Venipuncture-related median nerve injury

Extract:

“Iatrogenic peripheral nerve injuries may result from transection, stretch, compression, injections, ligature, heat, anticoagulant use, and radiation. Iatrogenic median nerve palsy has been reported rarely. We report a case of a woman who underwent craniectomy for treatment of trigeminal neuralgia. Intraoperatively, a transient decline in the amplitude of the left upper extremity somatosensory evoked potentials (SSEPs) was noted. This finding was presumed to be due to the traction on the brachial plexus as it improved with repositioning. Immediately upon waking from anesthesia, the patient experienced sensorimotor deficits in the left median nerve distribution. Ecchymoses from venipuncture were observed in this area. Electrodiagnostic studies confirmed a left median nerve neuropathy localized in the antebrachial area. Neurosurgeons and neurologists should be alert to potential iatrogenic median nerve palsy following vascular access at the antebrachial region. Vascular access could be performed under the ultrasound guidance when a patient is under anesthesia or unable to give sensory feedback. Furthermore, placing an additional recording electrode over the proximal upper arm during intraoperative SSEP monitoring aids in distinguishing between brachial plexus and peripheral nerve injuries.”

Reference:

Shields LBE, Sutton B, Iyer VG, Shields CB, Rao AJ. Venipuncture-Related Median Nerve Palsy Disguised as Intraoperative Brachial Plexus Injury. Case Rep Neurol. 2021 Jun 11;13(2):361-368. doi: 10.1159/000515474. PMID: 34248570; PMCID: PMC8255717.

Full Text