Wrist Buckle Fracture

What has happened to my child?
Your child has broken the radius and/or ulna bone in their wrist. This injury is known as a “buckle” fracture (figure 1). This sort of fracture is very common in children. It is actually just a kink in the bone as it has been squashed.

Why hasn’t a plaster cast been applied?
Research has shown that this injury will heal well in a splint which gives support and protection. Splints are usually more comfortable for the child and more convenient for the parent or carer.

How do I wash the splint?
Hand wash in lukewarm water with mild detergent. Rinse and air dry only. This may be best done overnight so that the splint can be reapplied for daytime activities.

When should my child see the GP?
Please see your GP within 1 week for your child to be reassessed to make sure pain is controlled and the splint is well-fitting. No further X-rays are required.

How long will the fracture take to heal?
Healing takes three to four weeks depending on the age of your child. Expect the wrist to be stiff for a few days after removal. This should improve over the next week or two. Your child should avoid rough play and contact sports, as well as activities such as trampolining and skateboarding for a total of SIX weeks after injury.

What treatment does my child need?
These fractures heal well with rest and time. A removable wrist splint should be worn for comfort for three to four weeks, day and night (except when it is removed for washing and drying) so that the chance of further injury is reduced. However, the splint can be taken off for bathing, or if you need to wash the splint itself (figure 2). Simple pain medication such as Paracetamol or Ibuprofen should be given regularly until your child is comfortable. Never exceed the recommended dose. Encourage your child to move the shoulder, elbow, and fingers.

Figure 1: buckle fracture

Figure 2. Wrist splint
Dear Doctor,

Many thanks for reviewing this child who was diagnosed with a buckle fracture of the radius and/or ulna.

This facture does not require orthopaedic specialist input, as they usually heal without complications. The patient has been placed in a wrist splint for analgesia. This type of splint is usually more comfortable and convenient than a rigid cast.

Could you please review the child within one week post injury to ensure pain is controlled and the splint is well tolerated. **A repeat X-Ray is not required.** The child should wear the splint day and night (except when it is removed for washing and drying) for 3-4 weeks by which time the fracture should have healed and the child will be pain free without tenderness over the fracture.

There might be some stiffness when the splint is removed – this is normal and will improve with normal activities in 1-2 weeks. Please emphasize to the parents the importance of avoiding rough play and contact sports for a total of 6 weeks after injury.

If there are ongoing concerns please contact the Orthopaedic registrar/SRMO on-call directly at The Children’s Hospital at Westmead via the hospital switch on 98450000 to discuss further management and to expedite review if required. Please do not routinely instruct the family to attend the Emergency Department unless there are acute/time critical concerns.

If you would like to check the initial X-ray report please call The Children’s Hospital Radiology department on 9845 2944 between 0900 to 1700 Monday to Friday.

Yours Sincerely,

Emergency Department
The Children’s Hospital at Westmead