

OSCE

3

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This is a **7 minute** station.

Your intern has come up to you to discuss a case

A mum has brought in her 18 month old son with elbow pain for several hours. She believes child sustained some form of injury at daycare although no incident form was completed, so mechanism is unclear and staff state no falls. The child is refusing to move his right arm and cries when anyone attempts to move it.

The candidate's tasks are to:

- 1) Discuss aspects of history and examination with intern.
- 2) Describe and demonstrate general and specific management in this case

This OSCE will assess the following domains:

- Medical Expertise
 - Clinical Features and Differential diagnosis - 30%
 - Treatment Manoeuvre - 50%
- Scholarship and Teaching – 20%

Confederate/ Role Player Instructions

"Hi my name is, I'm an intern and I've just started my first rotation last week. I've just seen this child in the Paeds WR with elbow pain.

Candidate is expected to tease out the following bit of history and exam

History

- 18 month old
- Picked up after a full day care session, on getting home mum noticed child not moving right elbow and wincing in pain when mum attempts to move it or hold his hand.
- Normal developmental milestones, Normal Growth
- Goes to Day care 3 times a week
- No siblings
- No recent intercurrent illnesses
- No allergies, No significant PMH
- Fully immunised
- Normal vaginal delivery at term, No perinatal complications

Examination

- Obs normal afebrile
- No signs of dehydration or resp distress
- Happy at rest but distressed when anyone examines right arm
- No bruising or swelling to elbow forearm or wrist/hand
- Normal shoulder and wrist exam
- Neurovascularly intact in all nerve distributions
- No other signs of trauma (remainder of exam normal)

Progress

- Given unclear history or mechanism and child at daycare, candidate should state an xray is required and arrange analgesia.
- acceptable oral analgesia options – nurofen and/or paracetamol. (you will say they are given)
- Candidate may mention IN fentanyl (accept if dose appropriate and qualified with a child in significant pain or preparing to manipulate)

“So the Xray that I requested shows no fracture and it was confirmed by the Radiologist. I’m suspecting this is a pulled elbow.”

“Can you show me how you would reduce a pulled elbow”

There are two manoeuvres that are described to reduce the radial head subluxation:

- hyperpronation
- the supination/flexion method.

Neither requires sedation, however you should warn the parents it will be briefly uncomfortable as it relocates.

A recent meta-analysis of the two techniques showed that **hyperpronation** is the preferred technique (greater success rate and may be associated with less pain)

Following relocation, the child commonly has almost immediate pain relief, evidenced by normal use of the arm within 30 mins.

Frustratingly, a proportion of children with typical features of a pulled elbow fail to respond to initial reduction attempts.

Options at this stage are to x-ray the elbow and, if normal, repeat the reduction manoeuvre (often by a different practitioner), or to place the child’s arm in a sling and arrange review in 24 hours.

If not mentioned, can prompt candidate about what they would be if it failed to respond to the above manoevers.