## Instructions for Mallet Finger Treatment

**<u>Purpose</u>**: This document is to help you understand your injury, and reinforce the treatment required to get the best results possible.

**Diagnosis:** A mallet finger refers to an injury whereby the extensor tendon to the tip joint (distal interphalangeal) of the finger is disrupted or torn. The result is that the tip of the finger droops into a flexed (bent) position due to the absence of an effective extensor tendon. The result of an untreated mallet finger is not only the permanent flexed attitude of the tip of the finger, but also a secondary hyperextension deformity of the middle joint of the finger (proximal interphalangeal). This deformity is called a 'swan-neck' deformity.

**Goal of treatment:** To restore the extensor mechanism of the tip of the finger to allow for functional extension (straightening) as well as flexion (bending). It is important to understand that tendon healing is somewhat unpredictable, and there is no guarantee that treatment will restore your ability to fully extend the tip. On the other hand, it is rare for treatment to result in an inability of the tendon to heal. Therefore, the final result is typically a mobile, functional, pain-free joint, with no foreseeable negative consequences. Your compliance and adherence to treatment is critical – make no mistake.

**Treatment:** The extensor tendon has a terrific capacity to heal itself provided that the torn/disrupted ends are close together. This means that we want you to keep the tip joint in extension or slight hyperextension during the course of healing. Episodes of flexion or bending while the tendon is healing will result in either a delay of healing, sub-optimal healing resulting in a permanent inability to fully extend the tip, or an absence of healing. What we really want to avoid is an absence of healing or a significant flexed attitude to the tip due to an extensor tendon that has healed 'longer' than it was originally.

A quick note on the type of splints. There many ways to achieve splinting for a mallet injury, and different kinds of splints available for purchase on-line or a medical supply store. The one that works the best, in my opinion, is the one that is most comfortable, easy to manage, and effectively immobilizes the injured joint while allowing the PIP joint to move. We often make an aluminum-based splint at your initial office visit. I am very flexible with the type of splint especially when there is one that works better for the particular individual.

## First Stage (first 6 weeks)

- Maintain the joint in position full-time for 6 weeks.
- Make certain that the splint simultaneously prevents the tip joint from moving while allowing the middle joint (proximal interphalangeal) to move freely.

- Do not refrain from using your injured finger with the splint on and ensure that the joints that are not immobilized are moving freely to avoid any stiffness of the non-injured parts of your finger.
- Instructions for cleaning.
  - Have all your cleaning materials prepared since you will be one-handed while you are caring for your skin.
  - I recommend cleaning your finger tip at intervals, not necessarily daily, by carefully removing the splint with your fingertip firmly pressed against some countertop so that you can always keep the tip joint straight or even hyperextended.
  - Once completed, carefully replace the splint while maintaining your tip joint extended or hyperextended.
  - Check your skin to make sure there are no abrasions, rashes or open wounds developing. Please be reassured that these are not typical, even rare, occurrences. Notify us if they are (404-255-0226).

At the first follow-up visit, I will check to see if the tendon appears to be healing. IF that is the case, and it usually is, then I will start transitioning you out of the splint. Expect the tip joint to be stiff, and a little sore. It will take a few weeks for the tip joint to loosen up, and it is critically important that you remain patient during this phase to allow the tendon to continue to heal at its own rate. If you are impatient, and try to force your finger bent, you are more likely to stretch the healing tendon and cause your finger to droop. IF, on the other hand, the tendon seems to be healing slowly, I will continue to recommend full-time splinting and re-examine you one month.

## Second Stage (next 4 weeks)

- Remove the splint during waking hours
  - Except for any daytime activities where you are concerned for a recurrent injury such as...
    - Sports
    - Any exercise where you involve your fingers like weight-lifting, kick-boxing, biking, etc...
    - Work activities involving your hands extensively for manual labor
- Allow your tip joint to move on its own *do not force* it into a bent position (flexion) for fear that you will 'stretch' the healed tendon resulting in sub-optimal healing.
- If you notice progressive drooping of your finger while the splint is off then your tendon has not healed sufficiently, and you need to resume full-time splinting for another month. This is something that could occur within the first week of transitioning.

<u>Alternatives to splinting</u>: The splinting program just described is, by far, the most common method to treat a mallet finger. There are occasions to consider

the alternative, namely pinning the finger. The splinting program can be restrictive for some professions or occupations where frequent hand washing is critical: health care professionals, kitchen workers, etc... There are other situations where you may find the splinting program highly limiting and restrictive. In these circumstances, we can place a metal pin inside the joint to keep it in an extended position for 6-8 weeks without the real need for an external splint (the exception would still be sports). The pin is internalized and removed easily in the office when it is time.