

### Distal Radius Fracture

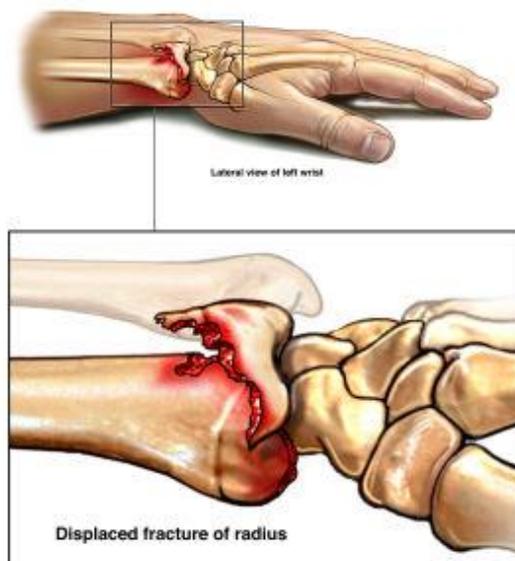
A distal radius fracture (broken bone) is a precise term for what is commonly known as a wrist fracture. It typically occurs from a fall onto an outstretched hand or wrist but can occur from other mechanisms such as direct blow or even forced hyperextension of the wrist. It can occur from a simple trip and fall in patients with weaker bone or from a higher energy injury such as a fall from a height or a motor vehicle collision in a patient with stronger bone. There can be other injuries to the same arm which may include other fractures and/or soft tissue injuries that also need to be treated.

If you have a distal radius fracture, the history of the injury, exam of your extremity, and x-rays of your wrist are very important to your physician as there are many possible ways to treat the fracture. It can range from treatment with a removable splint to treatment with a cast or even to surgery. Your physician will look at the x-rays and determine whether it is possible for the fracture to heal without surgery or whether surgery will be necessary to put the fracture pieces back in better alignment. Your age, activity level and overall health are also important in deciding how to treat a distal radius fracture.

If your physician decides that your fracture can be treated in a splint or a cast, you will likely have that on for a minimum of 3-4 weeks but perhaps more. This is necessary to reduce the risk of the fracture moving out of position as it heals. The cast will leave your fingers free to move, and it is very important to work on moving your fingers at this point. While the amount of wrist motion that a patient obtains after a distal radius fracture is unpredictable, there is not much wrist motion that is required to perform most activities of daily living (dressing, eating, writing, etc.). If a patient allows his or her fingers to get stiff during treatment of a distal radius fracture, this is difficult to overcome and may result in significant impairment of the hand. If non-operative treatment is chosen for a distal radius fracture, your physician may need to see you back regularly to check the position of the fracture for the first few weeks.

### Explanation of Procedure

If your physician will decide that your fracture needs to have surgical intervention to realign the pieces, this will be done on an outpatient basis in the operating room under general anesthesia. Occasionally the fracture can be put back in position and fixed with pins that align the bone. These pins may or may not stick out of the skin and are removed at a later date. Many fractures may be treated with plate and screw fixation. The muscles are moved out of the way to expose the broken bone. Under live x-ray the broken bone is then pieced back together, and the pieces are held in position with a plate and screws. The plate and screws will hold the bone in position while it heals. In some cases, this is necessary to give the best functional result.



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### **Preparing for Surgery**

Once you decide to have surgery, the physician and his staff will schedule the procedure at the local hospital or surgery center. Blood tests and other diagnostic exams are occasionally obtained to make sure the patient is safe for surgery. If you have multiple or severe medical conditions, you may see your primary care doctor prior to surgery. You are instructed to have nothing to eat after midnight the day before their surgery. It would be preferable to temporarily discontinue blood thinning medication, such as Coumadin or Plavix, but this should only be done under the strict direction of your physician. In addition, certain medications for rheumatoid arthritis may need to be stopped as well. Your surgeon will go over your medication list and let you know which medications will need to be stopped.

### **What to Expect at Surgery**

Expect to arrive at the hospital or surgery center at least 1-2 hours prior to your actual surgery time. This gives the staff time to meet you, get all your paperwork in order, and make sure you are safe and ready for surgery. You will meet many different people on the day of surgery. A preoperative nurse will get you dressed and ready for surgery. The anesthesiologist will discuss the different options available to help you sleep comfortably and pain-free during the actual surgery. Finally, the postoperative nurse will help you recover from the anesthesia after the surgery. Depending on the type of anesthesia you receive, you may be in the postoperative care area from anywhere from a half hour to three hours after your procedure. A friend or relative will need to drive you home after you are released from the postoperative care unit. Friends or relatives waiting for you should be aware that your discharge time may be unpredictable and a longer stay in the postoperative recovery area does not necessarily mean there is a problem.

### **Care After Surgery**

You are encouraged to move your fingers and thumb postoperatively beginning immediately after surgery. You will be instructed to keep the dressing and splint clean and dry. Elevation of the wrist and ice for the first 48-72 hours after surgery is important to reduce swelling. The surgical dressing will remain in place until you see your surgeon back in the office, generally within 10-14 days after surgery. You are able to shower by placing a plastic bag over the dressing with tape or a rubber band. At your first postoperative appointment, the sutures are usually removed. Most commonly a removable splint is then placed. You then start formal physical therapy to learn how to do exercises to regain motion. The duration and intensity of physical therapy can vary according to the type of fracture and patient involvement. The motivation of the patient is perhaps the most important factor in achieving a good result, as a willingness to do the exercises and participate in rehabilitation actively often leads to a better functional result.

### **Possible Complications and Instructions**

1. Infection is usually rare for this procedure but can occur. Common signs of infection include increasing pain after surgery, increased redness around the incision, swelling, and drainage. Patients may have fever or chills as well. If you experience any of these symptoms, contact your surgeon immediately. If you are unable to see your doctor, go to the emergency room.
2. The swelling and mechanism of injury may cause a delayed temporary or permanent nerve injury, most commonly to the median nerve. The median nerve is affected in carpal tunnel syndrome and presents with numbness in the thumb, index, and middle finger. Occasionally surgery may be necessary if numbness does not improve after a certain length of time.

3. Tendon rupture can occur with both non-operative and operative treatment of a distal radius fracture. This complication is rare and often affects the tendons that move the thumb up or down. It is important to tell your physician if you have sudden loss of thumb or finger motion.
4. Even the simplest of distal radius fractures can become stiff after treatment and result in decreased motion of the wrist. It may be difficult to achieve the motion required to do pushups for example after the fracture has healed.
5. The length of time for full recovery can vary. Patient should expect at least 3-4 months for recovery and release to full activity. However, it is not uncommon for patients to continue to improve their motion and strength up to 12 months postoperatively.

### **Questions**

The CORE Institute is dedicated to your outcome. If any questions or concerns arise, please call The CORE Institute at 1.866.974.2673.