We present a very unusual case of Bilateral Posterior Interosseous Nerve (PIN) Palsy in a 52 year old. PIN palsy is an extremely rare occurrence with 0.7% incidence recorded in the literature. A 52 year old male who works as a chef, presented to the clinic with gradual onset of inability to use his right hand and decreasing power. It was insidious in onset with gradual worsening over a period of 6 months. There was no history of trauma and mentions he has had no problem in using his right hand prior to this period.

He had similar issues about a year ago, for which he was diagnosed with PIN palsy and had extensive investigations including Nerve Conduction studies (NCS) and MRI. He has had a tendon reconstruction (at a different hospital) done for his left side. On clinical examination of his right hand now, he had finger drop with wrist extension in radial deviation. Elbow movements showed good flexion with restriction of terminal extension (fixed flexion of 10 deg). Pronation was full, supination was 80 deg (10 deg Lag), but symmetrical. There were no signs of other nerve involvement and sensory examination was normal. A clinical diagnosis of PIN palsy was made. Investigations which included radiographs of his elbow and forearm and NCS were performed. NCS confirmed severely abnormal spontaneous activity in the form of positive sharp waves and fibrillations, discrete recruitment pattern and decreased recruitment interval in posterior interosseous innervated muscles. There was no abnormal radial head noted in the plain radiograph.

To rule out a mechanical cause of compression, MRI of the right elbow was performed. MRI confirmed partial subluxation of radial head with marked thickening of the capsule. In order to confirm the same on the left side an MRI of the left elbow was also undertaken, which confirmed similar findings. The patient was explained the same and offered physiotherapy/orthosis for the right elbow (left side was already attended to by tendon transfer surgery and hence no further treatment was required). He was planned for surgical exploration with/without annular ligament reconstruction. Patient wished to defer surgery, but agreed to continue the conservative management. He was seen in 2 months at the clinic and noted to have regained full power of the finger extensors and thumb. He has been explained that this could recur and shall need the above procedure. Posterior interosseous nerve palsy is a rare occurrence and involvement bilaterally is the first of such kind which has not been reported in the literature.

Biography
Satish Babu Janipireddy has completed his DNB (Orthopedics) from National Board of Examinations in India. He has then moved to the UK in 2007 to pursue a Research degree MCh Orthopaedics from University of Dundee in Scotland. He has then worked at North Middlesex University Hospital NHS Trust at London and attained the FRCS in 2015. He is presently working as a Consultant at the same hospital.

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