

Madigan Army Medical Center

Referral Guidelines

Mallet Finger

Diagnosis/Definition

- Traumatic flexion deformity of the distal joint of any digit which may involve a bony injury to the base of the 3rd phalanx or only a soft tissue injury to the terminal tendon insertion.
- This injury may be opened or closed.
- Typical history is a blow to the end of an outstretched finger or a laceration dorsally over the distal joint of the digit.

Initial Diagnosis and Management

- Examination: There is a loss of full active extension with retained full passive extension.
- AP and Lateral radiographs of the digit should be obtained and may reveal a bony avulsion fragment of variable size. The reason for radiographic assessment, however, is to assure that the distal interphalangeal joint (DIPJ) is not subluxated or dislocated.
- Initial management is full extension (or slight hyperextension) of the DIPJ continuously for 6 to 8 weeks. This can be done up to 3 months following the initial injury. This treatment is done for both bony and soft tissue mallet deformities and may be accomplished by a Stack splint (prefabricated splint) or by a dorsal or volar splint (made of foam-backed aluminum) that extends the DIPJ **without limiting** the proximal interphalangeal joint (PIPJ).
- To prevent skin problems, any type of splint must be removed at least 3 to 4 times per day to check the skin to ensure it is not macerated or developing breakdown on the dorsal surface. This condition is more commonly a problem with plastic stack splints. It is critically important to maintain the DIPJ in full extension while removing/replacing the splint.

Ongoing Management and Objectives

After the DIPJ has been maintained in continuous extension for 6 to 8 weeks, the splint may be removed and active. Later, active assisted flexion exercises may be initiated. For the first 2 weeks following discontinuance of the continuous splint, an extension splint for the DIPJ should be worn during sleep. All patients treated for a mallet finger will have a mild extension lag and/or a mild to moderate dorsal bump at the DIP joint. This is not considered a failure of treatment.

Indications for Specialty Care Referral

- An open mallet finger or laceration should be referred for ASAP care (i.e. Cast clinic appointment).
- A functionally unacceptable result after adequate splinting.

- Refer to OT for chronic mallet finger deformity (greater than 3 months from injury without any initial treatment) that is either painful, functionally limiting, or shows signs of secondary swan neck deformity of the PIP joint.
- An initial presentation with some degree of DIPJ joint subluxation/dislocation.
- Occupational requirements that necessitate the hands getting wet or that will not allow wearing of a splint.

Criteria for Return to Primary Care

Successful surgical treatment of either an acute or chronic mallet finger with completion of necessary post-operative follow-up.

Last Review for this Guideline: **November 2012**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator