

Mallet Finger

This information leaflet is also available at: <https://www.esht.nhs.uk/leaflet/mallet-finger/>

What is mallet finger?

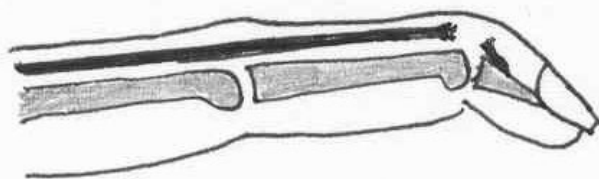
Mallet finger is the drooped-down deformity of the end section of a finger, after damage to the extensor tendon.

Normal finger anatomy

There are three bones in each finger. There are “extensor muscles” in the forearm to make the fingers straight. The end parts of these muscles become “extensor tendons”. Tendons are like ropes. They attach into the finger bones. There is one attachment into the end bone (= distal phalanx) just before the nail, to extend (straighten) the final joint (D.I.P. joint) of the finger.

Why does mallet finger happen?

A typical injury is when someone is making a bed. A finger suddenly meets resistance, while there is some tension in the tendons, and the extensor tendon snaps, just over the end joint. Sometimes the bone where the tendon attaches breaks off, rather than the tendon snapping, but the treatment usually the same. Because there is nothing else pulling the finger straight, the finger droops down. The tendon eventually joins with scar tissue, but in the stretched position.



P.I.P.
Joint

D.I.P.
Joint

The extensor tendon ruptured
over the D.I.P. joint

How does the mallet splint work?

The mallet splint aims to hold the end joint (D.I.P. joint) in the correct (straight) position until the tendon has healed.



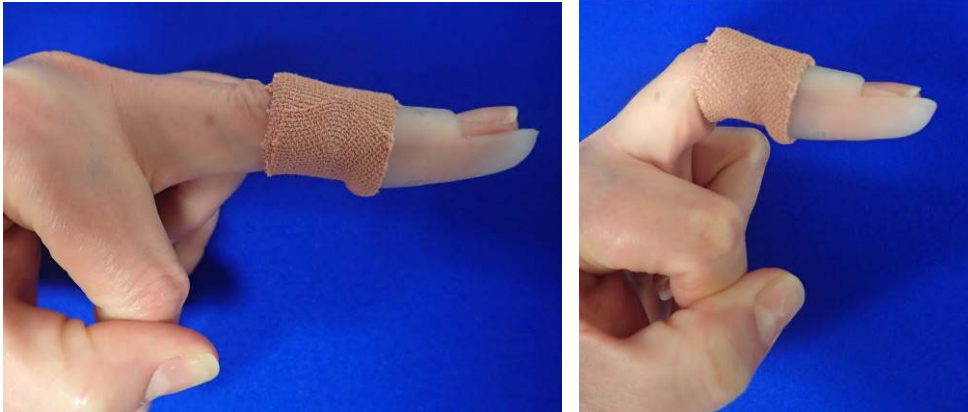
How do we use the mallet splint?

The mallet splint must be kept on night and day for six weeks. If it is removed for cleaning, the finger must be kept completely straight, and the splint replaced immediately. It may be useful to have someone else to help.

You must keep the D.I.P. joint (end joint) straight. Ideally, you should try to keep the P.I.P. joint (in the middle of the finger) moving, while keeping the D.I.P. joint (end joint) straight in the splint.

Exercises to do for six weeks, while the splint is on:

