

# Distal Forearm Buckle Fractures

## Paediatric Full Clinical UHDB Guideline

Reference no: CH CLIN C36 CED

### **Introduction:**

To ensure prompt and uniform evidence based practice in the management of a child with a buckle fracture.

### **Aim and Purpose:**

These guidelines apply to all children and young people up to 15 years old attending the Paediatric Emergency Department (CED).

To provide guidance on the management of paediatric buckle fractures of the distal radius, ulna or both.

### **Explanation of treatment of buckle fractures:**

Historically all uncomplicated paediatric distal forearm buckle fractures were managed in a back slab applied in CED. Follow-up was at children's fracture clinic for on-going management.

There is evidence that this management and follow-up is unnecessary and that not only is simple CED management sufficient in the management of these injuries, it also reduces financial and time costs to the patient and hospital trust.

Buckle (AKA: Torus) fractures of the wrist are the most common type of broken bone in children.

A large population based study (The FORCE Study) has been completed in children aged 4 -15 yrs and found there was no difference at all in the levels of pain between those treated with a hard splint (and usual outpatient follow-up) and those offered a bandage and discharge (i.e. no further follow-up). Similarly, there was no difference in the recovery using the arm, quality of life, complications encountered or school absences).

### **Presentation**

Buckle fractures are the most common wrist fractures in children, usually following a fall on the outstretched hand. They are usually easily-identifiable on plain X-rays of the wrist. The child will typically be tender over the fracture site, with minimal swelling and demonstrate reduced range of movement at the wrist.

### **Management**

A bandage can be offered for support but this is not necessarily required.

The child may have discomfort in their wrist which should settle over a few days, they may require simple analgesia.

### **Follow-up**

**No Follow-up is required.** These fractures heal very well with no intervention.

Most children start to use their wrist and hand comfortably again after a couple of weeks.

Patients and parents should be advised to re-attend CED should they be experiencing increasing symptoms of pain and stiffness despite simple analgesics.

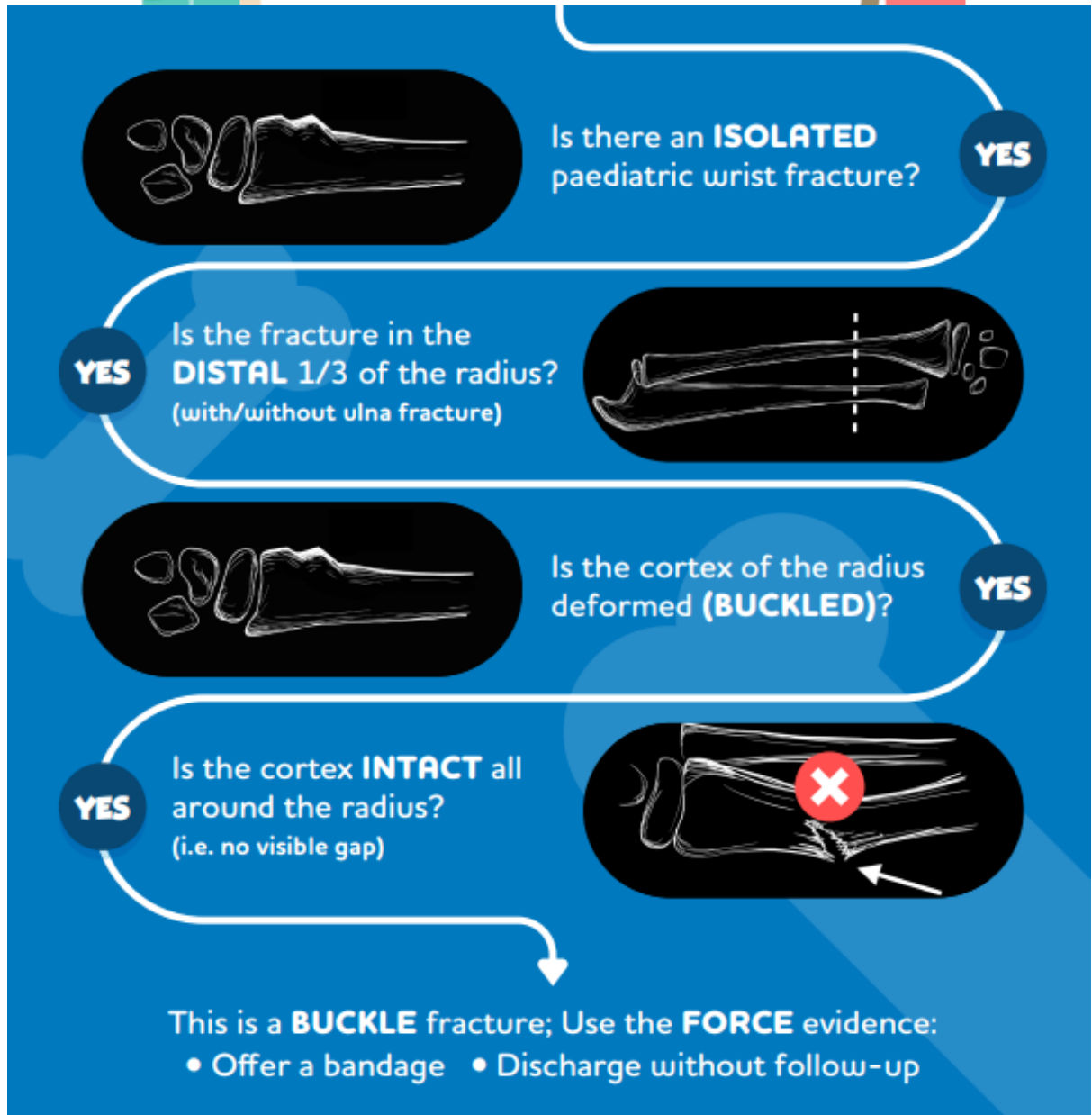
### **Sport and Exercise**

They should be encouraged to use the hand as much as they want to, but shouldn't do anything that causes them significant pain and discomfort.

The child should be allowed to return to sporting activities, physical exercise and rough play as soon as the pain and discomfort settles.

### **Leaflets**

Patients should be issued with the advice leaflet: [Link with Force leaflet + trust details once intranet link](#)



To see the published evidence and patient materials, go to

[www.FORCEstudy.org](http://www.FORCEstudy.org)

## References (including any links to NICE Guidance etc.)

- Perry *et al* (2022) [Offer of a bandage versus rigid immobilisation in 4- to 15-year-olds with distal radius torus fractures: the FORCE equivalence RCT \(nhr.ac.uk\)](#)
- [The FOr forearm fracture Recovery in Children Evaluation Study – Results \(digitrial.com\)](#)

## Documentation Controls

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CH CLIN C36 CED			Final	
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