# Your Guide to Distal Radius Fracture Surgery

Brian J. Bear, MD



ORTHOILLINOIS

Hand, Wrist, and Elbow Center of Excellence









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# **Care Team and Contact Numbers:**

Main Phone line
<b>Kailey</b> - Lead Nurse
Ronda - Surgery Scheduler 815-484-6969
<b>Sadie</b> - Office Scheduler

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#### Learn More About Dr. Bear

I would like to take this opportunity to tell you more about myself and my experience in health care. Originally from Winnetka, Illinois, I attended Northwestern University graduating in 1987, cum laude, president of Mortar Board Senior Honor Society and a member of Phi Betta Kappa. I continued my studies at Northwestern University School of Medicine, receiving my medical degree in 1991 as a member of Alpha Omega Alpha honor society. Following my graduation, I pursued advanced orthopedic training at Cornell Hospital for Special Surgery, which is ranked as the top orthopedic hospital in the United States. In addition, I completed a specialized training fellowship program in elbow and hand surgery at the Mayo Clinic.

My practice is focused on shoulder, elbow, hand, microvascular, traumatic, and reconstructive surgery. It is my mission to provide you compassionate care with expertise comparable to any major university center. I am humbled by my inclusion in two prestigious quality health care listings: as a Castle Connolly Regional Top Doctor®, and the Best Doctors® list. Earning a place on either list is a result of being nominated by other physicians and a thorough review by the listing organization into my background, professional achievements, patient satisfaction and positive treatment record. Inclusion on the Best Doctor<sup>R</sup> list is a direct result of other doctors selecting me as the person they would choose to treat themselves or a family member. These are honors I take very seriously and I am committed to maintaining the high standards they represent with all my patients.

I am actively involved in continuing education, have given numerous lectures, and published many orthopedic articles. As Clinical Associate Professor of Surgery at the University of Illinois College of Medicine, I have been awarded the Golden Apple teaching award and the Excellence in Teaching award. I am a reviewer for the acclaimed Journal of Shoulder and Elbow Surgery and currently serve as a faculty member at the Orthopedic Learning Center, where I teach other surgeons the latest techniques of hand, elbow and shoulder surgery. I hold Associate and Assistant Clinical Professor of Orthopedic Surgery positions respectively at University of Illinois College of Medicine in Rockford and Rush University Medical Center in Chicago where I help train medical students, family practice residents, and orthopedic surgery residents.

Please let me know if there is anything I can do to further improve your experience at Ortholllinois. My goal is to provide the best medical care available to help you return to an active and pain-free lifestyle.

Sincerely, Brian Bear, M.D.

> Working together to provide a higher standard of care. It is my goal as an orthopaedic surgeon to provide you the best possible care with compassion and respect. At Ortholllinois, we utilize a team approach that allows

> > for the highest quality service and treatment. An integral part of the team is **Joseph Steiner**, **PA-C**. As a certified physician assistant (PA), Joe is an extension of my care and is highly trained to provide many office and hospital services as well as assist me in surgical procedures.

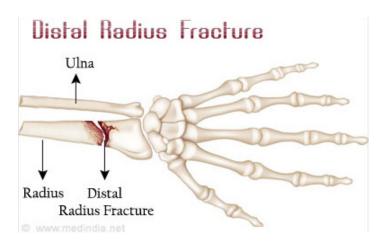
Joseph Steiner.

From your first visit to the completion of your treatment you will be seen by me or by Joe. We work together to offer a comprehensive evaluation and treatment plan to quickly return you to a healthy, active lifestyle.

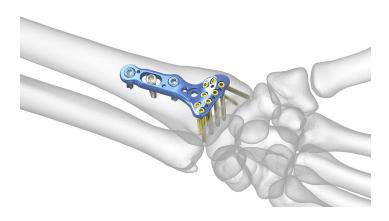




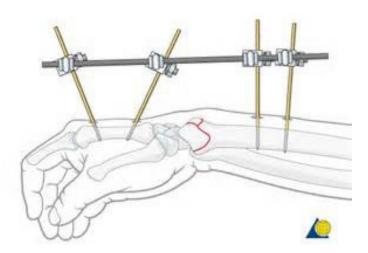
The Distal Radius is term given to describe the end of your forearm bone called the radius in the area where it meets your hand. It forms ½ of your wrist joint. It is a very important bone that allows your wrist to move smoothly to position your hand in order to perform activities. This is a common area that is fractured when you fall onto an outstretched wrist.



