Worcestershire Acute Hospitals NHS Trust

GUIDELINE FOR THERAPY INTERVENTION POST REPAIR EXTENSOR POLLICIS LONGUS (EPL)

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 covers the post operative care of patients with an extensor tendon repair to the thumb for patients attending therapy departments within Worcestershire.

All patients following an extensor tendon repair should be referred to occupational therapy /physiotherapy (as soon as is practical) after surgery for hand rehabilitation. The referral should describe the full patient diagnosis, the operation details and level of injury.

THIS GUIDELINE IS FOR USE BY THE FOLLOWING STAFF GROUPS :

Therapists who have undertaken a period of supervised practice in this field within the previous 2 years.

Supervising/senior therapists to work towards British Association of Hand Therapists (BAHT accredited training at Level II in Elective, Trauma and Hand Therapy).

Lead Clinician(s)

An Van Hyfte	Clinical specialist OT
Approved by Hand Therapy and Occupational:	17 September 2009
Therapy Clinical Governance Group on:	7th March 2018
Review Date: This is the most current document and is to be used until a revised version is available	7th December 2020

Key Amendments made to this Document:

Date	Amendment	By:
24/08/11	To start course of ultrasound as appropriate from week 2 onwards	An Van Hyfte
15/05/2013	Guideline reviewed at Therapy Hands Clinical Governance Group. No changes to document required.	Alison Hinton
30/04/2015	Guideline reviewed at Therapy Hands Clinical Governance Group. No changes to document required.	An Van Hyfte
August 2017	Document extended for 6 months in line with TMC approval	TMC
December 2017	Sentence added in at the request of the Coroner	
March 2018	Document extended for 3 months as approved by TLG	TLG
7th March 2018	Document reviewed and re-approved for use by the Therapy Hands Clinical Governance Group	Alison Hinton
3rd March 2020	Document extended for 3 months whilst under review	Alison Hinton
June 2020	Document extended for 6 months during COVID-19 period	

GUIDELINE FOR THERAPY INTERVENTION POST REPAIR EXTENSOR POLLICIS LONGUS (EPL)

INTRODUCTION

This guideline covers the post operative care of patients with an extensor tendon repair to the thumb for patients attending therapy departments within Worcestershire. Thumb extensors are divided into 8 zones. Characteristics of the extensor tendon vary at each level, dictating variations in treatment.
All patients following an extensor tendon repair should be referred to occupational therapy /physiotherapy (as soon as is practical) after surgery for hand rehabilitation. The referral should describe the full patient diagnosis, the operation details and level of injury.

COMPETENCIES REQUIRED

- Therapists who have undertaken a period of supervised practice in this field within the previous 2 years.
- Supervising/senior therapists to work towards British Association of Hand Therapists (BAHT accredited training at Level II in Elective, Trauma and Hand Therapy).
- Adherence to the Trusts guidelines on wound management and infection control aseptic technique for Therapists.

PATIENTS COVERED

- Any patient able to comply with the Early Controlled Motion (ECM), following an extensor tendon repair to the thumb within zones III-VIII.
- For longitudinal extensor division no protective splinting is necessary. Start early gentle mobilisation.
- Injuries of the extensor tendon of the thumb in zone I/II are fitted with a mallet splint immobilising the IP joint in neutral for 6 weeks, leaving the CMC and MP joint free for mobilisation.

DETAILS OF GUIDELINE

Time	Intervention
In theatre	• Following the repair, a volar based POP is applied to the forearm and covering the full extent of the thumb. Wrist: 30° extension Thumb CMC: abduction MP joint: 20° flexion IP joint - full extension • If there is a clinical reason for a variation in the positioning, it must be clearly documented on the therapy referral.
As soon as possible after surgery (ideally 24-48 hrs)  ***Advice and education*** ***General Considerations*** ***Concerning splinting***	• To be seen by a therapist. • Remove the surgical dressing and theatre POP. • Apply a lighter dressing to any of the wound areas using aseptic technique. • Removable thermoplastic splint constructed- positioned as per theatre instructions, on operation notes and/or referral. • Patient is advised to position the forearm in elevation when sitting/sleeping using pillows. • Patient is advised to maintain range of movement on elbow/shoulder regularly. • Patient is advised to keep splint **on** at all times. • Patient is advised not to use the affected hand for any activity i.e. work/ driving/lifting/housework • Splinting information leaflet to be given to the patient • Follow up appointment to be booked in 1 week's time. • Cotton stockinette (**not** tubigrip) can be worn under the splint to absorb perspiration. • Be aware that patients can be allergic to the splint materials, and this requires monitoring. • If the patient has nerve involvement and sensation/reduction loss care is required when applying materials which can be over 60°
Exercises **From splint application – up to 6 weeks post op**	**Early Active Regime –** • All exercises will be demonstrated by a therapist and the patient will receive written instructions on their exercise regime for home use. Exercises to be carried out **within the splint:** **Week 1** (up to 7 days from the splint application) All exercises to be carried out x5 hourly. • Passive extension of the thumb • Active extension of the thumb • Active flexion/extension of the IP joint with MP joint and wrist held in extension. **Week 2-4** Week 1 exercises to be upgraded to x10 every hour as tolerated.

