

# Guideline for Therapy Intervention post Fasciectomy for the correction of Dupuytren’s disease

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and / or carer. Health care professionals must be prepared to justify any deviation from this guidance.

## Introduction

This guideline is intended for use with all patients with a diagnosis of Dupuytren's disease who have undergone corrective surgery.

### **This guideline is for use by the following staff groups :**

- Occupational Therapy
- Physiotherapy
- Trauma and Orthopaedic Medical Staff
- Trauma and Orthopaedic Specialist Nursing Staff

### Lead Clinician(s)

An Van Hyfte Occupational Therapy Manager  
Clinical specialist OT

Guideline reviewed and approved by Hand Therapy Clinical Governance: 23<sup>th</sup> June 2022

Review Date: 23<sup>rd</sup> June 2025

This is the most current document and is to be used until a revised version is available

### Key amendments to this guideline

Date	Amendment	By:
25/01/2006	Guideline approved by Occupational Therapy Clinical Governance group of behalf of Clinical Effectiveness Committee	
Jan 2008	Guideline reviewed and approved	Clinical Governance Hand Therapy Group
Nov 2009	Guideline reviewed and reapproved	Clinical Governance Hand Therapy Group
24/08/2011	Title of guideline changed from guideline for therapy intervention with Dupuytren’s disease / contracture to guideline for therapy intervention post fasciectomy for the correction of Dupuytren’s disease	An Van Hyfte
09.05.2014	Guideline reviewed with amendments made to content i.e. timing of exercise regime	An Van Hyfte
05.12.2017	Sentence added in at the request of the Coroner	
07/03/18	Guideline was reviewed and re-approved as it stands by the Therapy hands clinical governance group. To	Alison Hinton

	be reviewed in June 2018 with a view to amending it to include the treatment of Dupuytren's with Xiapex injections.	
30/04/2018	Document extended until June as per email from Alison Hinton	Alison Hinton
June 2018	Document extended for 3 months as per TLG recommendation	TLG
August 2018	Document extended for 6 months whilst New manager is in post and documents placed onto Key docs webpage	Julie Elliot
September 2018	Document approved with no content changes	Hand therapy Clinical Governance
September 2020	Document approved with no content changes	An Van Hyfte
June 2022	Guideline was reviewed by the Therapy hands clinical governance group. Alterations made to wearing regime of splint in line with latest research and to scar management to include the use of dissolvable sutures. Further consultations with consultants required regarding splint provision therefore guideline to be reviewed in June 2024.	

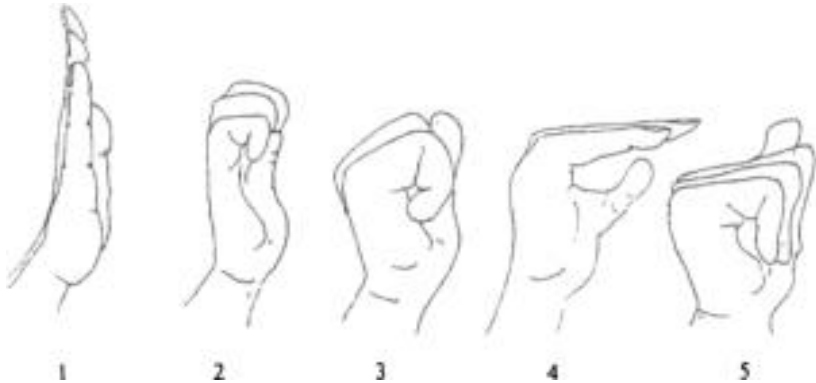
## Introduction

This guideline covers the post-operative care of patients who underwent a Fasciectomy for the correction of Dupuytren's disease. **All** patients following a Dupuytren's contracture release should be referred to Occupational Therapy / Physiotherapy (as soon as is practical) after surgery for hand rehabilitation. The referral should describe the patient diagnosis and the operation details.

## Details of Guideline

Time	Intervention
<b>In theatre (By Surgeon)</b>	<ul style="list-style-type: none"> <li>Following the release, a volar Plaster of Paris (POP) is applied to the hand covering the full extent of the corrected digits.</li> <li>The positioning should be: Metocarpalphalangeal, Proximal Interphalangeal and Distal Interphalangeal joints in full extension</li> <li>If there is a clinical reason for a variation in the position, it must be clearly documented on the therapy referral.</li> </ul>
<b>Day 1- 7 post surgery</b>	<p>Timeframe of initial therapy intervention should be discussed with consultant if not mentioned in the operation notes.</p> <ul style="list-style-type: none"> <li>Remove the surgical dressing and theatre Plaster of Paris and apply a lighter dressing across sutures area using a-septic technique.</li> </ul>

