



Patient Education:

# Elbow Fracture, Pediatric

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# Elbow Fracture, Pediatric

A fracture is a break in a bone. Elbow fractures in children often include the lower parts of the upper arm bone (these types of fractures are called distal humerus or supracondylar fractures).

There are three types of fractures:

- Minimal or no displacement. This means that the bone is in good position and will likely remain there.
- Angulated fracture that is partially displaced. This means that a portion of the bone is in the correct place. The portion that is not in the correct place is bent away from itself will need to be pushed back into place.
- Completely displaced. This means that the bone is no longer in correct position. The bone will need to be put back in alignment (*reduced*).

Complications of elbow fractures include:

- Injury to the artery in the upper arm (*brachial artery*). This is the most common complication.
- The bone may heal in a poor position. This results in an deformity called cubitus varus. Correct treatment prevents this problem from developing.
- Nerve injuries. These usually get better and rarely result in any disability. They are most common with a completely displaced fracture.
- Compartment syndrome. This is rare if the fracture is treated soon after injury. Compartment syndrome may cause a tense forearm and severe pain. It is most common with a completely displaced fracture.

## CAUSES

Fractures are usually the result of an injury. Elbow fractures are often caused by falling on an outstretched arm. They can also be caused by trauma related to sports or activities. The way the elbow is injured will influence the type of fracture that results.

## SIGNS AND SYMPTOMS

- Severe pain in the elbow or forearm.
- Numbness of the hand (if the nerve is injured).

## DIAGNOSIS

Your child's health care provider will perform a physical exam and may take X-ray exams.

## TREATMENT

- To treat a minimal or no displacement fracture, the elbow will be held in place (*immobilized*) with a material or device to keep it from moving (*splint*).
- To treat an angulated fracture that is partially displaced, the elbow will be immobilized with a splint. The splint will go from your child's armpit to his or her knuckles. Children with this type

of fracture need to stay at the hospital so a health care provider can check for possible nerve or blood vessel damage.

- To treat a completely displaced fracture, the bone pieces will be put into a good position without surgery (*closed reduction*). If the closed reduction is unsuccessful, a procedure called pin fixation or surgery (*open reduction*) will be done to get the broken bones back into position.
- Children with splints may need to do range of motion exercises to prevent the elbow from getting stiff. These exercises give your child the best chance of having an elbow that works normally again.

## HOME CARE INSTRUCTIONS

- Only give your child over-the-counter or prescription medicines for pain, discomfort, or fever as directed by the health care provider.
- If your child has a splint and an elastic wrap and his or her hand or fingers become numb, cold, or blue, loosen the wrap or reapply it more loosely.
- Make sure your child performs range of motion exercises if directed by the health care provider.
- You may put ice on the injured area.
  - Put ice in a plastic bag.
  - Place a towel between your child's skin and the bag.
  - Leave the ice on for 20 minutes, 4 times per day, for the first 2 to 3 days.
- Keep follow-up appointments as directed by the health care provider.
- Carefully monitor the condition of your child's arm.

## SEEK IMMEDIATE MEDICAL CARE IF:

- There is swelling or increasing pain in the elbow.
- Your child begins to lose feeling in his or her hand or fingers.
- Your child's hand or fingers swell or become cold, numb, or blue.

## MAKE SURE YOU:

- Understand these instructions.
- Will watch your child's condition.
- Will get help right away if your child is not doing well or gets worse.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

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