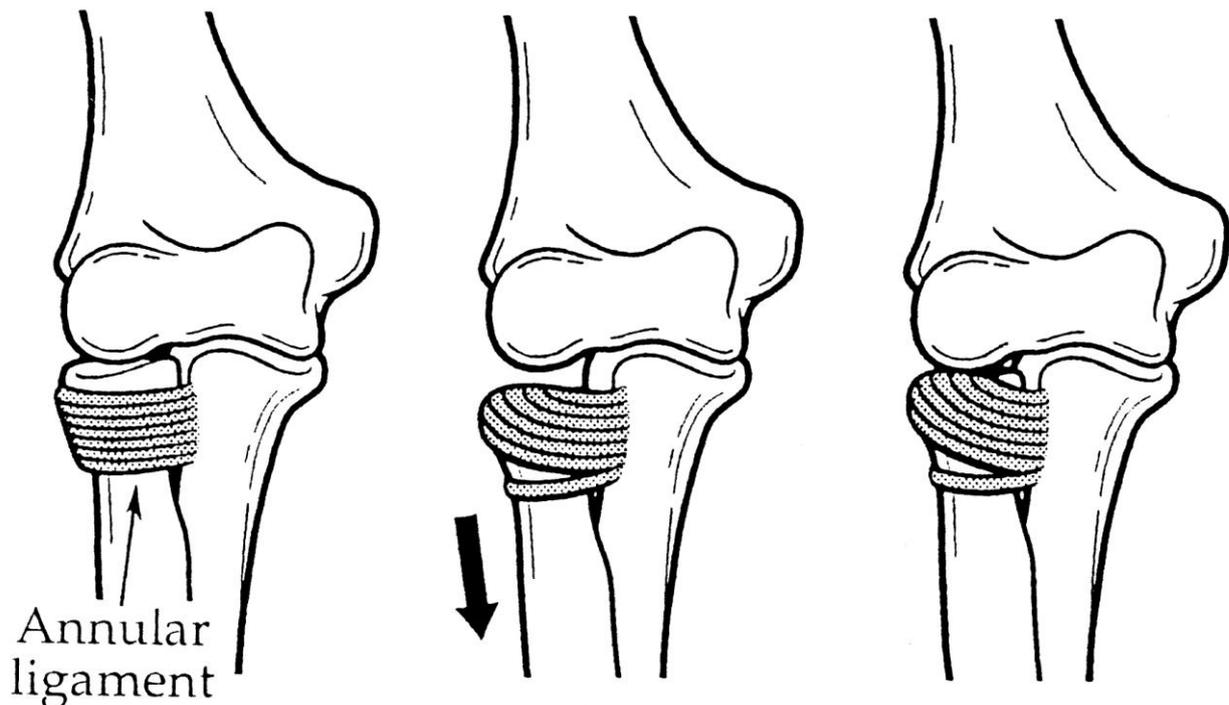


Radial head subluxation (AKA annular ligament displacement, pulled elbow and nursemaid's elbow) is a common elbow injury unique to children aged between 1 and 5 years.



The **annular ligament** encircles the proximal radial head and attaches to the anterior and posterior margins of the radial notch of the ulna. It holds the radial head in the radial notch.

Sudden traction on the distal radius causes a portion of the annular ligament to slip over the radial head and become **trapped in the radiohumeral joint**. After the age of five the annular ligament is much stronger and is unlikely to become displaced.



Mechanism:

- Pulling of the forearm while in pronation and the elbow flexed.
- Child swung by forearm during play.
- Fall onto elbow.

Examination and Diagnosis:

- The child holds the elbow close to the body in some degree of flexion and pronation.
- Mild tenderness over the anterolateral aspect of the radial head.
- Pain +++ on supination of the forearm.
- Absence of tenderness of the ulna and humerus.
- Passive range of movement is normal (though the child may be reluctant).
- **Diagnosis** is made by the presence of a **typical history and examination**.
- Perform X rays only if the history or examination are atypical.

Reduction

- Both the **supination-flexion** and **hyperpronation** techniques can be used.
- **Supination-flexion:** supinate the forearm then flex the elbow maximally while exerting moderate pressure on the radial head with the thumb.
- **Hyperpronation:** support the elbow and exert moderate pressure on the radial head. Hyperpronate the child's forearm with the other hand.
- With both methods you may feel a click as the radial head is reduced.
- Pain should resolve immediately and the child should begin moving the arm within a few minutes when they realise it is no longer painful.
- **No further treatment is necessary.**
- Advise the responsible adult against exerting traction on the child's forearm.