# **Description of Procedures**



Internal Fixator. Distal Radius fractures are commonly repaired with a special metal plate and screws designed to fit on the bottom (palm side) of the radius bone. This is called an internal fixator. Please see left for picture.



External Fixation. Distal radius fractures can also be repaired with an external fixator. An external fixator is a device spans the wrist joint. It accomplishes this by using two pins to anchor into the radius bone above the fracture and two more pins to anchor into the index finger hand (metacarpal) bone. Please see picture at left.

# Information to Keep in Mind Prior to Surgery

- 1. Please notify our office for any illness or conditions within one week prior to your scheduled surgery date. (E.g. skin abrasions, rashes, insect bites, pimples about the operative site, colds, and upper respiratory or urinary infections).
- 2. Please leave valuables (jewelry, contact lenses, etc.) at home.
- 3. If you are over 50 years of age, or if you have any significant medical problems including but not limited to heart disease, diabetes, lung disease, kidney disease, auto immune diseases, endocrine disorders, cancer, please ask Dr. Bear, his nurse Jessie or his surgery scheduler to determine if you need to see your medical doctor for written clearance prior to surgery. Patients with heart disease may need cardiac clearance from a Cardiologist. Ronda, our surgery scheduler can help you with this. Her phone number is 815-484-6969.
- 4. If you have any disability forms or papers, please have these in our office at least one week prior to surgery. Do not bring them to the hospital. Allow approximately 5-7 business days to be completed.
- 5. Failure to arrive on time, some medical problems, and eating and drinking after midnight will cause your surgery to be cancelled for your safety.
- 6. Remember to wear loose fitting shirts or blouses that are able to fit over a bulky bandage that will be on your arm.

# **Types of Anesthesia**

**General Anesthesia:** General anesthesia commonly requires a combination of medications given intravenously (through your veins) and inhaled gasses through a breathing tube to put you into a deep sleep during surgery. You will not feel any pain during surgery and will not remember any parts of the actual surgery. You will be in a very deep unconscious sleep.

**Regional Anesthesia:** Regional anesthesia refers to a technique performed by skilled anesthesiologists where your entire arm is completely numbed. This is commonly achieved by injecting a strong numbing medicine into your upper arm or just below your collar bone. Many anesthesiologists will utilize an ultrasound machine to help them localize (see) the nerves they want to numb. Your arm will be completely numb and you will not be able to move your elbow, wrist, hand, fingers and sometimes shoulder until the anesthetic has worn off. This typically takes between 12-36 hours. You will not feel pain and you will receive medicine that will make you forget the majority of the surgical procedure.

**Combined General and Regional Anesthesia:** For longer more extensive cases (more than 1 hour) general and regional anesthesia are often used together. This is done to control pain after surgery. The benefit of this technique is to control pain after surgery. When patients wake up from surgery, their arm is completely numb and they will have minimal pain. They will also not be able to move their fingers, wrist, elbow and sometimes shoulder until the block wears off in 12 -36 hours.

\*YOUR ANESTHESIOLOGIST WILL BE ABLE TO ANSWER ANY QUESTIONS REGARDING THE TYPE OF ANESTHESIA THAT THEY RECOMMEND



#### THE SURGICAL EXPERIENCE

# **Pre-Admission Guide for Surgery**

❖ Ortholllinois Surgery Center (346 Roxbury Rd. Rockford 61107)- If your surgery is scheduled at Orthoillinois Surgery Center a nurse will contact you prior to the surgery date to go over instructions, your medications, your medical history, and answer any questions you may have.





❖ OSF St. Anthony Medical Center\* (5666 E. State St. Rockford 61108) - You will receive a call from a nurse at OSF to do a pre-anesthesia phone assessment. If any labs are needed per the hospital's anesthesia protocol, the nurse will inform you as to when you can go to the hospital to have those done. If you require a history and physical and medical clearance by your primary care physician and your doctor

is not in the Rockford area or is not affiliated with OSF, then you may need to be seen by a hospitalist at the hospital to have your history and physical done for medical clearance. The nurse from OSF will also inform you when and where to have that done.

