

Treatment

Conservative treatment involves continuous extension splinting of the PIP joint and progressive flexion splinting of the DIP joint. Splinting must be continuous and the patient must be very attentive to splinting techniques and not remove the splint during the treatment period of two to three months. In selected cases, the PIP joint may be stabilized with a temporary transarticular pin. This has known risks including infection, hardware complications, and numbness. A second procedure is required to remove the pin. Despite the best efforts, there is usually some residual boutonniere posture.

The treatment of long standing or fixed boutonniere deformity requires therapy to restore full passive motion of all joints prior to any surgery. If passive motion cannot be achieved, surgical results of tendon reconstruction are often poor, and proximal interphalangeal joint fusion may be indicated.

Surgical reconstruction is technically demanding, involving tenotomy and transfer of tendon slips. Therapy is necessary for several months after surgery. Stiffness and residual contracture usually persist to some degree even after surgery. For this reason, nonoperative treatment is often a reasonable option.

Please be aware that this information is provided to supplement the care provided by your physician. It is neither intended nor implied to be a substitute for professional medical advice.

Call Your healthcare provider immediately if you think you may have a medical emergency.

Always seek the advice of your physician or other qualified health provider prior to starting any new treatment or with any questions you may have regarding a medical condition.



Irwin Army Community Hospital

Fort Riley, KS 66442

Occupational Therapy Clinic

Patient Information Handout

BOUTONNIERE DEFORMITY



Irwin Army Community Hospital

Occupational Therapy Service

(785) 239-7863

Consult Required



Boutonniere Deformity



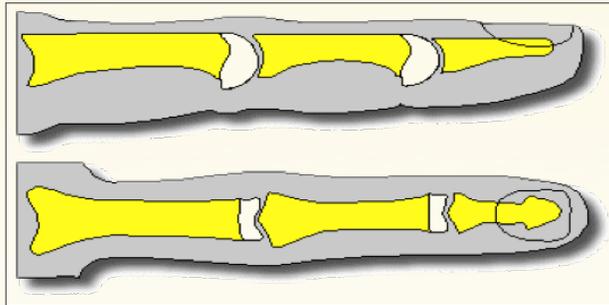
An imbalance of the flexion and extension forces of the finger, resulting in the characteristic deformity of flexion at the proximal interphalangeal joint and extension at the distal interphalangeal joint.



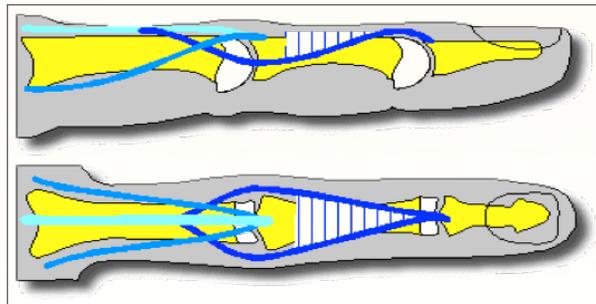
Causes

Boutonniere deformity is due to the rupture of the central slip of the extensor tendon at the level of the proximal interphalangeal joint. This is usually due to an injury. Although it can develop in inflammatory disorders such as rheumatoid arthritis. Also, some people are born with a mild boutonniere posture of most or all of their fingers.

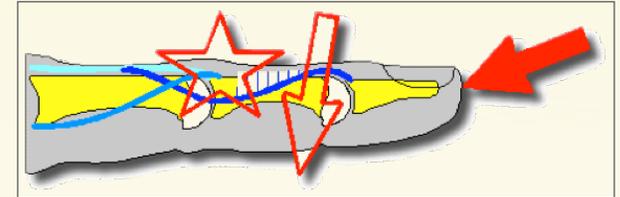
Here's how the problem happens as a result of the injury. The bones and joints are shown here:



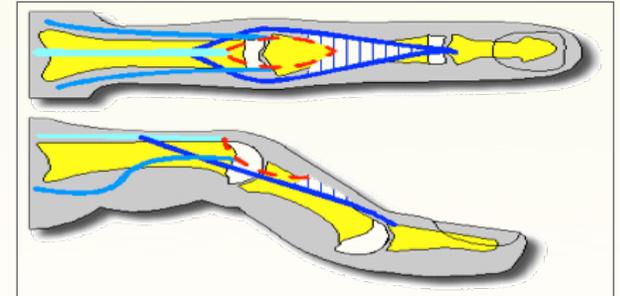
The tendons which straighten these joints are a bit complicated. They are link strings running from the sides and the back of the finger to a sheet on the top of the finger.



When the finger is hit or bent forcefully in just the wrong way, the sheet on the top of the finger (the central slip tendon) tears away from its attachment to the top of the middle to the top of the middle finger bone.



The tear in the tendon sheet looks like a buttonhole ("boutonniere" in French), and the end of the finger bone actually begins to stick through the hole. As a result, the tendons can't straighten the middle joint (which stays bent) and all of the force of the tendons bypasses the middle joint and goes to the end joint (which flips backwards).



The problem can also result from a cut on the back of the finger. The tendon is right under the skin as it passes over the middle knuckle.