Question 42

A 25-year-old man sustains a soft tissue injury to the right shoulder in a football tackle. Following the game he is noted to have weakness of right shoulder abduction (4/5) and internal rotations (3/5). Reflexes are normal. There is patchy sensory loss over the lateral forearm.

The most likely injury is to the
A. axillary nerve  
B. suprascapular nerve  
C. C5 nerve root  
D. upper trunk of the brachial plexus  
E. musculocutaneous nerve.

Oh yeah a question on the neuro exam –
So this questions is a focus on C5 basically and all the things that could go wrong
Here are some uptodate upperlimb neuro images

And here are the images from neurology and neurosurgery illustrated Lindsay and bone
Reflexes:
biceps jerk C5, C6 roots. Musculocutaneous nerve (inside elbow)
triceps jerk C6, C7, C8 roots. Radial nerve (outside elbow)
supinators jerk c6, c7 roots. Radial nerve (wrist)
Hoffman reflex C7, C8 (flick patient’s terminal phalanx look for thumb flexion)

This man has weakness of right shoulder abduction (4/5) and internal rotations (3/5). Reflexes are normal. There is patchy sensory loss over the lateral forearm.

A. axillary nerve – more than just axillary nerve

**AXILLARY NERVE (posterior cord) (C5,C6)**

*Supplies: Deltoid and teres minor muscles.*

**Damaged by:**
- Shoulder dislocation.
- Limited brachial neuritis.

**Results in:**
- Weakness of abduction of shoulder between 15–90° and sensory loss over the outer aspect of the shoulder.

B. suprascapular nerve – more than just suprascapular nerve
C. C5 nerve root
This is not consistent with a syndrome of root compression

So basically this man has pranged surpascapular and axillary nerve so the answer is

D. upper trunk of the brachial plexus consistent with presentation

Upper plexus lesion (C5, C6)
Traction on the arm at birth (Erb-Duchenne paralysis) or falling on the shoulder may damage the upper part (C5, C6) of the plexus
Resulting in paralysis of deltoid, supraspinatus, infraspinatus and elbow flexors biceps, brachialis
Adductors of shoulder are mildly affected

E. musculocutaneous nerve. – not consistent with presentation his reflexes are intact
Later cord C5C6
Sensory supply: lateral border of the arm
Damaged by: Fracture of the humerus; Systemic causes
Results in: Weakness of elbow flexion and forearm supination with characteristic sensory loss and absent biceps reflex

Answer D