❖ SwedishAmerican Hospital\* (1400 Charles St. Rockford 61108)- You will receive a call from a nurse at SwedishAmerican Hospital to do a pre-anesthesia phone assessment. If any labs are needed per the hospital's anesthesia protocol, the nurse will inform you as to when you can go to the hospital to have those completed.





❖ Mercy Rockford Hospital\* (2400 N Rockton Ave. Rockford 61103) You will receive a call from a nurse at Mercy Health to do a pre-anesthesia phone assessment. If any labs are needed per the hospital's anesthesia protocol, the nurse will inform you as to when you can go into the hopistal to have those done. If you require a history and physical and medical clearance by your primary care physician and your doctor is not in the Rockford area or affiliated with Mercy Health, you may need to be seen by a hospitalist at the hospital to have your history and physical done for medical clearance. Our surgery scheduler Ronda will be in contact with you to let you know when the hospital scheduled that appointment as well as a pre-anesthesia on-site assessment if required.

Your surgical experience includes three parts or phases. The first part or pre -operative phase is the time before your surgery. The second or intra - operative phase is the time you spend in surgery. The third or post-operative phase is the time immediately after your surgery and the first days following your surgery.

#### ONCE ARRIVING AT THE HOSPITAL OR AMUBLATORY SURGERY CENTER

#### **Before Your Surgery** (Pre-operative phase)

- 1. An admission healthcare provider will take your information that is relative to your hospital or surgery center stay. A health care provider will discuss your medical history and you will sign a surgery consent form. This gives us permission to operate on your arm.
- 2. Required Pre admission laboratory testing is typically performed prior to the day of surgery. In some cases, labs may need to be performed the day of surgery. All women of child bearing age who are undergoing general or regional anesthesia are required to take a urine pregnancy test.
- 3. You will be taken into a room where you will wait for your time in surgery. This is called the pre-operative holding room. Nurses assigned to you will ask you some of the same questions the Admission Health Care Provider asked you. You will hear these questions over and over during your pathway to the operating room. This is for your safety. Hearing the answers from you personally assures each health care provider of accurate information. Medications, IV's etc. may be taken care of during this part of your stay.
- 4. You will need to change into a hospital gown. You may leave your underwear on (bras must come off).
- 5. The operating room will send for you about 15-20 minutes before your surgery. Although we make every attempt to run on schedule, for various reasons the operating room can be delayed. Your nurse will notify you if the operating room is on time or delayed. You may have 1-2 family members accompany you to this area. Your surgeon will see you in this area and write his initials on the extremity that being operated on. If you have hair on your arm in the area of surgery, your arm will be shaved with an electric hair clipper in this location.

- 6. If you are having a regional or a general anesthetic and if you have not met your anesthesiologist prior to this time, you will meet him/her here. The Anesthesiologist will be able to answer any questions regarding the type of anesthesia you will be having for your surgery. If you are having a regional anesthetic the anesthesiologist may perform this now.
- 7. If you have any last questions regarding the surgical procedure, this is the last time you will be able to ask the nurse, Dr. Bear's physician assistant or Dr. Bear.

# **During Your Surgery** (Inter-operative phase)

- 1. One of the nurses from your operating room will speak to you and will transport you to the operating room. You will see a lot of equipment and other team members when you enter the operating room. Do not be alarmed. All the staff is there to make sure that you have a positive experience.
- 2. You will be asked to move from your stretcher to another bed, called the operating room table. This room may be slightly chilly feeling and the nurse will provide you with a warm blanket.
- 3. A blood pressure cuff will be placed on your arm. An EKG pad (used to monitor the heart during surgery will be placed on your back and an oxygen monitor will be placed on your finger. A safety strap will be placed across your legs above your knees. All of this is for your safety.
- 4. Either your nurse or anesthesiologist will start an IV in your hand if it has not already been done. Your anesthesiologist or nurse will give you fluids and medications through this IV that will cause you to drift off to sleep. Sometimes these medications will initially sting a little in your arm, but will go away quickly.
- 5. While you are alseep your anesthesiologist will place a breathing tube that supplies the appropriate oxygen and gasses to keep you asleep during surgery.
- 6. When your surgery is completed, your anesthesiologist will wake you up. You will be moved from the operating room table to another bed and taken to the recovery room.

