

HAND INJURIES

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Injuries to hands, wrists and fingers are extremely common in sports. Michael Sullivan, M.D., board-certified orthopaedic hand surgeon with Summit Sports Medicine & Orthopaedic Surgery, a strategic affiliate of Southeast Georgia Health System, sees many of these types of injuries. "Sometimes these seemingly small injuries are underestimated by players, parents, and coaches," Dr. Sullivan says. "Delayed diagnosis and treatment of these injuries may lead to unnecessary long term problems."

Below are some of the most common hand injuries seen in sports and how they should be managed.

Jammed Finger

A "jammed finger" is probably the most common hand injury in sports. Often, this is caused by a ball forcefully hitting the tip of the finger. The ligaments or joint capsule at the middle knuckle usually take most of the impact which results in swelling, inflammation, pain and stiffness. Treating the pain and swelling with the R.I.C.E. principle (Rest, Ice, Compression, Elevation) is the first step. If the athlete took a violent blow to the finger, it is always a good idea to rule out a fracture. Once the pain subsides and motion returns, buddy taping (taping it to the next finger) helps support the injured finger until it is healed.

Jersey Finger

Jersey finger is appropriately named because it is usually occurs when an athlete's finger catches on another player's clothing. The tendon that bends the end of the finger is pulled away from the bone, causing tenderness and swelling at the tip of the finger and he or she will not be able to curl the finger into the palm. This condition usually requires surgical repair. If jersey finger is suspected, the sooner treated by an orthopaedic or hand surgeon, the better. Late repair can cause the need for more complicated surgical procedures.

Dislocated Finger

Depending on the circumstances of the accident, a dislocated finger is often accompanied by other injuries to the finger or hand. These injuries may include broken bones or injuries to ligaments, tendons or nerves. The signs of a dislocation usually involve a visibly deformed or out-of-place finger. Symptoms may include swelling, pain and inability to move the joint.

When a finger is out of place, only a health care professional should try to relocate it. Trying to put it back in place oneself can lead to more injury to the surrounding tissues and nerves. An ice pack should be put on the joint and finger right away. Support the finger or thumb in its displaced position and seek medical help immediately.

If there is a delay in getting it treated, swelling and muscle spasm may occur. This may make it harder to put the finger in place. X-rays should be taken to determine the extent of damage.

Rehabilitation after a dislocation includes gaining full range of motion by bending and straightening the finger as well as strengthening it by squeezing a rubber ball. During the healing process, a splint or buddy taping is a good idea to protect the finger from being reinjured.

Mallet Finger

A mallet finger occurs when the small tendon on the top of the finger is overstretched or pulled away from the bone. This is usually caused by a ball hitting the tip of the finger. There can either be a small break in the bone, or the tendon can be elongated or ruptured making the finger tip unable to extend. X-rays will determine the severity of the injury. For a minor stretching of the tendon, splinting may be an option, but often surgery is required to correct a mallet finger.

Scaphoid Fracture

The scaphoid is located at the base of the thumb. Falling on an outstretched hand is usually the culprit for this fracture. There is typically swelling on the wrist near the base of the thumb and pain with grasping or wrist movement. Unless your wrist is deformed, it might not be obvious that the scaphoid bone is broken. In some cases, the pain is not severe, and may be mistaken for a sprain. Any pain that persists more than a day or two should be seen by a doctor. Delaying treatment can cause the bone to take months to heal or to never heal, causing chronic pain and arthritis.

Carpal Tunnel Syndrome

The carpal tunnel is a narrow passageway located on the palm side of the wrist. This tunnel protects the median nerve to the hand and the tendons that bend the fingers. The median nerve can become irritated or

compressed and cause numbness, weakness, pain or tingling in the hand. Over time, these symptoms can increase if left untreated. This condition can be caused by repetitive wrist movements, old wrist injuries, rheumatoid arthritis, obesity, diabetes and sometimes even pregnancy.

Conservative treatment includes stopping the activity that causes the pain, icing three to four times a day for 15 minutes, and wearing a wrist brace to keep the wrist in a neutral position. Taking a non-steroidal anti-inflammatory drug can help to relieve pain and reduce swelling. If these methods of treatment fail, surgery may be an option.

Too often, injuries to hands, wrists, and fingers are under-treated and left for further complications to arise. While some injuries can be treated conservatively with immediate return to play, others require a more in-depth assessment. The key to managing these injuries is to receive a full assessment and evaluation. Caring for these conditions properly and promptly is essential to avoiding long-term pain and dysfunction. When in doubt, have it checked out. ☞

Meet Dr. Michael Sullivan

Michael Sullivan, M.D. received both his undergraduate degree and medical doctorate degree from the University of California in Irvine, California. He completed his orthopaedic surgery residency at Tulane University in New Orleans, Louisiana, and received exclusive training in hand and wrist surgery while in a fellowship program with Baylor College of Medicine in Houston, Texas.



Dr. Sullivan is board-certified by the American Board of Orthopaedic Surgery with a certificate of added qualification in hand surgery. He has been in practice with Summit Sports Medicine & Orthopaedic Surgery since 1999, and resides on St. Simons Island with his wife and six children.

Summit Sports Medicine & Orthopaedic Surgery is a strategic affiliate of Southeast Georgia Health System, and has three convenient locations. For more information, call 912-262-9961 in Brunswick, 912-466-5570 on St. Simons Island, or 912-576-6355 in St. Marys or go to www.summitsportsmedicine.com.

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