Wrist Fractures: A Guide to Recovery

Wrist fractures (breaks) are very common injuries that usually happen from a fall onto the outstretched hand or from high energy trauma, like car accidents. There are two long bones in the forearm: the radius and the ulna. There are eight very small bones in the wrist itself called the ‘carpal bones’.

The most common type of wrist fracture is break of the end of the radius bone, also called a ‘distal radius fracture’. It is common to have a small break in the end of the ulna bone too, when the radius is broken. The smaller bones in the wrist, called the carpal bones, can also break or ligaments can tear. The scaphoid is the most common carpal bone to be fractured.

Most wrist fracture can be treated with casting either with or without ‘straightening’ the bone out first. Straighten the bone is called a ‘reduction’.

Surgery may be recommended if the bones are in a ‘bad position’ after the break or still in a bad position after the ‘reduction’. If the break heals in a poor position, there could be a loss of function or movement, or ongoing pain the wrist, which is why surgery may be recommended.

Treatment of Wrist Fractures:

There are many ways to treat fractures of the wrist. These are the most common.

Non-Surgical ways of treating wrist fractures:

- Casting: if the break is an acceptable position, it can be treated with a cast for 6-8 weeks. X-rays will be taken to ensure the break stays in a good position while it is healing.

- Reduction and Casting: If the bone breaks in a bad position, it can be straightened by pulling on the wrist (‘reduction’) without cutting the skin and then applying a cast to help hold the bone in the better position while it heals. This is usually done in the Emergency Department with freezing or sedation to reduce pain. Sometimes this is done in the Operating Room. X-rays will be taken frequently to ensure the break stays in a good position while it is healing.
Wrist Fractures: A Guide to Recovery

Types of Surgery to treat wrist fractures:

Wrist fracture surgery is day care surgery, meaning you go home the same day as the surgery.

- **Reduction & Pinning:** This is done in the operating room most commonly under general anesthesia. The bones are pulled into alignment and then pinned with metal wires through the skin. The wires are removed after 3-6 weeks. The wires are removed in the clinic and this typically causes no or very little discomfort.

- **Fixation or ORIF (Open Reduction Internal Fixation):** this is the most common surgery and is done in the operating room usually under general anesthesia. In this surgery, the skin is cut and the bones are manipulated with tools to place them in better position. The bones are then held in position with screws, plates, heavy sutures or other means. After surgery, a half cast is applied is typically removed around three weeks after surgery. After this, a removable wrist splint is often worn. The plates and screws do not need to be removed unless they are causing pain or other problems after the break has healed. This is uncommon.

- **External Fixation:** This is done in the operating usually under general anesthesia. The bones are realigned without cutting the skins and pins are placed into the bones. The pins are attached to a metal frame called a fixater. The pins and frame are removed in the clinic around 4-8 weeks after the fracture.

Recovery from Wrist Fractures:

No matter what method is used to treat the break, the bone takes the same amount of time to heal, usually 1-2 months. However, recovery takes much longer. Most of the recovery is completed by 4-6 months. Some stiffness is common after these injuries and can be very frustrating, but improvement continues for at least 6-12 months after the injury. Stiffness is often because of scar tissue and will improve with the right exercises and working thru some discomfort, once your surgeon allows.

Many patients make a full or near full recovery and return to all of their activities by around 4-6 months after the injury. However, it is not uncommon to have some ongoing pain. This is usually mild but can be significant for a small number of patients.

Thin Bones or ‘Osteoporosis’: is common in patients who break their wrist. The risk of osteoporosis is higher if you are thin, older, Caucasian or Asian, female, smoke, drink excess alcohol or are taking certain medications. Please ask your doctor about a referral to the Island Osteoporosis Clinic for an assessment – medications or other treatments can be suggested to decrease your chance of another broken bone.

Going Home: Arrange to have someone take you home after surgery, even if you are taking a taxi

**Care of your Incision & Wound:**
- Leave your cast or splint on and do not remove
- Keep your cast or splint dry
- Call your surgeon if your cast gets wet

**Bathing:**
- You may shower or bathe following the surgery.
- Keep your cast/splint dry and cover with a plastic bag while bathing
Wrist Fractures: A Guide to Recovery

- If your cast becomes wet, contact your surgeon

Activity:
- Do not use your broken hand to lift anything heavier than 1 lb (a large coffee mug) until you discuss with your surgeon - usually this is for the first 6 weeks after the break
- Avoid wearing a sling because this can increase swelling in the hand and cause a stiff elbow or shoulder
- Gradually resume normal activities like walking; recovery is gradual and it is normal to feel weak and tired for a couple of weeks after surgery or injury
- Move your fingers, thumb, elbow and shoulder gently every 1-2 hours to avoid stiffness (unless otherwise directed)
- Your surgeon will tell you if and when you need physiotherapy.

