Mallet finger injury

This information is for patients who have a mallet finger injury. It explains what this is and how it can be treated. Please note that this leaflet offers general guidelines – variations may exist depending on individual circumstances.

What is a mallet finger?
Mallet finger is where the tendon that attaches to the end joint of a finger (the distal interphalangeal joint, or DIPJ) is torn, meaning that the tip of the finger cannot be straightened.

Mallet finger is usually the result of one of four underlying causes:
1. The tendon is damaged, but no fractures (breaks) are present.
2. The tendon has ruptured with a small fracture caused by the force of the injury.
3. The tendon has ruptured with a large fracture, causing the joint to sublux (slip out of alignment).
4. Open mallet – where the tendon is cut by a sharp object such as a knife.

What causes a mallet finger?
Mallet finger can occur following a forced flexion (bend) of the DIPJ. It is most often caused by a minor injury, such as:
- catching the finger "end on" with a ball during sports.
- tucking bed sheets
- a laceration (cut).

How is a mallet finger treated?

Conservative management
The majority of mallet finger injuries can be treated conservatively (without surgery) by wearing a splint (a rigid support to keep the DIPJ straight) for six to eight weeks. The splint must be worn at all times and should not be taken off during the treatment. Keeping the DIPJ straight allows the two ends of the torn tendon or broken bone to reattach. If the DIPJ is allowed to bend at any point, you may have to restart treatment from the beginning.

You may be taught how to change the splint at home, although this can be tricky and some people prefer to come to clinic to have the splint changed.

Surgical management
Occasionally the tendon fails to heal by itself. In this instance, we may suggest continued use of the splint or surgical repair. Surgery may also be advised if the mallet injury involves a large fracture, subluxation of the joint or an open wound. It is important to note, however, that surgery does not always give good results.

If you are advised to have surgery, the operation will be performed as a day case under local anaesthetic. During the operation, the surgeon may either repair the tendon with sutures (stitches) or use metal pins (K-wires) to hold the joint in place. Your surgeon or nurse practitioner will tell you which option is recommended for your particular case.

A period of splinting will be necessary following your operation.
What are the benefits of treating a mallet finger?
If the injury is left untreated, the tendon will not be able to reattach which could lead to the finger being permanently deformed. An untreated mallet finger can have a knock-on effect to the other joints in the finger, and you may develop a swan neck deformity where the adjacent proximal interphalangeal joint (PIPJ) hyperextends (bends backwards).

What are the risks of treating a mallet finger?
The use of the splint can sometimes put pressure on the skin over the back of the finger and cause a wound. This will be monitored when the splint is changed, and the splint will be adjusted as necessary. You may also experience stiffness to the DIPJ once the splint has been removed. To counter this, you will be given a program of exercise to help you regain movement of the joint.

Following treatment of a mallet finger where there has been a fracture, there may be a prominent boney area over the DIPJ. This is due to the way that the bone is healing and may smooth out over time.

As with all surgery, there is a risk that complications may occur. These can include infection, oedema (swelling), stiffness, pain, nerve damage and scarring, all of which will be monitored carefully during your clinic appointments. Signs of infection include redness, hotness, increasing pain, burning pain, pus from the wound and/or increased swelling. If you think you might have an infection, please contact us urgently using the contact numbers given at the end of this leaflet.

What can I expect from my recovery?
Most people regain full function of the finger with no long-term problems, however full recovery may take several months. Any redness, swelling and tenderness of the skin over the DIPJ may also continue for few months after the injury. Sometimes the joint remains stiff and can no longer bend to a tight fist. In other cases, the joint will struggle to fully straighten and may have a permanent slight bend, known as a lag.

Who can I contact for further information?
If you have any questions or concerns, please discuss them with your surgeon or nurse practitioner at your clinic appointment. Alternatively, you can contact the hand unit on 020 8725 4770 (Monday to Friday, 8.30am to 5pm).

For urgent advice outside of these hours, please contact the on call plastic surgeon by calling the switchboard on 020 8672 1255 and asking for bleep number 7050.

Additional services

Patient Advice and Liaison Service (PALS)
PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9am and 5pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).
Tel: 020 8725 2453 Email: pals@stgeorges.nhs.uk

Reference: PLA_MFI_01 Published: August 2015 Review date: August 2017