
IATROGENIC INJURY IN HAEMORRHAGIC STROKE – A RARE COMPLICATION

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Background

The placement of a peripheral arterial line is a common procedure in clinical practice, with peripheral nerve injury being a rare iatrogenic complication. We report a case of peripheral neuropathy following arterial line placement in the brachial artery.

Case report

A 58-year-old woman presented with a neuromotor picture of grade 4 hemiplegia on the MRC (Medical Research Council) scale, left-sided hemihypoaesthesia and dysmetria, and a wide-based gait. She was admitted for an intensive rehabilitation programme following a cerebellar haemorrhagic stroke. In addition to stroke-related symptoms, the patient reported paraesthesia over the median nerve territory, starting at the left antecubital fossa. Examination revealed atrophy of palmar interosseous muscles, hypoaesthesia in the median nerve territory, and inability to flex the second metacarpophalangeal joint of the left hand. Although affecting the plegic limb, these findings were not attributed to the stroke, prompting further investigation. Electromyography revealed partial left median nerve injury, with severe axonal sensory-motor involvement, above the emergence of motor branches to the pronator teres muscle. Ultrasound of the antecubital fossa showed a small lesion suggestive of a neuroma, nerve swelling, and possible resorbing perineural haematoma. Review of the patient's acute hospitalisation revealed the placement of an arterial line in the left brachial artery due to loss of peripheral venous access. This was temporally associated with the onset of the reported symptoms and clinical signs. Given the absence of significant functional impact, we opted for conservative management with follow-up consultation to assess the potential need for referral to a specialised consultation.

Conclusion

Given the clinical and temporal correlation, we can assume that the median nerve injury occurred at the antecubital fossa during the placement of the arterial line in the left brachial artery. Although this is a frequently performed procedure, it carries risks that must be recognised and addressed promptly.

Keywords: neuropathy, iatrogenesis, electromyography