Pain:
- Discomfort will be moderate for the first few days and will gradually get better
- Use any pain medications as prescribed by your surgeon
- Gradually reduce your pain medications as your pain decreases

Swelling
- Expect swelling following the break or surgery. The swelling is usually worst in the first two weeks and then gradually gets better but can linger for months.
- To reduce swelling, elevate the hand to the level of the heart and keep the wrist above the elbow
- Frequently moving the fingers helps reduce swelling
- When resting, sit with the affected limb supported with pillows and elevated,

Icing:
- Applying ice packs, even over the cast, may reduce pain and swelling
- Apply ice for 10-15 minutes, 4-6 times per day
- Never apply ice directly to skin

Return to Work:
- When you are able to return to work depends on:
  - the kind of job you have and its physical demands
  - how much pain & swelling you have after your injury
  - how your recovery is progressing
  - if you are able to modify your job or work from home
- Your surgeon will help you decided when to return to work
- Expect to take off at least 4-8 weeks for a desk job that does not require much use of both hands
- Expect to take off 2-4 months for more physically demanding work

Healthy Eating:
- Start with clear fluids after surgery
- Gradually increase to a well balanced diet as your appetite allows
- Drink at least 6 cups of fluids daily

Going to the Bathroom:
- Changes in medications, activity and diet can cause constipation (hard, dry bowel movements)
Wrist Fractures: A Guide to Recovery

- To avoid constipation, drink lots of fluids, eat high fibre foods such as prunes, fruits, bran, whole grains and vegetables
- Take a stool softener or laxative if needed. Ask your surgeon or pharmacist to suggest one.

Smoking:
- Smoking causes problems with the healing of bones and tissues
- Not smoking or smoking less in the 3-6 months after surgery will reduce the chance of a problem with healing
- visit www.quitnow.ca for information about tools and medications to help you quit smoking

Driving:
- Do not drive while taking pain medications
- Discuss with your surgeon when it is safe to drive
- If your ability to safely drive (e.g. swerve sharply, perform an emergency stop) is impaired, your insurance may not be valid in the case of an accident.
- If you have a cast or splint on your wrist, you will likely be found ‘impaired’ in your ability to drive

Your Medications:
- Resume your regular medications unless instructed otherwise by your surgeon

Supplies/special equipment:
- Your surgeon may prescribe you a ‘removable wrist splint’. This can be purchased at many pharmacies, medical supply stores or One Bracing @ RebalanceMD

Follow Up Appointment:
- If you have surgery, a post-operative appointment should be scheduled for approximately 10-14 days post surgery
- If you break was treated without surgery, you should have an appointment and new x-rays within 7-14 days of the break to ensure that the break is healing in a good position
- Call the office if you do not have an appointment scheduled
- Write down your questions for the surgeon before the appointment

Call your Surgeon if you have:
- Increasing pain or swelling that is not relieved by elevation, ice and pain medications
- Bleeding that continues even after applying direct pressure for 10-15 minutes
- Incisions that are red, puffy, hot or leaking fluid more than 48 hrs after surgery
- Fever greater than 38°C
- Signs of circulation problems (e.g. coolness, change in skin colour, numbness) which is not relieved by rest
- Persistent nausea and vomiting
- Inability to pass urine for more than 8-10 hours
- Chest pain or shortness of breath that is unusual for you

If you cannot reach your Surgeon:
- Call your family doctor, go to a walk-in clinic or hospital emergency department

Non-emergency health information and services:
- HealthLinkBC  www.healthlinkBC.ca
Wrist Fractures: A Guide to Recovery

- Tel: 811 from anywhere in BC
- Tel: 711 for deaf and hearing impaired assistance (TTY)

The information in this handout is intended only for the person it was given to by the health care team. It does not replace the advice or direction given to you by your surgeon.