Advice **Post suture removal**	• Hand hygiene advice given **Post suture removal:** • Scar management advice: To commence once the wound is closed (with no signs of infection). Scar massage is introduced using a non perfumed moisturiser (E45 or aqueous cream)Patients are taught to use circular motions along the scar working distal to proximal to help the reduction of oedema. • Patient will commence a course of ultrasound as appropriate. Review every two weeks.
6 weeks	• Reduce splinting to night time only. Discontinue all splinting at week 8. If extension lag exists continue with splinting at night for another 2 weeks. • Introduce light use of the hand in ADL's. The patient can return to work if he has a sedentary job. • The patient may drive at week 7 • **Exercises:** Commence active thumb flexion/ thumb opposition
12 weeks onwards	• The patient should have full active wrist and digit flexion. Introduce stretching exercises if this is a problem. • The patient can return to manual work. Playing sports as recommended by the consultant/therapist.

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	General adherence to the guideline.	As part of the out-patient notes audit in therapy	Yearly	Senior therapists in physio and occupational therapy out-patients departments	Clinical governance for therapies and clinical governance for hand therapy.	Once per year, after the notes audit.

REFERENCES

- Occupational Therapy splinting and hand therapy procedure. WAHNHST (2000); Elliott J.
- Occupational Therapy Risk Assessment COSSH; WAHNHST (1999). Elliott J.
- Selly Oak Hospital Birmingham: Hand Protocols
- Queen Victoria Hospital NHS Trust, Hand Therapy Protocols
- Derby Royal Infirmary, Hand Therapy guidelines
- Frenchay Hand Centre, Bristol, Hand Therapy Guidelines
- Hereford NHS Trust, Hand Therapy Guidelines.
- Brigham and Women's hospital, hand therapy guidelines.
- Hand Therapy Protocols Alexandra Hospital/Worcester Royal Hospitals; WAHNHST (2002) Worcestershire Hand Therapies Group
- Journal of hand surgery, May 2005, p 175-179; "Extensor tendon rehabilitation: a prospective trial comparing 3 rehab regimes"; N.W. Bulstrode, N. Burr, A.L. Pratt, A.O. Grobbelaar.
- British Journal of hand therapy, Volume 5 no1, 2000, p 10-15; "Early controlled motion following extensor tendon repair: a critical review"; Jacki Hunt.

CONTRIBUTION LIST

Key individuals involved in developing the document

Name	Designation
An Van Hyfte	Clinical specialist OT
Collette James	Senior OT
Mandy Rawlings	Clinical specialist physio
Jane Simons	Senior OT
Suzette botha	OT Hereford NHS Trust

Circulated to the following individuals for comments

Name	Designation
Mr P.J Ratcliffe	Orthopaedic Consultant, WRH
Miss Moon	Orthopaedic Consultant Alex
Mr Liu	Orthopaedic Consultant Alex
Mr Pereira	Orthopaedic Consultant, Alex
Mr C Bell	Orthopaedic Consultant, Alex
Mr Knebel	Orthopaedic Consultant, Alex
Mr D Selvy	Orthopaedic Consultant, Alex
Mr Sforza	Orthopaedic Consultant, Alex
Mr Luscombe	Orthopaedic Consultant, Alex
Physiotherapy Departments (outpatients)	WRH, Alex, Kidderminster
OT Departments (outpatients)	WRH, Alex, Kidderminster

Supporting Document 1 - Equality Impact Assessment Tool

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

		Yes/No	Comments
1.	**Does the policy/guidance affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Transgender	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment & mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	N/a	
4.	**Is the impact of the policy/guidance likely to be negative?**	N/a	
5.	**If so can the impact be avoided?**	N/a	
6.	**What alternatives are there to achieving the policy/guidance without the impact?**	N/a	
7.	**Can we reduce the impact by taking different action?**	n/a	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

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.

	Title of document:	Yes/No
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:	No

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.