# **After Your Surgery** (Post-operative phase)

- 1. When you wake up in the recovery room, you may be cold. This is normal. Warm blankets will be provided for your comfort.
- 2. Your arm will be bandaged and commonly with a splint or half cast secured with an ace bandage on your arm. Ice packs may be provided to help decrease postoperative pain and swelling. If you are experiencing pain, notify your nurse and pain medication will be administered to control the discomfort.
- 3. None of your family members will be allowed to visit you in the recovery room. When you are alert, you will be taken to the second stage recovery area.
- 4. In the second stage recovery area, your family will be able to see you. Once you are feeling well and are able to tolerate drinking liquids you will get dressed back into your clothes and be discharged to home from this location. Taking antibiotics for two days after surgery is critical to prevent infection from setting in. Most patients will be discharged home after distal radius surgery. Prescriptions for antibiotics and some mild pain medicine can be called into your pharmacy by the nursing staff. Federal law no longer allows phoning in prescriptions for Schedule II narcotic medication. This list includes Norco, Vicodin, Percocet, and OxyContin. Written prescriptions need to be given to you by the nursing staff for these types of medications before you leave the surgery center or hospital.
- 5. If you are being admitted to the hospital for observation, you will be transported to your hospital room from this location.
- 6. Dr. Bear or his physician assistant will be seeing you in the office 5-14 days after surgery. An appointment should already be scheduled for you. If you have left the surgery center or hospital without a scheduled post-op appointment please call Sadie Carlton, Dr. Bear's office scheduler at 815-484-6996 to schedule a post surgery appointment.
- 7. If you are admitted to the hospital after surgery, Dr. Bear or his physician assistant will be checking on you in the hospital the day after surgery to answer any questions and arrange your discharge from the hospital.

#### While You Recover at Home

- 1. The first meal should be clear liquids like tea or broth.
- 2. An ice bag should be applied to your elbow for at least 20 minutes 4 times a day or more for the first 72 hours. DO NOT USE HEAT-this may increase swelling and discomfort.
- 3. If you have painful swelling, temperature **above** 101 degrees, redness around your incision or yellow drainage from your incision call Dr. Bear's office immediately at 815 -398-9491.
- 4. You will keep your splint, sling, and dressing on until otherwise instructed.
- 5. DO NOT BEGIN ANY WRIST EXERCISES UNTIL INSTRUCTED. YOU SHOULD FULLY OPEN AND CLOSE YOUR FINGERS NOT AFFECTED BY THE SURGEY TO PREVENT FINGER STIFFNESS AND TO DECREASE HAND SWELLING. FULLY OPENING AND CLOSING YOUR FINGERS IS RECOMMEND TO PREVENT STIFFNESS.
- 6. Do not get the sling, dressing or the incisions wet. The bandage must be kept clean and dry after surgery. Showering can be performed but a plastic bag sealed around your arm with duct tape or a commercially available waterproof cast protector will be affective in keeping your bandage dry while showering.

Waterproof cast protectors can be purchased from our Medical Supply Store in the front of our Roxbury office or at most drug stores (see image at below). Another economical option is to purchase artificial insemination gloves from Farm and Fleet which, when properly sealed, can keep the bandages dry. Baths are NOT allowed until 4 weeks after surgery.

Commercially available cast protectors may be purchased at The Store at our Roxbury clinic, at FitRight at Mulford and Riverside, or at most drug stores.

7. Swelling and bruising may develop after surgery. This is normal.

# While You Recover at Home (Continued)

# It is IMPORTANT to keep hand elevated above the heart to decrease swelling and avoid finger stiffness.

**PROPER** sling position showing the hand above the heart.



IMPROPER sling position showing the hand NOT above the heart.



PROPER position of arm while sitting on coach





# **Commonly Asked Questions**

#### 1. Will I need assistance at home?

\*Yes. You may need assistance with dressing, bathing, putting on and taking off your sling or brace and possibly with meal preparation. Putting on and taking off a water proof bandage protector to shower is difficult without help.