	<ul style="list-style-type: none"> <li>• A <b>volar hand-based thermoplastic splint</b> across the operated digit including the adjacent digit is manufactured. The splint should aim for comfortable MCP, PIP &amp; DIP extension and should encourage a non-tension application. <i>The splint should be worn at night time only. Therapists may consider for the splint to be worn continuously if pain or excessive oedema are present post surgery.</i></li> </ul> <p><b>Exercises:</b></p> <ul style="list-style-type: none"> <li>• Active Flexion – to flex all digits towards the distal palmar crease</li> <li>• Active Extension- to extend the digits till the end of a pain free range of movement</li> <li>• Full wrist movement</li> <li>• Thumb opposition to each fingertip followed by thumb extension and abduction</li> <li>• Finger abduction and adduction</li> <li>• Gentle passive flexion/ extension as pain allows.</li> </ul> <p><i>Regularity of exercises to be at therapist discretion, taking into consideration any post surgery inflammation and oedema.</i></p> <p><b>Advice:</b></p> <ul style="list-style-type: none"> <li>• Hand hygiene advice given. Patient to wipe non affected areas with non-perfumed wipes.</li> <li>• Oedema management: Patient is advised to position the forearm in elevation when sitting / sleeping using pillows</li> <li>• Patient is advised to maintain range of movement of wrist, elbow, &amp; shoulder regularly</li> <li>• The Patient is advised to avoid heavy lifting and driving for at least 4 -6 weeks post-operation.</li> </ul>
<p><b>2 weeks post-surgery or after suture removal</b></p>	<p><i>If non-dissolvable, sutures should be removed at Consultant / Fracture Clinic at the Consultants discretion – between 10 – 14 days. If dissolvable sutures in place, scar management can commence 14 days post surgery if the wounds are closed.</i></p> <p><b>Scar massage</b> with non-perfumed cream can be commenced. Patient are taught to use small circular motions along the scar working distal to proximal to help the reduction of oedema.</p> <p><b>Exercises:</b></p> <ul style="list-style-type: none"> <li>• To continue with week 1 exercises</li> <li>• Introduce passive range of motion if full flexion and extension have not been achieved.</li> <li>• Introduce tendon gliding exercises. Ref. to Diagrams</li> </ul>

	 <p><i>Regularity of exercises to be at therapist discretion, taking into consideration any post surgery inflammation and oedema.</i></p> <p><b>Serial Splinting:</b>              If contractures are identified, serial splinting is introduced at night to provide a low tension stretch.</p> <p><b>Advice:</b>              Patient is advised to use hand for light ADL's only.</p>
<p><b>Week 4 onwards</b></p>	<ul style="list-style-type: none"> <li>• Continue with exercise regime. Consider strengthening exercises if required.</li> <li>• Continue using splint at night.</li> <li>• Introduce the use of the hand including using grip and lifting. Patient can return to manual work, driving and playing of sports as recommended by the consultant / therapist, dependent on the condition of the hand.</li> </ul>
<p><b>General Considerations</b></p>	<ul style="list-style-type: none"> <li>• Cotton stockinette (not Tubigrip) can be worn under the splint to absorb perspiration</li> <li>• Be aware that patient can be allergic to the splint materials, and this requires monitoring.</li> <li>• Night splint to be worn for 3-6 months post surgery. Splinting then gradually to be reduced.</li> </ul>

**Competencies Required**

- Therapists who have basic experience in splinting hand therapy or have been practicing in this field within the previous two years or are under the supervision of an experienced hand therapist.
- Supervising / senior therapist to work towards British Association of Hand Therapists (BAHT accredited training at Level II in Elective, and Trauma) and Hand Therapists.
- Adherence to the Trust guidelines on wound management and infection control aseptic technique for Therapists.

**Monitoring Tool**

STANDARDS	%	Clinical Exceptions
All patients who had a Fasciectomy for the correction of Dupuytren’s disease	100	Patients who are unable to safely follow the regime instructions e.g. those with cognitive impairment. Their treatment will be discussed on an individual basis with their consultant.

How will monitoring be carried out?	Continuous
When will monitoring be carried out?	As treatment occurs
Who will monitor compliance with the guideline?	Clinical Specialist physio/ OT in Rheumatology/Hand trauma

**References**

- **A clinical report of the effect of Mechanical Stress on Functional Results after fasciectomy for Dupuytren’s contracture**, Evans, RB., Dell, PC., Fiolkowski, P. (2002) *Journal of Hand Therapy*, 15 (4): 331-339.
- **Open- Palm Technique in Dupuytren’s Disease** Fietti, VG, & Mackin, EJ. (1995). Chapter 57: In Hunter JM et al (Eds). *Rehabilitation of the Hand: Surgery and Therapy. Vol II* Mosby: St. Louis
- **A study of the Effect of night extension splintage on post-fasciectomy Dupuytren’s patient**, Glassey, N. (2001), *British Journal of Hand Therapy*, 6 (3): 89-94
- **Night-time splinting after fasciectomy for Dupuytren’s contracture: a pragmatic, multi-centre, randomised controlled trial**, Jerosh C., Shepstone L, Chojnowski A., Larson D., Barrett E. and Vaughan S., (2011), In: Eaton, C., Seegenschmiedt, M., Bayat, A., Gabbiani, G., Werker, P., Wach, W. (eds) *Dupuytren’s Disease and Related Hyperproliferative Disorders*. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-22697-7\\_41p323-332](https://doi.org/10.1007/978-3-642-22697-7_41p323-332)
- **The Effect of Night Extension Orthoses Following Surgical Release of Dupuytren Contracture: A Single-Center, Randomized, Controlled Trial**,(2013) Collis J., Collocott S., Hing W. and Kelly E., *The Journal of Hand Surgery*, Volume 38, Issue 7, July 2013, Pages 1285-1294
- **Night Orthosis After Surgical Correction of Dupuytren Contractures: A Systematic Review**, (2017) Samrgandi O., Alyouha S., Larouche P, Corkum J., Kemler M and Tang D., *The Journal of Hand Surgery*, 42, Issue 10, October 2017, Pages 839-839.
- **Dupuytren’s disease: limited fasciectomy, night splinting, and hand exercises—long-term results**, (2018), Kitridis D., Karamitsu P., Giannaros I., Papadakis N., Sinopidis C. and Givissis P, *European Journal of Orthopaedic Surgery & Traumatology*, 29, pages 349–355

