the palmar fascia and leads to debilitating digital contractures, particularly of the metacarpophalangeal (MCP) joints or the proximal interphalangeal (PIP) joints.
- A disorder that
 - Affects Male > Female
 - Often presents in the 50's and 60's
 - Has a gradual onset
 - Affects more from Northern European background
 - Can have a familial link
 - Is thought to be related to smoking, diabetes, alcohol abuse and possibly vibration injury.
 - Often presents with pain free nodules in the palm
 - Is sometimes found in association with Garrod's nodes (on the back of the hand over the PIP joints); Ledderhose disease (plantar fibromatosis); and Peyronie's Disease.
 - Can severely affect the everyday functioning of the hand. For example ability to shake hands, dress oneself and open containers.



How to treat Dupuytren's Disease

1. Conservative Management

- No evidence that splinting or any other treatment can prevent the contracture developing

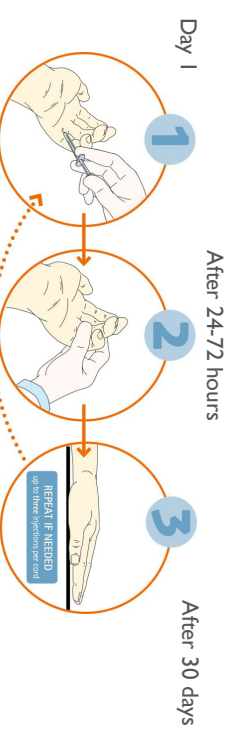
2. Injection

- Collagenase injection
 - An outpatient procedure over two days – initially injected and then 24–72 hours later, when the collagenase has broken down the contracted fascia, the affected finger is manipulated into extension
 - Licensed for the treatment of Dupuytren's contracture in adult patients with a palpable cord¹

- Works best for MCPJ contractures but also for PIPJs
- Patients may be fitted with a custom-made splint for night time use to hold the fingers in extension and to do hand exercises to restore movement
- Although recurrence can occur (approximately 50% at 5 years) the initial benefits from clinical trials suggest that around 65% of patients will be able to get the curvature of the finger reduced to between 0 and 5 degrees.

- Over 50,000 procedures now done worldwide

- Recovery rapid (usually 4 – 7 days)
 - Slightly longer in the 11% who sustain a skin tear



How to treat Dupuytren's Disease

continued

3. Needle Fasciotomy

- Fibres are cut with a blade or needle
- Done as an outpatient procedure or day case, and is quick to perform. Recurrence rates are very high.
- According to NICE guidelines, needle fasciotomy is more suitable for patients who are unsuitable for open surgery and who understand the recurrence rates.
- Occasional hand therapy required

4. Surgery

- Fasciectomy or Dermofasciectomy (latter used for cases with significant skin involvement)
- This is the most common treatment for Dupuytren's Contracture
- Dissection and removal of the diseased fascia in palm and finger
- Usually a day case
- Usually about 6 weeks, but may be as long as six months.
- Hand Therapy always recommended
- Recurrence can occur (approximately 20% at 5 years)^{2,3,4}



When to refer and what happens next

Testing for Dupuytren's Disease

1. Exclude other pathologies such as trigger finger
2. Tabletop Test⁵: Ask the patient to place their hand flat on the desk. The test is positive if the hand and fingers cannot sit flat
3. Make a referral if the Tabletop Test is positive

