

Guideline

Management of Distal Forearm Buckle Fractures in Children

1 Scope

Local use within the Emergency Department of Addenbrookes Hospital.

2 Aim

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

3 Introduction

Historically all paediatric distal forearm buckle fractures were managed in a POP cast applied in the ED. Follow-up was at orthopaedic fracture clinic where children underwent clinical and radiological review and were managed with ongoing immobilisation in a circumferential cast. There is growing evidence that this follow-up is unnecessary and that not only is simple ED management sufficient in the management of these injuries, it also reduces financial and time costs to patient and hospital trust. A

4 Main text and recommendations

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 and demonstrate reduced range of movement at the wrist.

Management

- Once identified, a correctly-sized Futura splint should be applied to the affected limb. This is usually worn for around three weeks but may be removed earlier if the child is comfortable. A
- If the child is experiencing a lot of pain even with the splint and regular analgesia, they should be encouraged to return to the Emergency Department for review (and consideration of a cast).
- After three weeks, they can “wean” from the splint, using it only when symptomatic. It is expected that the child will experience some pain and stiffness in the affected wrist on removal of the splint B

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but that with gentle movement and simple analgesia this should settle within a few days.

- Patients and parents can be advised that they can remove the splint for bathing/showering without risk to the fracture. A
- No follow-up is required. These fractures heal very well with very low rates of displacement. Patients and parents should be advised to re-attend the Emergency Department should they be experiencing increasing symptoms of pain or stiffness. A
- Sporting activities should be avoided for a total of six weeks from injury providing they are asymptomatic at that time. B
- Patients should be issued with the advice leaflet "Torus Fractures (Child)".

5 Monitoring the effectiveness of the Guideline

Breaches of this standard will be identified by the incident reporting system and managed by the Emergency Department Clinical Governance System.

Equality and Diversity Statement

This document complies with the Cambridge University Hospitals NHS Foundation Trust service Equality and Diversity statement.

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