key points

SELECTED BY

Dr Chris Barclay
GP, Suffolk

The close proximity of contraceptive implant placement to the course of the ulnar nerve can result in injury. Several factors have been implicated in this complication including: low BMI, erroneous placement of the implant, implantation over the brachial groove, and migration of the implant from its original insertion.

Clinicians should familiarise themselves with the vulnerable neurovascular structures in the area and refer promptly to a specialist if any neurological symptoms develop during placement or removal of these devices.

The prognosis following nerve injury is related to the anatomical site, pathophysiological depth of injury and delay between injury and treatment. Minor injury (neurapraxia) results from ischaemia or oedema within the nerve. In more severe injuries there is axonal damage resulting in Wallerian degeneration. The axonal damage affects all nerve fibre subtypes and as a result there is usually neuropathic pain and loss of autonomic sudomotor and vasomotor function in the cutaneous territory of the affected nerve. Loss of these autonomic supplies results in disruption of function of sweat glands and blood flow regulation respectively which manifests as dry erythematous skin.

High-grade nerve injury with axonal degeneration should be suspected when there is neuropathic pain, autonomic dysfunction and a positive Tinel's sign (pain in the territory of the nerve elicited by gently tapping over the site of suspected injury).

The British Orthopaedic Association recommends prompt referral for specialist assessment when there is motor or sensory dysfunction in the territory of a nerve following an intervention in proximity to the nerve. Early recognition and intervention may prevent further degeneration and improve outcomes.