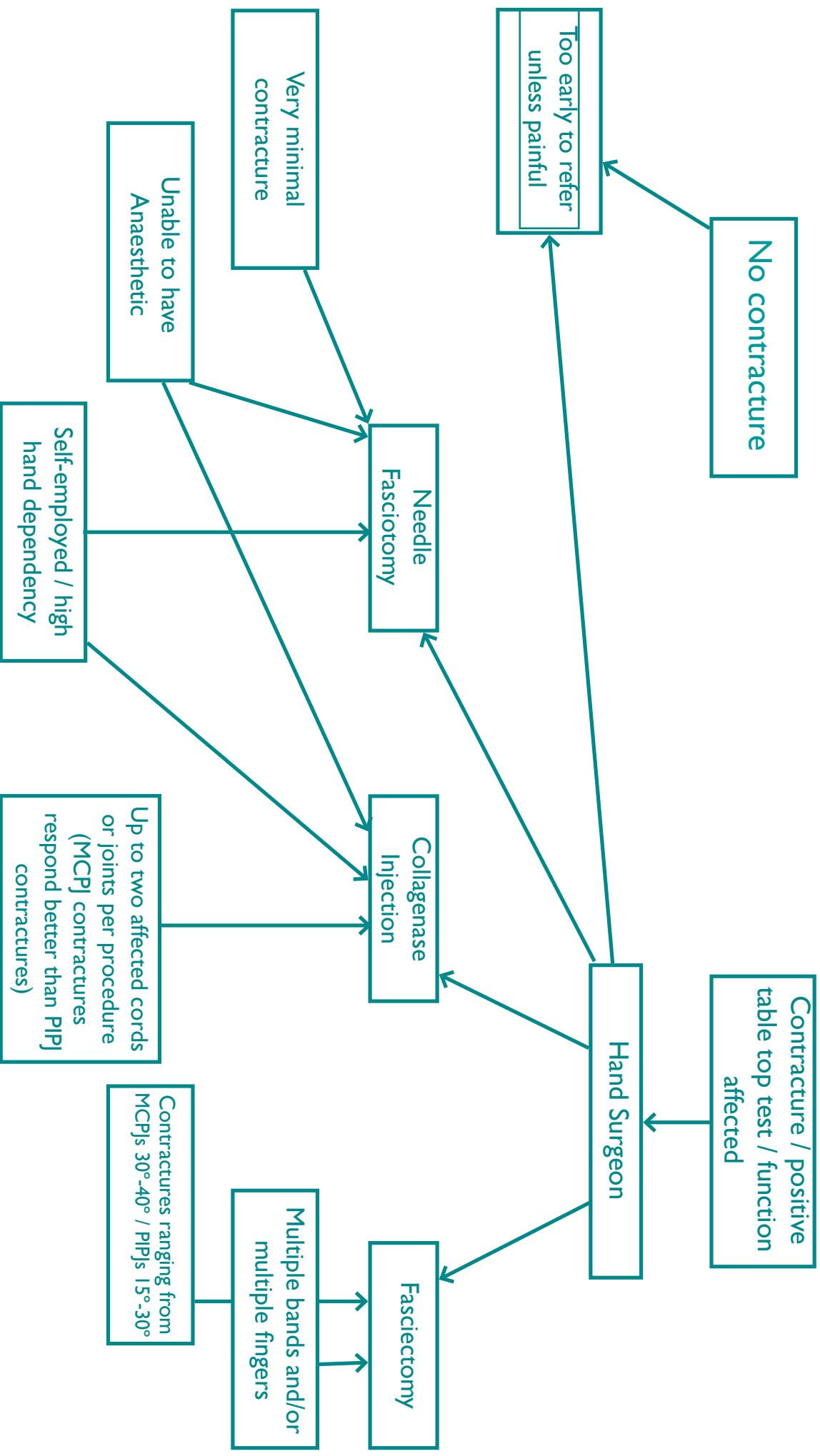
Rehabilitation after intervention

1. Swelling and stiffness is common following treatment
2. Scar tissue (also contractile) will form and need counteracting
3. Hand therapy is usually required to restore movement and function
4. Guidelines – Return to work 4 – 7 days post collagenase, 3 – 7 weeks post fasciectomy dependent on individual and hand functional requirements



Which procedure for who?

A decision made by the hand surgeon with the patient



Rehabilitation

- Usually 3 – 8 sessions depending on the patient
- Addresses oedema, wound (and then scar)
- Maximises range of movement
- Restores strength and function
- Hand therapy includes modalities such as exercise, splinting and silicone (for scar management)

Dynamic or serial splinting PIPJ post op for
3 – 6 months is shown to improve PIPJ
extension beyond surgical gains⁶



“50% POST OPERATIVE RESULT
RELATES TO THERAPY”⁷

BMI Healthcare

According to research carried out by the British Dupuytren's Society, patients reported the following 10 hand-functions most affected by Dupuytren's Disease are:

- Opening jars, bottles and food containers
- Using car gear stick and driving
- Pushing or pulling a trolley, pram, wheelbarrow and luggage
- Clapping
- Shaking hands
- Using graters, zesters and other kitchen utensils
- Holding toothbrush, hairbrush/hairdryer and flossing
- Exercising with weights, elastic cords and doing yoga
- Raking leaves, gardening, shovelling snow
- Using door handles or handrail

Refer to a Consultant
Hand Surgeon

Self Pay Package:

£2345

(This could be in either
Orthopaedics or Plastic Surgery
depending on your locality)

References

1. Xiapex SPC 2016
2. Ball et al. BMC Musculoskeletal Disorders (2016)
3. Ullah et al J Bone Joint Surg [Br] 2009;91-B:374-8.
4. Van Rijssen et al Plastic and Reconstructive Surgery 2012
5. The Tabletop Test Hueston JT. Hand 1982 Feb; 14(1):100-103
6. (Saar & Grithus 2000, Mullins 1999, Crowley & Tonkin 1999)
7. Gosset 1985

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