

Fractures, sprains and dislocations

Children of all ages can present to A&E with injuries

The mechanism of injury is the most important part of the history, as it will help to predict the severity of the injury

- If a child has one injury, it is important to ask if they have injured any other part of their body e.g. abdominal injury with handlebars of bikes or scooters
- Always check if the child has hit their head or been unconscious
- If a child has been riding a bike, or a horse or doing some contact sport, check whether they were wearing a helmet or any other protective clothing
- Check other medical history in case the child is at high risk for fractures or dislocations eg hypermobility, Osteogenesis Imperfecta
- The severity of pain should be assessed on triage, and appropriate analgesia prescribed and given as soon as possible
 - Intranasal diamorphine 0.1 mg/kg or Oramorph 200-300mcg/kg
- Examination of the child should include
 - Observation for swelling, bruising or deformity
 - Movements of the affected limb
 - Tenderness on palpation
 - Function of the limb
 - Ability to weight bear
 - Neurovascular examination
 - Presence of lacerations overlying a fracture
 - Evidence of compartment syndrome

The examination should point to the area of concern, though younger children may not be able to localise pain well and may need to have a whole limb x-rayed. Consider the Ottawa ankle and foot rules in older children to avoid multiple x-rays.

In children specific injuries must be considered eg pulled elbow. If a young child comes in with an arm injury and is unable to localize pain, always consider a clavicle fracture.

Displaced fractures or fracture dislocations should be referred to Orthopaedics and admitted to Ash Ward for manipulation under anaesthesia.

Other dislocations should be discussed with an A&E senior depending on the age of the child

Crutches should not be given routinely for ankle sprains, but they may be required for more severe sprains.

Children tend not to sprain their wrists, so if they have clinical signs, but no x-ray findings, apply a future splint and arrange follow up in Fracture Clinic.

Please consult Fracture Help which is on the Trustnet under widgets.

There are guidelines on the intranet for

- Ankle injuries
- Pulled elbow
- Limping child

There are also leaflets available in Paediatric A&E for

- Broken collar bone
- Injured fingers and toes
- Pulled elbow
- Ankle injury
- Fractured 5th metacarpal
- Mallet finger
- Knee injury
- Supracondylar fracture of the elbow
- Neck injury

All fractures and injuries causing significant loss of function should be referred to the appropriate Clinic using the generic clinic form available in Paediatric A&E. There is a notice at the nurses' station which will guide you to the most suitable clinic to send the children for follow up.

Dr Erin Dawson Updated 21st September 2016