



## PAEDIATRIC ACUTE CARE GUIDELINE

### Pulled Elbow

<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

This document should be read in conjunction with this DISCLAIMER  
<http://kidshealthwa.com/about/disclaimer/>

## Pulled Elbow

A pulled elbow is where there is partial subluxation of the radial head, with the orbicular ligament slipping off the end of the radius

## Background

- This is a common injury in toddlers 2-3 years of age (reported age range = 6 months - 7 years)



## Assessment

- The history is central to the diagnosis
- The child is often undistressed, but reluctant to use the arm, and cries if the arm is moved
- The child usually holds the affected arm motionless, in a mid-prone position in front of the chest, kept still by the opposite hand

## History

- A sudden longitudinal pull or axial traction on the arm of an infant or toddler, while the arm is extended

- Typically, the injury may occur when a parents grabs a child by the arm as the child is running away or falling
- A typical history is central to the diagnosis
- If the history is typical, and examination fits with the diagnosis, then X-Ray is not necessary
- If the history or examination are not typical, then X-Rays should be done to exclude other injuries before attempting to manipulate the arm

## Examination

- There may be mild focal tenderness over the radial head, but generally there is no specific bony tenderness
- Very gentle exclusive supination-pronation of an otherwise still forearm will cause distress (i.e. rotation of the radial head)

## Investigations

- No X-Rays are required unless the history is atypical

## Management

### Initial management

### Reduction

First explain to the parents that there will be a brief moment of pain followed by complete relief of pain

#### Method 1:

- With the elbow semi-flexed, grasp the forearm with one hand, and place the thumb of your other hand over the lateral aspect of the elbow
- Supinate the forearm fully, and if not immediately successful, pronate fully
- Reduction is almost always associated with a clicking sensation which is both heard and felt
- If reduction hasn't occurred at this stage, flex the elbow fully while keeping the elbow supinated

#### Method 2:

- Flex the elbow and supinate the forearm as a single fluid movement

If reduction is successful, then the child should start using their arm freely a short while after reduction. No immobilisation is necessary after reduction.

If reduction has been unsuccessful, then an X-Ray should be done to exclude a different injury. If the X-Ray is normal, then reassure the parents that spontaneous reduction almost always occurs. A sling can be applied, appropriate analgesia given, and the child reviewed the following day.


## Tags

arm, elbow, injury, motionless, pain, partial subluxation, pulled arm, pulled elbow, radial head, reduction, subluxation, toddler, X-Ray, xray

## References

1. Krul M, van der Wouden JC, Kruithof EJ, van Suijlekom-Smit LWA, Koes BW. Manipulative interventions for reducing pulled elbow in young children. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD007759. DOI: 10.1002/14651858.CD007759.pub4
2. Aylor M, Anderson JM, Vanderford P, Halsey M, Lai S, Braner D. Reduction of Pulled Elbow. N Engl J Med 2014; 371:e32 [November 20, 2014](#) DOI: 10.1056/NEJMc1211809

This document can be made available in alternative formats on request for a person with a disability.

File Path:			
Document Owner:	Dr Meredith Borland HoD, PMH Emergency Department		
Reviewer / Team:	Kids Health WA Guidelines Team		
Date First Issued:	31 October, 2013	Version:	
Last Reviewed:	13 June, 2017	Review Date:	13 June, 2020
Approved by:	Dr Meredith Borland	Date:	13 June, 2017
Endorsed by:	Medical Advisory Committee	Date:	13 June, 2017
Standards Applicable:	NSQHS Standards: 		
<b>Printed or personally saved electronic copies of this document are considered uncontrolled</b>			