Mallet Finger

A mallet finger is a common injury that involves disruption of the extensor tendon mechanism that extends or straightens the last joint of a digit. Any finger or the thumb may be injured this way. The injury may occur as a pure tendon injury, or the tendon can also pull off a piece of bone from where it attaches. Mallet injuries in young patients may involve a portion of the growth plate. Mallet injuries in older patients may occur from minimal trauma, and may involve a tendon that was already thin and weakened.

The last joint of the finger is bent and not able to be straightened
Mallet injuries that occur as a result of open trauma, such as lacerations, may require surgery. Almost all other mallet injuries are treated with splinting and do not require surgery.

Pure tendon mallet injuries are treated with a finger splint that usually holds the last joint of the finger straight or even mildly hyper-extended. The splint needs to be worn full time, without being removed, for 8 weeks. A program to gradually discontinue the splint is then followed for another 4 weeks.

The splint is most often made by a therapist, custom fit to place the joint in the best position.

It is periodically checked by the therapist to make sure that fit is appropriate, and that the underlying skin is in good condition.

Mallet injuries that include a piece of bone (mallet fracture) are treated with 6 weeks of full time splinting, followed by the same gradual weaning program for another 4 weeks.
Mallet Splint
The splint is worn full-time for 8 weeks in a pure tendon injury, and 6 weeks for a mallet injury that includes a bone fragment. If the splint is removed during this initial period for skin care, the involved joint (the DIP joint) should be kept completely straight. Splint removal should be done as infrequently as possible, and preferably with the help of the therapist.

Splint Weaning Program
After the initial period of full-time wear, the splint is gradually worn less during the next 4 weeks.

Week 1: The splint can be removed 2 to 4 hours of the day, including bathing. The time out of the splint can be consecutive or intermittent, but should be during light or sedentary activity only.

Week 2: During the second week, the time out of the splint can be increased to 6 to 8 hours a day.

Week 3: For the third week, the splint should be worn for heavy activity during the day (sports or yard work) but still worn for sleep.

Week 4: The splint is worn for sleep only.
Exercises
During this 4 week period, and often for 1-2 months afterwards, exercises should be done to regain motion of the affected joint.

The exercises should be done 2-3 times per day, for 5 minutes. The most important exercises are called blocking exercises. The fingers of the other hand are used to block the other finger joint, and the last joint is then bent for a count of 10, and then straightened for a count of 10. The bending exercises regain flexion lost from being in a splint, and the straightening exercises are to strengthen the tendon that was injured.