

Wrist Fracture Surgery (child)

What is a Wrist Fracture?

A **wrist fracture** refers to a **break in one or both of the forearm bones** near the wrist joint. This type of fracture is often called a **distal radius fracture**.

Your surgeon has recommended **surgery to treat your child's wrist fracture**.

Involving Your Child in the Decision

It is important to include your child in the discussion about their treatment, especially if they are mature enough to understand the procedure.

This document provides essential information on the **benefits and risks of surgery** to help you make an informed decision. If you have any questions that are not covered here, please speak with your **surgeon or healthcare team**.

How Does a Wrist Fracture Occur?

- Most wrist fractures in children happen due to a **fall onto an outstretched hand**.
- Because a child's bones are **softer and more flexible than an adult's**, the injury may result in:
 - A **bending of the bone (buckle fracture)**.
 - A **small crack** in the bone.
 - A **complete break**, which m

The severity of the fracture will determine the **best treatment approach**, which **surgeon will discuss with you**.

Wires

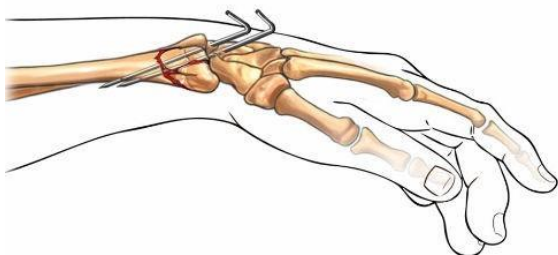
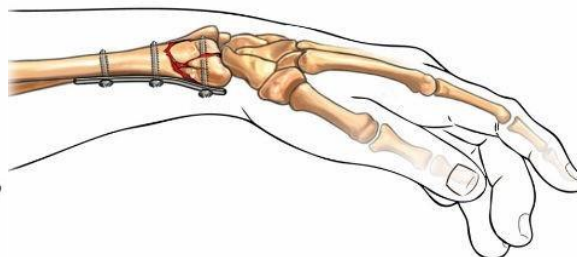


Plate and screws



What Are the Benefits of Surgery?

The goal of surgery is to **realign and stabilize the fractured bones**, allowing them to heal in the correct position. This increases the likelihood of your child's **wrist recovering full function** and minimizing long-term complications.

Are There Alternatives to Surgery?

Some wrist fractures can heal well with a **cast alone**. In many cases, even if the bones heal with a **slight bend**, they may gradually **straighten as the child grows**.

However, whether a cast is sufficient depends on:

- **Your child's age** – Younger children have greater bone remodeling potential.
- **The severity of the fracture** – If the bones are significantly out of place, surgery is more likely to be recommended.

Your **surgeon will assess the fracture** and recommend the most appropriate treatment.

What Happens If My Child Does Not Have Surgery?

If surgery is not performed:

- Your child's **wrist will be placed in a cast** to immobilize the fracture and allow it to heal naturally.
- However, if the bones **do not heal in the correct position**, your child may experience:
 - **Stiffness** in the wrist or forearm.
 - **Reduced mobility or difficulty using the wrist** in the future.

In some cases, if the wrist **does not naturally straighten over time**, your surgeon may **recommend surgery later on** to realign the bones.

What Does the Operation Involve?

Pre-Surgical Checks

- The healthcare team will conduct **multiple safety checks** to ensure your child is undergoing the correct procedure.
- You can assist by **confirming your child's name and the procedure** with the surgeon and medical staff.

Anaesthesia and Infection Prevention

- The operation is performed under **general anaesthesia**, meaning your child will be asleep throughout the procedure.
- **Antibiotics may be administered** during surgery to help **prevent infection**.

Surgical Procedure

There are several techniques for treating a **wrist fracture**, and the **surgeon will determine the most appropriate method** based on the type and severity of the fracture.

- **Bone Realignment (Reduction)** – The surgeon will **manually manipulate** the bones into the correct position.
- **Stabilization Methods:**
 - **Cast Only** – If the bones remain stable after realignment, a **cast alone may be sufficient** to maintain proper alignment.
 - **Wire Fixation** – Thin metal **wires are inserted through the skin** to hold the bones in place.
 - **Plate and Screws** – In more severe fractures, the surgeon may make a **small incision** and use a **metal plate secured with screws** to fix the bones.
- Any **surgical incisions will be closed** with stitches, and a **cast will be applied** to support healing.
- Your surgeon will discuss the most suitable option for your child.

How Can I Help Ensure My Child’s Surgery is Successful?

Reducing the Risk of Infection

- Your child should **bathe or shower** the day before or on the day of the operation.
 - If your child has a **temporary cast**, ensure it **remains dry**.
- Keep your child **warm before and after surgery**—inform the healthcare team if they feel cold.

Possible Complications of Surgery

The **healthcare team will take precautions** to minimize risks, but all surgeries carry some potential complications. The likelihood of complications varies depending on factors such as **your child’s health, age, and the nature of the fracture**.

