



## Volar Plate Injuries

A volar plate injury is commonly called a “jammed finger” or “sprain”. This happens when the finger is bent backward too far (hyperextended). It often happens to athletes. The middle joint of the finger is affected.

The volar plate is a thick ligament that connects two bones in the finger. There are other ligaments to each side of the joint as well (collateral ligaments). When the finger is bent back too far, one or more of the collateral ligaments can also be torn. If the collateral ligaments are torn, there could be an increase in side-to-side movement of the joint.

As the volar plate is stretched and torn, it may also pull off a small piece of bone. This can result in a fracture (break). This is also called an **avulsion fracture**.

### Symptoms

When a volar plate injury occurs, there is usually:

- immediate pain in the joint
- swelling
- loss of motion in the joint
- bruising

In severe cases, the joint may be dislocated.

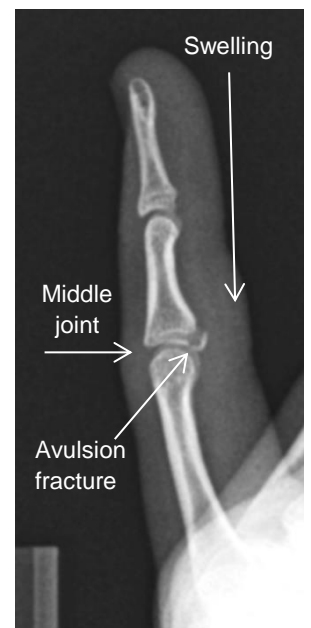
### Diagnosis

X-rays of the finger are taken to see if a fracture is present and to rule out other injuries (Picture 1).

### Treatment

Your child may use a splint for a short time before transitioning to “buddy taping.” This is usually for no longer than 1 week and gives the finger rest.

“Buddy taping” is the most common treatment for volar plate avulsion fractures. When the injured finger is taped to another “good” finger, the healthy finger acts like a splint. This ensures that the injured finger is not moved side-to-side or hyperextended. It also helps safely move the joint to prevent stiffness.



**Picture 1** In an x-ray of the finger, you can see the small avulsion fracture on the lower right side of the middle joint.

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## **Treatment, continued**

After the doctor diagnoses the volar plate injury, no further visits are usually needed. Range of motion and gentle exercises may be started within days of the doctor visit. The motion exercises are continued until full motion is achieved, which almost always occurs.

If the collateral ligaments are also stretched or torn, they usually scar and heal. There may be a bulge or swelling at the joint that will last a very long time. It may never completely go away. However, this rarely prevents full range of motion after healing.

Expect decreased pain every day. There should be no pain within 3 to 4 weeks. If at 3 to 4 weeks there is still pain and stiffness or if you have any concerns, you should return to clinic for a repeat evaluation.

## **What to Do at Home and What to Expect**

Expect there to be some pain for 3 to 4 weeks. You may consider giving your child anti-inflammatory medicine such as ibuprofen (Motrin<sup>®</sup> or Advil<sup>®</sup>). There may be some loss of motion for a while and swelling can continue for weeks. This will get better with time and as your child does the range of motion exercises.

Your child may need to limit sports activities for 1 to 2 weeks. This will depend on the severity of the injury and the advice of your child's health care provider.