

Wrist Fracture Surgery

What is a Wrist Fracture?

A **wrist fracture** is a break in one or both of the bones in your **forearm** near the **wrist joint**. This type of fracture is commonly referred to as a **distal radius fracture**.

Your surgeon has suggested an operation to treat your **broken wrist**. However, the decision to proceed with the operation is entirely **up to you**.

This document provides essential information regarding the **benefits and risks** of surgery to help you make an **informed decision**. If you have any questions that are not answered here, it is **important** to discuss them with your **surgeon or healthcare team**.

Once all your concerns have been addressed and you feel **ready** to proceed, you will be asked to **sign an informed consent form**—this is the **final step** in the decision-making process. However, you **can still change your mind** at any time.

How Does a Wrist Fracture Happen?

Many wrist fractures occur when **people fall onto an outstretched hand**. While they are **more common in older adults**, younger individuals can also sustain **wrist fractures**, especially from **sports injuries, falls, or accidents**.

Some fractures involve a **small crack in the bone**, while **more severe fractures** may result in multiple broken pieces or damage to the **surface of the wrist joint**.

What are the Benefits of Surgery?

The primary goal of surgery is to **align and stabilize the broken bones** in a **good position** while they **heal**. This should:

- ✓ **Improve wrist function**
- ✓ **Reduce pain**
- ✓ **Restore movement and strength**

Are There Any Alternatives to Surgery?

- **Casting:** Some wrist fractures heal well in a **cast**. Before applying a cast, the surgeon may need to **manually reposition the bones (manipulation)**, which may require a **local or general anaesthetic**.

- **Monitoring:** In some cases, **regular X-rays** may be taken to check if the bones **stay in place** while healing.

If the **bones do not remain in a good position**, your surgeon may recommend an **operation** to **improve alignment** and **prevent long-term problems** such as stiffness or loss of movement.

What Will Happen if I Decide Not to Have the Operation?

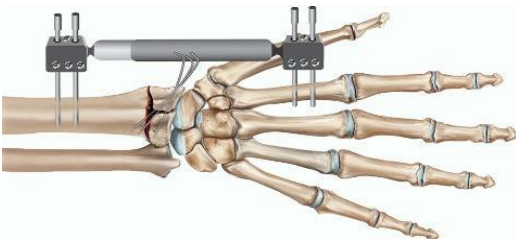
If the fracture is left **untreated**, you may experience:

- ✗ **Poor healing or misalignment of bones**, leading to **reduced wrist function**
- ✗ **Long-term pain and stiffness**
- ✗ **Increased risk of arthritis** in the wrist joint

Surgery offers the **best long-term outcomes**, especially if performed **early after the injury**. Your surgeon will discuss your **specific case** and recommend the **best treatment plan** for you.



Wires



An external fixator

What Will Happen if I Decide Not to Have the Operation?

If you choose **not to have surgery**, you may require a **manipulation** to reposition the bones, followed by **immobilization in a cast**. However, if the bones do not heal in an **adequate position**, you may experience:

- ✗ **Reduced wrist function** and difficulty performing daily tasks
- ✗ **Persistent pain and stiffness** over time
- ✗ **Higher risk of developing arthritis** in the wrist joint

Surgery is typically **only an option within the first two weeks** after the injury. Delaying treatment beyond this period may result in **permanent changes** in wrist mobility and function. If you have concerns, discuss the **best course of action** with your **surgeon or healthcare team**.



Plates and screws

What Does the Operation Involve?

Before the procedure, the **healthcare team** will perform checks to ensure you are undergoing the **correct operation on the correct side**. You can assist by confirming **your name and the procedure** with your **surgeon and medical team**.

Your **anaesthetist** will discuss the available **anaesthetic options**, which may include **local, regional, or general anaesthesia**. You may also receive a **local anaesthetic injection** to help manage **postoperative pain** and **antibiotics** to lower the risk of infection.

There are different surgical techniques for stabilizing a **wrist fracture**:

- ✓ **Wires inserted through the skin**
- ✓ **Plates secured with screws**
- ✓ **External fixator (a frame with pins for stability)**

Your **surgeon** will determine the most suitable approach for your case. The wound will be **closed with stitches or clips**, and a **bandage, splint, or cast** will be applied to support healing.

What Should I Do About My Medication?

Inform your **healthcare team** about all **medications** you take, including **blood thinners, herbal supplements, and over-the-counter drugs**. Follow their advice carefully. **Anti-inflammatory painkillers** may interfere with **bone healing**, so it is best to **avoid them if possible**.

How Can I Help Ensure a Successful Operation?

✓ **Quit smoking** – This **reduces complications** and promotes **bone healing**, as nicotine can impair recovery.

✓ **Maintain a healthy weight** – Excess weight increases the risk of **surgical complications**.

✓ **Exercise regularly** – Staying active before surgery helps with **recovery and long-term mobility**. Consult your **doctor or physiotherapist** before starting an exercise routine.

To **lower your risk of infection**, take these precautions:

- **Bathe or shower** the day before or on the day of the surgery, ensuring a **temporary cast remains dry**.
- **Keep warm** before the operation and inform the healthcare team if you feel **cold**.
- **Control blood sugar levels** if you have **diabetes**, as this aids **healing and prevents infection**.

Discuss with your **healthcare team** whether you require **vaccinations** to reduce your risk of serious **illness** during recovery. While in the hospital, practice **good hand hygiene** and wear a **face covering** if advised.

What Complications Can Occur?

The **healthcare team** will take all necessary measures to **minimize risks**. Some complications are more common in individuals who are **older, obese, smokers, or have pre-existing conditions** like **diabetes, heart disease, or lung disease**.

✓ Some complications can be **serious**. If you have **concerns**, ask your **doctor for clarification**.