**Contribution List****Key individuals involved in developing the document**

<b>Name</b>	<b>Designation</b>
Julie Elliott	OT Manager
Jane Simons	Senior OT
Collette James	Senior OT
An Van Hyfte	Senior OT
Mandi Rawlings	Physiotherapist – Extended Scope Practitioner

**Circulated to the following individuals for comments**

<b>Name</b>	<b>Designation</b>
Mr P.J Ratcliffe	Orthopaedic Consultant, WRH
Mr Mahon	Orthopaedic consultant, AH
Miss Moon	Orthopaedic consultant, AH
Mr Liu	Orthopaedic consultant, AH
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OT Departments (outpatients)	WRH, Alex, Kidderminster

***Circulated to the following CD's / Heads of Department for comments from their directorates / departments***

<b>Name</b>	<b>Directorate / Department</b>

***Circulated to the chair of the following committee's / groups for comments***

<b>Name</b>	<b>Committee / Group</b>

**Supporting Document 1 - Equality Impact Assessment Tool**

**Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form**  
Please read EIA guidelines when completing this form

**Section 1 - Name of Organisation** (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	<input checked="" type="checkbox"/>	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

<b>Name of Lead for Activity</b>	<b>An Van Hyfte</b>
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<b>Details of individuals completing this assessment</b>	<b>Name</b>	<b>Job title</b>	<b>e-mail contact</b>
	An Van Hyfte	Clinical specialist OT	a.vanhifte@nhs.net
<b>Date assessment completed</b>	<b>07/07/2022</b>		

**Section 2**

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	<b>Title:</b> WHAT-OCT-005 'Guideline for Therapy Intervention post Fasciectomy for the correction of Dupuytren's disease'		
What is the aim, purpose and/or intended outcomes of this Activity?	This is an evidence based guideline for the rehabilitation of patients who have had surgical intervention to treat Dupuytren's disease.		
Who will be affected by the development & implementation	<input type="checkbox"/> Service User <input type="checkbox"/> Patient	<input type="checkbox"/> Staff <input type="checkbox"/> Communities	

of this activity?	<input type="checkbox"/> Carers <input type="checkbox"/> Visitors	<input type="checkbox"/> Other N/A
Is this:	<input checked="" type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity <input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?	
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	We have compared our guideline with the practice of specialist hand therapy units in Queen Elisabeth Birmingham, UHCW, Pulvertaft centre Derbyshire and have completed a literature search on the databases Medline, Cinahl and via the BAHT library.	
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Discussed and reviewed in the therapy clinical governance meeting held on 23/06/2022	
Summary of relevant findings	The guideline is up to date	

**Section 3**

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.** Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age	✓			
Disability	✓			
Gender Reassignment	✓			
Marriage & Civil Partnerships	✓			
Pregnancy & Maternity	✓			
Race including Traveling Communities	✓			
Religion & Belief	✓			
Sex	✓			



<b>Equality Group</b>	<b>Potential positive impact</b>	<b>Potential neutral impact</b>	<b>Potential negative impact</b>	<b>Please explain your reasons for any potential positive, neutral or negative impact identified</b>
<b>Sexual Orientation</b>	√			
<b>Other Vulnerable and Disadvantaged Groups</b> (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)	√			
<b>Health Inequalities</b> (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)	√			

**Section 4**

<b>What actions will you take to mitigate any potential negative impacts?</b>	<b>Risk identified</b>	<b>Actions required to reduce / eliminate negative impact</b>	<b>Who will lead on the action?</b>	<b>Timeframe</b>
	N/A			
<b>How will you monitor these actions?</b>	<b>By regular audit of notes, observed practice (please see monitoring section of the document)</b>			
<b>When will you review this EIA?</b> (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	<b>June 2024</b>			

**Section 5 - Please read and agree to the following Equality Statement**

**1. Equality Statement**

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation


1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the

**WAHT-OCT-005**

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diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer’s etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

<b>Signature of person completing EIA</b>	An Van Hyfte 
<b>Date signed</b>	07/07/2022
<b>Comments:</b>	
<b>Signature of person the Leader Person for this activity</b>	
<b>Date signed</b>	
<b>Comments:</b>	



## WAHT-OCT-005

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### Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	<b>Title of document:</b>	<b>Yes/No</b>
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval