Hook of Hamate Fracture

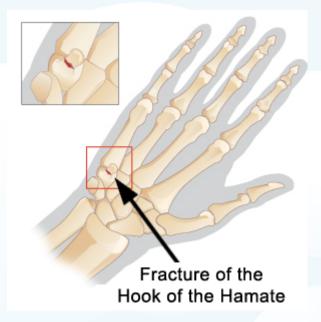
The wrist is composed of eight small bones (carpals) and the forearm bone ends (radius and ulna). The hamate is one of the largest of all the carpal bones. It is located along the pinky side of the palm. There is a protrusion in the hamate, which is known as the hook of hamate. A hook fracture can occur from direct injuries to the bone or from indirect blows occurring commonly in sports.

When it comes to golf, most of these fractures happen due to the positioning of the golf club resting along the hook. When you hit into a large divot, tree stump, or hit the mat at the range where the head of the club stops abruptly, the force can end up being displaced into the shaft of the club. That force is then transmitted directly into the wrist where a fracture occurs.

Fortunately hook of hamate fractures are rare. But it is possible to fracture the body of the hamate (middle of the bone) as well as the hook.

Hook of Hamate Fracture Anatomy

The hamate is one of the different carpal bones within the wrist. It sits within the distal row of the far ulnar side and articulates with the fourth and fifth metacarpals, triquetrum and capitate. The proximal surface boasts a convex shape that allows for articulation within the proximal carpals. Inside of the hamate, there is a hook that protrudes outward.



How to Treat a Hook of Hamate Fracture:

Fractures of the hook of hamate are often difficult to visualize with an x-ray, so a CT scan might be needed to make a proper diagnosis. However, this is costly and so it may be diagnosed by clinical examination and history. However, it is easy to miss the fracture and misdiagnose the injury as a ligament sprain. And it may also be painful for several months after injury if it goes untreated. Even though there are a few isolated cases where the injury has healed with a splint and immobilization with a cast, surgery is often the required method of treatment. The best way to treat these fractures is to remove the hook. Complex fractures often don't tend to heal with traditional treatment, which is why surgically removing the fractured portion of the bone is the main treatment choice.

After hook of hamate removal surgery or ORIF surgery, rehab starts after the wrist has remained immobilized for a period of 10-14 days. The golfer will be able to initiate bending of the wrist and extending it when clearance is received from the doctor. The main goal is to achieve full movement in the wrist. Golfers are able to return to their previous playing level once the incision has healed enough so that it isn't tender and playing doesn't involve a great deal of pain.

Tips:

- Whenever playing risky sports, it is important that you wear protective equipment that is padded and fitted. Use racquets, bats and clubs that have a padded grip. Wrist supports for skaters or snowboarders may help.
- It is important that you use and learn the proper techniques whenever swinging or hitting a bat, club or racquet.
- If you had an injury previously, use padding or tape to protect your hands before playing any jumping or contact sports.
- For those who have a history of joint or bone disease, the chance of fracturing the hook of hamate increases.
- If you think you have injured your wrist, you should go to the hospital to get it checked by a doctor. A good sports therapist or osteopath will also be able to advise if a fracture is likely.