✓ Your **anaesthetist** will discuss the **risks of anaesthesia** specific to you.

Following **medical advice and post-surgical care instructions** will help **reduce risks and enhance recovery**.

General Complications of Any Surgery

- **Bleeding** may occur during or after the procedure.
- **Wound infection** – It is generally safe to shower after **two days**, but always confirm with the healthcare team. Keep the **wound clean and dry**, especially if you have a cast. Inform the medical team if you develop a **high temperature, pus, redness, or increased pain** at the surgical site. While infections typically respond to **antibiotics**, some cases require **special dressings or additional surgery**. Avoid taking antibiotics unless prescribed.
- **Allergic reactions** – Some individuals may experience **reactions to surgical materials, medications, or equipment**. Inform your doctor about any known **allergies** or past **adverse reactions to medications, tests, or dressings**.
- **Difficulty passing urine** – A temporary **bladder catheter** may be needed for **1 to 2 days**.
- **Chest infection** – The risk is lower if you have **stopped smoking** and have been **symptom-free from COVID-19** for at least **seven weeks** before surgery.

Specific Complications of This Surgery

- **Nerve damage**, leading to **numbness or tenderness at the scar site** (risk: **1 in 10**). This usually improves but may be permanent.
- **Infection at a pin or wire site** (risk: **1 in 10**). This often resolves after **removing the pin or wire**, though **antibiotics** may be required.
- **Bone infection** near a **wire or plate** (risk: **1 in 250**). Treatment may involve **antibiotics or additional surgery**.
- **Bone misalignment**, where the **fractured bones shift out of place**. A repeat operation may be necessary to correct the position.

- **Severe pain, stiffness, and loss of wrist function (complex regional pain syndrome – CRPS)** (risk: **1 in 10**). The exact cause is unknown. **Painkillers and physiotherapy** may help, though **full recovery can take months or years**, and some cases result in **permanent stiffness and discomfort**. Taking **vitamin C daily for six weeks** may lower the risk.
- **Tendon issues in the thumb**, causing **pain or limited movement**. A snapped tendon will require another operation (risk: **1 in 100**).
- **Carpal tunnel syndrome**, where **pressure on the median nerve** leads to **pain or numbness** in the **thumb, index, and middle fingers** (risk: **1 in 20**). Some cases require a **carpal tunnel release procedure**.
- **Wrist arthritis** (risk: **1 in 25**). This is usually **mild and does not require treatment**.

Possible Outcomes of the Procedure

- **Pain** – The healthcare team will provide **pain medication**. It is essential to take it as prescribed to facilitate movement and recovery.
- **Scarring** – The surgical site may develop **visible scarring**.

Recovery Timeline

In the Hospital

- After surgery, you will be monitored in the **recovery area**, then moved to a **ward**.
- Keep the **wound dry for 4 to 5 days**. Use a **waterproof dressing** when **bathing or showering**.
- The healthcare team will **inform you** if stitches need **removal** or **dressings need changing**.
- Most patients can **return home the same day**, but in some cases, an extended stay may be recommended.
- If you experience **any concerns** at home or in the hospital, contact the **healthcare team** for guidance.

Resuming Normal Activities

If you had **sedation or a general anaesthetic** and are discharged the same day:

- A **responsible adult** must accompany you home by **car or taxi** and stay with you for at least **24 hours**.
- Keep a **telephone nearby** in case of an emergency.
- Avoid **driving, operating machinery, or engaging in hazardous activities** (such as cooking) for **at least 24 hours**, until you have fully regained **feeling, movement, and coordination**.
- Refrain from **signing legal documents** or **drinking alcohol** for **at least 24 hours**.

The healthcare team will **advise** when you can resume normal activities.

- **Keep your hand elevated** for the first **week** to **reduce swelling**.
- Regularly **move your fingers, elbow, and shoulder** to **prevent stiffness**.
- The fracture typically **heals within a month**. If **wires or an external fixator** were used, they are usually **removed in the outpatient clinic** without the need for another anaesthetic.
- Physiotherapy may be **recommended** if your wrist remains **stiff**.
- **Engage in regular exercise** to aid recovery, but consult the **healthcare team or GP** before starting.
- Avoid **driving or cycling** until you can **safely control your vehicle**, including in emergencies. Always check with your **insurance provider** and the **healthcare team**.

Long-Term Outlook

Most individuals make a **good recovery** and return to **normal activities**, though **full recovery** may take **several months**.

Your doctor may recommend additional **tests or treatments** to lower the risk of **future fractures**, such as:

- **Investigating potential causes** of the fall, such as **dizziness or blackouts**.
- A **structured exercise program** to improve **balance and muscle strength**.
- **Medication to strengthen bones**, particularly if you have **osteoporosis (brittle bones)**.

Some **wrist movement loss** and **weakened grip strength** may be permanent. Around **1 in 25** people develop **wrist arthritis**, but treatment is rarely required.

Summary

For certain **wrist fractures**, surgery ensures the bones heal in the **correct position**.

Although surgery is **generally safe and effective**, complications can arise. Understanding these risks will help you make an **informed decision** and detect **potential issues early**.

Keep this document for reference. It can be useful when discussing concerns with the **healthcare team**.

Some risk and complication statistics come from **global studies and databases**. Your doctor can provide **personalized risk assessments** and discuss any **alternative treatment options**.

This document is for **informational purposes only** and should not replace **medical advice** from your **healthcare provider**.

Professor M. A. Imam
MD, D.SportMed, PhD, FRCS (Tr and Orth)
Subspecialist in Upper limb and Complex trauma reconstruction
Tel: 020 3384 5588
info@thearmdoc.co.uk
www.thearmdoc.co.uk