



## DISPLACED LATERAL CONDYLE FRACTURE

### FRACTURE DESCRIPTION

- Your child has a LATERAL CONDYLE FRACTURE of the HUMERUS which is a fracture into the elbow joint (see Figure 1)
- These are a common fracture of childhood.
- The whole extent of the fracture can not be seen on the xrays, because most of the elbow joint is cartilage at this age
  - The fracture line goes through the cartilage and into the elbow joint, making the fracture much more extensive than it appears on the xray (see Figure 2 and 3)
- These fractures can be
  - Undisplaced (bones are in perfect alignment) OR
  - Minimally displaced (the bones are in a good alignment) (see figure 2) OR
  - Displaced (the bones are out of alignment) (see figure 3)
- Your child has a DISPLACED lateral condyle fracture of the elbow
  - Even a small amount of displacement on xrays requires an operation to align the joint surface and hold the fragment with a screw (see figure 4)

### Anatomy and xray examples

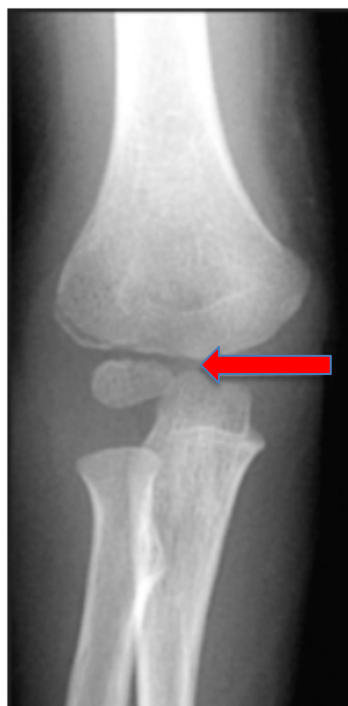


Figure 1. Schematic diagram of minimally displaced lateral condyle fracture



Figure 2. Xrays of a displaced lateral condyle fracture of the elbow



Figure 3. Xrays of a displaced lateral condyle fracture of the elbow

## MANAGEMENT

- After the operation, your child will be placed in a backslab (a partial cast).
- Your child will remain in hospital overnight to monitor for swelling, pain and circulation of the fingers
- If their pain and swelling is controlled, your child should be able to go home the next day

## WHEN YOU GO HOME

- The arm should be placed under loose fitting clothing (not through the sleeve of the arm).
- Fractures can be painful swell, especially in the first few days.
- Simple pain medication such as paracetamol and ibuprofen are usually effective
  - Give regularly for the first few days, following the directions
  - Give a dose before bedtime to allow a good sleep
- When your child is not moving, rest the elbow and hand above the level of the heart (centre of the chest) to minimise swelling (see **Cast Care for the Arm Information Sheet** and **Wires and Wounds Care for Children Information Sheet**).
- Check your child has normal finger movement and feeling, and that the fingers are pink, during the first few days.



## FOLLOW UP

- Your child will see Dr Graff and have an xray 10-14 days after the operation
  - To ensure the fracture alignment is still satisfactory
  - To check the wound is healing well
  - To change the backslab to a full cast (non-water resistant to ensure the wound heals well)
  - (see **Wires and Wound Care for Children Information Sheet**)
- Your child will see Dr Graff again 4 weeks after this (6 weeks after surgery), to remove the plaster and have another xray out of the plaster
  - If the fracture is healing well, movement of the elbow commences

## WHAT TO EXPECT

- See **Cast Removal Information Sheet**
- When the plaster is removed, the elbow will be very stiff with decreased movement.
  - This resolves slowly, often over a period of months.
  - It can take up to one year for full movement to return
- The metal work needs to be removed after the fracture is healed

## **WHAT CAN GO WRONG**

- Infection
  - Any metal placed in the body is at risk of infection
  - This is rare in children, and antibiotics are not required unless there are signs of infection (see **Wires and Wound Care for Children Information Sheet**)
- Swelling
  - Swelling can be severe with these fractures
  - Your child may be monitored overnight in the hospital after the surgery
- Stiffness
  - This resolves slowly, often over a period of months.
  - It can take up to one year for full movement to return
- Avascular necrosis
  - This is a condition where the blood supply to the fracture fragment or other parts of the elbow are disrupted
  - The bone can die in this part of the elbow
  - Often, the bone grows back and returns to normal, especially if your child is very young
- Lateral spurring
  - The outside part of the elbow where the fracture is can sometimes grow too much after this injury
  - This can cause a bump on the side but does not affect the function of the elbow
- Growth disturbance
  - Occasionally, the growth plate around the fracture can be damaged
  - This can lead to deformity of the elbow as your child grows, which can stretch a nerve in the area
  - Your child will be monitored for any growth problems with clinical review and xrays up to 12 months after the fracture
- Non union
  - Sometimes, even after an operation, this fracture does not heal
  - Occasionally, this requires further surgery
- Malalignment of the fracture
  - Occasionally, the fracture can move and heal in a position that is not like the other elbow
  - Rarely, this will require surgery when the child is older

## **ALSO READ:**

- **Cast Care for the Arm Information Sheet**
- **Cast Removal Information Sheet**
- **Wires and Wound Care for Children Information Sheet**