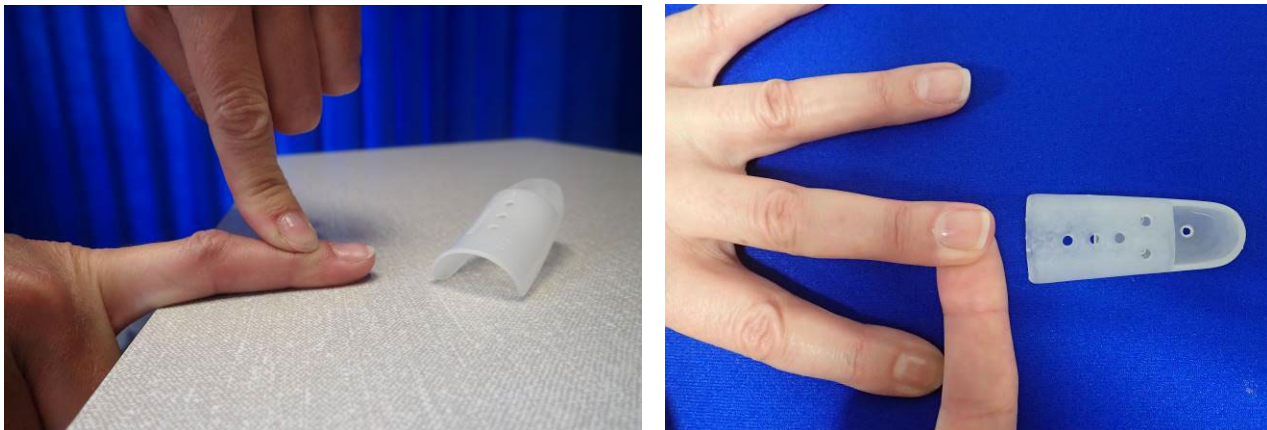
Bend and straighten you finger below the level of the splint (the end of the finger must stay straight in the splint)



How to protect the finger when changing the splint

If you remove the splint to air the finger you must keep the joint straight like this.

DO NOT LET THE END OF YOUR FINGER BEND.



Taking the splint off:



Putting the splint back on:



Keep the tip of the finger straight at all times when putting on the splint

Smoking cessation

Medical evidence suggests that smoking prolongs healing time. In extreme cases it can stop healing altogether. It is important that you consider this information with relation to your recent injury. Stopping smoking during the healing phase of your tendon injury will help ensure optimal recovery from this injury.

For advice on smoking cessation and local support available, please refer to the following website: <http://smokefree.nhs.uk> or discuss this with your GP.

What other treatments are possible?

It is possible to put a wire across the joint for six weeks. This is more common in other countries, for people who need to get gloves on. The wire functions as an internal splint, and has a risk of causing damage to the joint.

The extensor tendon can be repaired. The joint is held straight for the following six weeks, so the repair does not break. It leaves a bumpy scar, and all the risks of surgery (damage to nail bed etc.). It often leaves a joint that is stiffer in extension than flexion. This is rarely done.

Contact details:

Fracture Care Team:

Fracture clinic and orthopaedic outpatient appointments:	Eastbourne	0300 131 4788
Fracture clinic and orthopaedic outpatient appointments:	Conquest	0300 131 4861
Casting Department:	Eastbourne	0300 131 5564
Casting Department:	Conquest	0300 131 4860
Trust Switchboard:	all sites:	0300 131 4500

What happens at six weeks, when the splint comes off?

After six weeks in the splint, most people wean themselves out of the splint slowly over the next three weeks, taking the splint off to bend and straighten the finger, but still wearing it at night.

The finger usually feels stiff at first. It is common for some of the mallet deformity to return. The finger is never perfect afterwards.

Please write down the dates for your injury and recovery:

weeks	Date =	
0-6	Date of injury =	Wear splint all the time for six weeks.
6-9	Date six weeks after splint first applied =	After six weeks, keep splint on at night. Remove it to wiggle finger during the day
	Date nine weeks after splint first applied =	After nine weeks, the splint should no longer be needed.

What happens if there is still a deformity after the splint comes off?

Unfortunately, some deformity is common after mallet injury. The options are:

- Most people manage to adapt to the new position with time. It does not affect grip strength.
- Surgery to reconstruct the scarred extensor tendon. This requires the joint to be kept still for six weeks and is not always successful.

- “Fusion” of the D.I.P. joint, so that it never bends again. This is done with wires or screw, and the hand has to be protected for six weeks.

Sources of information

We are grateful to the Fracture Care Team at Brighton and Sussex University Hospitals Fracture Care Team for their images adapted for use at East Sussex Healthcare NHS Trust. Information been updated during the COVID-19 pandemic to ensure that patients with injuries have information, support and care despite social distancing.

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or esh-tr.patientexperience@nhs.net.

Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse, practitioner or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Prof Scarlett McNally	Consultant Orthopaedic Surgeon
Miss Miranda Champion	Consultant Orthopaedic Surgeon
Mr Hemant Thakral	Consultant Orthopaedic Surgeon

The directorate group that has agreed this patient information leaflet:
Diagnostic, Anaesthetic and Surgery – Orthopaedics

Next review date: September 2025
Responsible Clinician: Prof Scarlett McNally, Consultant Orthopaedic Surgeon