

[PICTURES IN CLINICAL MEDICINE]

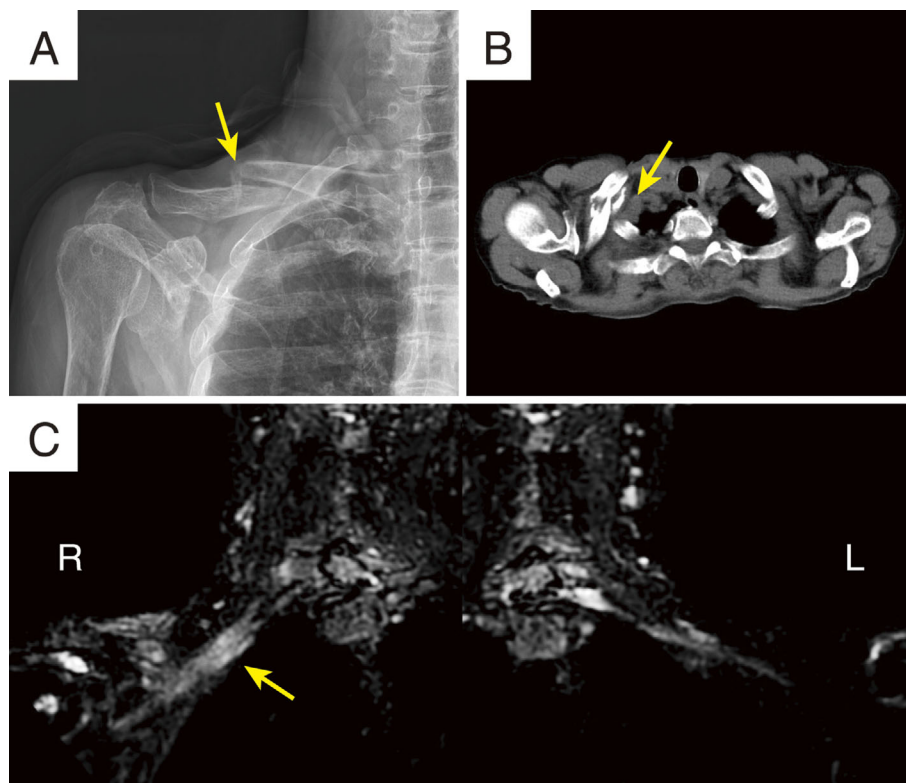
Delayed Brachial Plexus Palsy after Clavicular Fracture

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Key words: traumatic brachial plexopathy, medial cord, lateral cord, magnetic resonance neurography, clavicular fracture

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Picture.

A 65-year-old woman manifested subacute weakness of the right upper extremity and numbness of the right palm. She had suffered a displaced right clavicular midshaft fracture two weeks earlier (Picture A). A neurological examination revealed a decreased strength in the muscles innervated by the musculocutaneous, median, and ulnar nerves, whereas those supplied by the axillary and radial nerves appeared unaffected, suggesting medial and lateral cord impairment in the right brachial plexus. The area of reduced sensation of touch mostly corresponded to the distribution of the median and ulnar nerves. Chest computed tomography revealed a

displaced clavicular fragment pushing the soft tissues in the subclavicular space (Picture B). Brachio-cervical magnetic resonance neurography (MRN) with short T1 inversion recovery sequences showed longitudinal right brachial plexus swelling and focal high intensity in the segment under the fracture site (Picture C); this presumably reflected neural edema due to compression by the bone fragment. Brachial plexus palsy is a rare complication following clavicular fracture and can appear at an interval of several weeks after the trauma (1, 2). MRN may be useful for its diagnosis.

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