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**Answer: The 'OK' sign of injury to the Anterior Interosseous Nerve**

Inability to form a normal 'OK' sign suggests palsy of the Anterior Interosseous Nerve (AIN), a branch of the Median nerve. It is principally a motor nerve and supplies the flexor digitorum profundus (FDP), flexor pollicis Longus (FPL) and pronator quadratus muscle.<sup>1</sup>

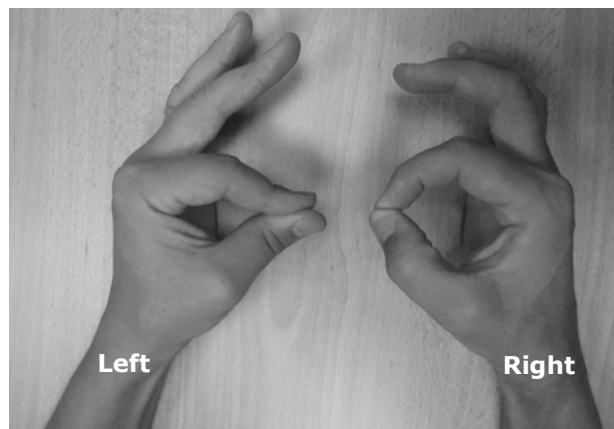
AIN lesion results in difficulty in moving the index and middle finger with weakness of flexor of inter-phalangeal joint of the thumb (FPL) and distal inter-phalangeal joint of the index and middle finger (FDP). This is best seen by asking the patient to make a pinch with thumb and index finger.<sup>1</sup>

Normally on pinching something between the index finger and thumb, metacar-

pophalangeal joint and inter-phalangeal joints of the thumb and index finger are flexed (Figure: right hand). In case of AIN palsy, terminal phalanges of thumb and index finger are extended or hyperextended (Figure: left hand).

AIN palsy accounts for less than 1% of all nerve compression syndromes in the upper limb. A number of anatomical sites of possible compression along the course of the nerve are recognized. AIN can also result from trauma, iatrogenic following surgery or venipuncture, secondary to tight dressings and slings, thrombosis of ulnar artery or arthroscopy of the elbow or shoulder.<sup>2</sup>

The differential diagnosis of AIN palsy includes a lateral cord lesion of brachial plexus, FDP avulsion and C8 radiculopathy.<sup>1</sup>



**REFERENCES**

- 1:** Anterior Interosseous Branch of Median Nerve. Retrieved from [http://www.wheelsonline.com/ortho/anterior\\_interosseous\\_branch\\_of\\_median\\_nerve](http://www.wheelsonline.com/ortho/anterior_interosseous_branch_of_median_nerve). (Accessed on 7<sup>th</sup> August 2013)
- 2:** Ulrich D, Piatkowski A, Pallua N. Anterior interosseous nerve syndrome: retrospective analysis of 14 patients. *Arch Orthop Trauma Surg* 2011; 131:1561-5.