

## Boutonniere Deformity

*“Working with a knowledgeable hand therapist can make the difference between success and failure in complex hand surgical cases. The therapist extends the continuum of our care, as well as functioning as coach and trainer for our patients.”*

Marybeth Ezaki, MD, President, American Society for Surgery of the Hand

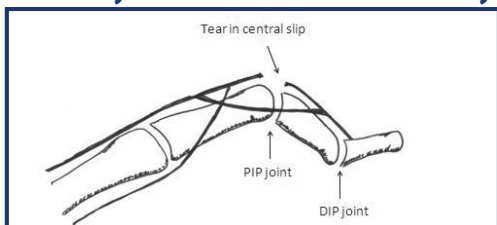
### What is a boutonniere deformity?

A boutonniere deformity is an injury to the middle joint of the finger (known as the PIP joint), which results in the inability to straighten that joint. The end joint of the finger, known as the DIP joint, then hyperextends, and is difficult to bend. This posture is the result of an injury to the extensor tendon over the top of the finger, which is known as the central slip.

### What causes a boutonniere deformity?

A tear in the central slip can occur from a dislocation of the PIP joint, a cut to the extensor tendon or from an inflammatory disease, such as arthritis. Unfortunately, what may appear to be simply a “jammed finger” may actually be a tendon injury and can result in a boutonniere deformity. If left untreated, these injuries can result in permanent stiffness to the injured joint. People with a boutonniere deformity will be unable to straighten their finger and will have difficulties with everyday activities, such as writing, buttoning their clothes and putting their hand in a pocket.

#### Anatomy of a Boutonniere Deformity



### What are the symptoms of a boutonniere deformity?

In an injury that has just happened, it will be difficult to straighten the PIP joint; however, this joint may be straightened with help from the other hand.

There will also be swelling and discomfort. In a boutonniere that has gone untreated, the finger may become stiff, making it difficult to straighten the finger at all.



*Index finger boutonniere deformity showing bent PIP joint and a straight DIP joint*

### What is the treatment for a boutonniere deformity?

The treatment for a boutonniere deformity begins with an accurate diagnosis by a physician. For a recent injury that does not require surgery, the treatment will involve a referral to a hand therapist. Boutonniere deformities that are a result of an untreated injury, arthritis or a laceration to the central slip of the extensor tendon, may require surgery.

### What can a hand therapist do for me?

For a boutonniere deformity that does not require surgery, a hand therapist will make a custom orthosis to place the finger in a proper position for correct healing. The therapist will also instruct the person in techniques to reduce swelling in the finger. The person must use the orthosis as instructed in order to achieve a good outcome. For injuries requiring surgery, the hand therapist will make an orthosis after surgery and instruct the patient in management of the scar. The hand therapist will also instruct the person in a specialized home exercise program that will assist with return to normal hand function.



*Example of custom finger orthosis for boutonniere deformity*