

## QUIZ 31<sup>st</sup> July 2019

### 1. Describe the Cunningham technique of reducing an anterior shoulder dislocation.

- *Inform the patient of the procedure. It is important to relax the patient and confident reassurance is the first step towards this.*
- *Sit the patient up with the back vertical, ideally with a rolled up towel between the scapulae. This can be done on a bed or chair (without arms).*
- *Carefully support the arm while it is moved into the correct position, allowing the patient to help with the other arm. The correct position is with the arm adducted (next to the body) and pointing vertically down, the elbow is flexed at 90 degrees so that the forearm points horizontally and anteriorly.*
- *The operator then squats/kneels to the side of the patient and facing the opposite direction to the patient. The operator then slips the hand between the patients forearm and body so that the patient's wrist/hand is resting on the operator's upper arm. Do not make pulling movements at any time as this will elicit pain and result in spasm.*
- *Apply steady, very gentle traction (the weight of the operators forearm is quite enough) directly downwards once the patient is settled and pain free. Keep this gentle weight on the arm throughout, stop if any spasm or pain..*
- *With the other hand, the operator then massages the trapezius, deltoid and biceps muscle sequentially, repeating this process and concentrating on the biceps brachii until the muscles are fully relaxed. At this point the humeral head will relocate usually without any clear indication that the shoulder has reduced (no sound or 'clunk' feeling).*

### 2. List another 3 recognized techniques of reducing a dislocated shoulder.

Spaso technique - The patient is placed in the supine position; the affected arm is grasped around the wrist or distal forearm and gently lifted vertically, applying gentle traction. While maintaining vertical traction, the shoulder is slightly externally rotated

Stimson technique – see below

Kocher technique – see below

- ▶ **Stimson technique**- The patient's arm is allowed to hang over the edge of the bed with about 10 pounds of weight hanging from the wrist



- ▶ **Kocher's method** -involves traction to the elbow with external rotation of the humerus and adducting the elbow toward the chest.



## 2. List the typical features on x-ray of a posterior shoulder dislocation on an AP film.

*Several radiological signs have been described on AP view, these include:*

- *Lightbulb sign – The head of the humerus in the same axis as the shaft producing a lightbulb shape*
- *Internal rotation of the humerus*
- *The 'rim sign' – Widening of the glenohumeral space*
- *The 'vacant glenoid sign' – Where the anterior glenoid fossa looks empty*
- *The 'trough sign' – a vertical line made by the impression fracture of the anterior humeral head*

## 3. What is a Bankart lesion and what is a Hill-Sachs deformity?

**Bankart lesion:** *is a sign that there has been antero-inferior detachment of the glenoid labrum. Usually associated with first-time traumatic anterior shoulder dislocations.*

*Bankart Lesion may involve the labrum only ("soft Bankart"), or involve the glenoid bone itself ("bony Bankart").*

**Hill-Sachs lesion:** *Cortical depression of posterolateral head of the humerus related to impaction of the humeral head with inferior glenoid in anterior shoulder dislocation. The resultant lesion predisposes the shoulder joint to recurrent dislocations, the lesion is larger in relation to the number of dislocations.*

*Both lesions can result in anterior shoulder joint instability and recurrent dislocations.*

## 4. Describe & Interpret the following ECG:

*Rate – ventricular rate approx. 40/min*

*Rhythm – regular with slow flutter waves, most obvious in II. Conduction is 4:1.*

*Axis – rightwards, between 60 & 90 degrees*

*QRS – wide at 0.22 sec*

*Positive deflections at the J point – 'Osborn waves' . ST segments are otherwise isoelectric*

*T waves – inverted V4 – V6 & inferiorly*

➔ *Slow atrial flutter (4:1) with Osborn waves c/w hypothermia.*

*Osborn waves start to appear <32 degrees & the size of the wave is proportional to the degree of hypothermia.*