#### 2. Do I have to pre-certify my surgery or will Dr. Bear's office do it?

\*Ronda, (815-484-6969) Dr. Bear's Surgery Scheduler will help arrange pre certification from your insurance provider. Call her for any questions. Surgery cannot be scheduled until pre certification is obtained from your insurance provider.

#### 3. What are some of the warning signs of an infection?

\*Fever over 101 degrees, the incision becomes red or swollen, or yellow or green drainage is coming out of the wound. If any of these symptoms occur **IMMEDIATELY CALL DR. BEAR'S OFFICE AT 815-398-9491 TO BE SEEN AS SOON AS POSSIBLE BY DR. BEAR OR HIS PHYSICIAN ASSISTANT.** 

#### 4. Are there any complications from surgery?

\*Complications are not common. Some complications can include, but are not limited to, surgical failure, infection, stiffness, blood vessel or nerve injury, blood clots. Finger stiffness is the most common complication. YOU SHOULD FULLY OPEN AND CLOSE YOUR FINGERS TO PREVENT FINGER STIFFNESS AND TO DECREASE HAND SWELLING. FULLY OPENING AND CLOSING YOUR FINGERS IS RECOMMENDED TO PREVENT STIFFNESS.

# 5. Will I need physical therapy?

\*Yes. The majority of your therapy can performed at your home with a detailed home exercise program taught to you by a physical therapist, occupational therapist or hand therapist. Therapy is an essential part of the healing process from your surgery. It helps to ensure that you will have a successful surgery. To neglect therapy would decrease the effectiveness of the repair Dr. Bear performed.

#### 6. Is swelling and pain normal?

\* Yes. It is normal to experience some swelling and pain after your surgery. Applying ice will decrease the amount of pain and swelling you may have. Taking your pain medicine as directed should control the pain. It is recommend to take the prescribed pain medicine as soon as you start to feel uncomfortable rather than waiting for the pain to become unbearable. This is called staying ahead of your post surgical pain rather than reacting to it. The pain after surgery should decrease each day after surgery. Depending on the surgery performed, most patients are off narcotic pain medication by a maximum of 7 - 21 days after surgery.

# **Commonly Asked Questions** (Continued)

# 7. How long and often should I apply ice?

\* An ice bag should be applied to your elbow for 20 minutes 4- 8 times a day. More frequent applications with ice bags should be performed in the first 72 hours after surgery. Make sure the ice bag is well sealed to avoid getting your cast wet with melted ice.

#### 8. What if I am on a blood thinner?

- \* Common blood thinners include Coumadin, Warfarin, Lovenox, Plavix, Xarelto, aspirin. If you are on a blood thinner you will need to contact the prescriber of this medication to discuss stopping prior to surgery. The **COMMON** recommendations are listed below but you still will need to **CONTACT YOUR PRESCRIBER TO VERIFY**
- <u>Coumadin / Warfarin</u> must be stopped a minimum of one week prior to surgery. A Prothrombin time has to be obtained a day or two prior to surgery to make sure your blood is not too thin.
- Plavix must be stopped 6 days prior to surgery. No lab testing is needed
- Xeralto should be stopped 5 days before surgery. No lab testing needed
- Lovenox should be stopped 24 hours before surgery. No lab testing needed.
- Aspirin should be stopped 10 days prior to surgery. No lab testing needed.

#### 9. What vitamins and supplements should be stopped?

- Vitamin E can thin the blood. This should be stopped 7 days prior to surgery
- Fish oil can thin the blood. This should be stopped 7 days prior to surgery.



#### Who To Call

# **Prescription Refills**

Contact Dr. Bear's office nurse Kailey at 815-398-9491. If you get voicemail, please leave a message including the following information:

- 1. Patient name
- 2. Patient telephone number
- 3. Pharmacy name
- 4. Pharmacy phone number
- 5. Name of medication you wish to have refilled. Your prescription should be called in by the end of the clinic day.

#### **Pain Medication**

Pain medication can only be called in by Dr. Bear, his physician assistant, or his nursing staff. During the weekend, on call doctors will not call in prescriptions for you. Therefore, if you feel you will need a prescription during the weekend, please refer to the prescription refill policy given to you in your pre-op instruction sheet.

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