Some complications can be **serious**, so it is important to discuss any concerns with your **doctor or anesthetist**.

General Surgical Risks

- **Bleeding during or after surgery** – Typically minimal but can occasionally require additional medical attention.
- **Surgical site infection (risk: 1 in 100)**
 - Your child can **shower after two days**, but confirm this with the healthcare team.
 - The **cast must remain dry**.
 - Contact the healthcare team if your child experiences:
 - **Fever or high temperature**
 - **Pus or unusual discharge from the wound**
 - **Redness, swelling, or increased pain at the wound site**
 - Most infections **resolve with antibiotics**, but in some cases, **special dressings or additional surgery** may be required.
 - **Do not give your child antibiotics unless prescribed by a doctor.**
- **Allergic reaction to materials, medications, or surgical equipment**
 - The healthcare team is trained to **detect and treat allergic reactions** if they occur.
 - Inform your doctor if your child has **any known allergies or past reactions** to medications, medical tests, or dressings.

Specific Complications of This Surgery

While the healthcare team will take every precaution to minimize risks, **complications can occur**. Below are some of the possible complications associated with wrist fracture surgery in children:

- **Nerve Damage (risk: 1 in 100)**

- This may result in a **patch of numb skin** or a **tender scar**.
- In most cases, the sensation **gradually improves**, but in rare cases, the numbness may be **permanent**.
- **Bone Infection (risk: 1 in 100)**
 - Infection may develop around the **metal wires or plates** used to stabilize the fracture.
 - If this occurs, your child may need a **course of antibiotics** or, in some cases, **another operation** to remove the infected hardware.
- **Bone Displacement After Surgery (risk: less than 1 in 5 with manipulation alone)**
 - Your child will undergo an **X-ray after about a week** to ensure the bones remain in the correct position.
 - If the bones have **shifted significantly**, another operation may be necessary to **realign and stabilize them**.
- **Infection Around a Wire (risk: 1 in 20)**
 - This usually **resolves once the wire is removed**.
- **Wrist Stiffness or Growth Disturbance (risk: 1 in 15)**
 - If the fracture affects the **growth plate**, it may **alter bone growth or cause stiffness** in the wrist.
 - Regular follow-up visits will help monitor any changes in growth.

Consequences of This Procedure

- **Pain Management**
 - Your child will receive **pain relief medication** to help them remain comfortable.
 - It is important that your child **takes the medication as prescribed** to allow them to move around as needed.
- **Scarring**
 - There may be some **visible scarring** on the skin, especially if open surgery was required.
 - In most cases, **scars heal well over time**.

Recovery Process

Hospital Stay and Immediate Care

- After surgery, your child will be **transferred to the recovery area** before being moved to the **hospital ward**.
- Most children can **return home the same day or the following day**, but in some cases, a longer hospital stay may be advised.
- If you have **any concerns at home**, contact the **healthcare team** for guidance and reassurance.

Returning to Normal Activities

- **General Recovery**
 - Children typically recover **quickly** and can return to many normal activities **within a few days**.
 - The **cast must remain dry** to prevent **infection or displacement of the bones**.
- **Returning to School**
 - Most children can **return to school within 2 to 7 days**, depending on their comfort level.
- **Hand and Wrist Care**
 - Your child should keep their **hand elevated for a few days** to **reduce swelling**.
 - Encourage your child to **move their fingers regularly** to **prevent stiffness**.
- **Fracture Healing and Cast Removal**
 - Most fractures heal within **about a month**, after which the **cast will be removed**.

- Your doctor will provide **guidance on when your child can resume certain activities**, such as:
 - **Contact sports**
 - **Climbing on playground equipment**
 - **Riding a bicycle**
- **Wire Removal (if used)**
 - If **wires were placed to stabilize the fracture**, they will **typically be removed at the same time as the cast**.
 - This procedure **does not usually require another anaesthetic**, unless the wires have become embedded in the skin.

Long-Term Outlook

- **Most children recover well** and return to their normal activities.
- If a **metal plate** was used to fix the bone, the doctor may recommend **another operation to remove it** after **up to a year**.
- If the fracture involved the **growth plate**, there is a small risk (**1 in 15**) that your child may experience **stiffness or altered bone growth**.

Summary

For some types of wrist fractures, **surgery is the most effective way to ensure proper bone healing**.

- **Surgery is generally safe and successful**, but complications can occur.
- Understanding the **benefits and risks** will help you make an **informed decision** about your child's care.
- Awareness of potential complications will also help you **detect and address any issues early** with the support of the **healthcare team**.

Important Information

Keep this document as a reference for discussing your child's treatment with the healthcare team.

- *Some **risk statistics** in this document are based on **global studies and medical databases**.*
- *Your **doctor or surgeon can provide more personalized risk assessments** and discuss **alternative treatment options** if necessary.*

Disclaimer

*This document is for informational purposes only and should not replace professional medical advice from your **doctor or healthcare team**. Always consult a qualified medical professional for guidance tailored to your c*