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Letter to the Editor

Before Diagnosing a Snipping Triceps due to a Cubita Varus, a Lesion of the Radial Nerve due to a Dislocated Humerus Fracture must be excluded

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We were interested to read the article by O'Driscoll *et al.* on a 23-year-old male with snapping triceps and concomitant dislocation of the ulnar nerve following a traumatic distal humeral fracture with post-traumatic cubitus varus deformity ^[1]. Within a few months of the trauma, the patient developed ulnar neuropathy and a clicking sensation in the medial elbow, which was diagnosed as a dislocation of the ulnar nerve and treated with transposition of the ulnar nerve, which was initially successful ^[1]. However, the cubital pain and sensory disturbances recurred, but after eight years of symptoms, the patient opted for non-surgical conservative therapy ^[1]. The study is appealing, but some points should be discussed.

First, we disagree with the assumption that the patient had ulnar neuritis ^[1]. Neuritis is characterized by an infectious or immunological inflammation of a nerve, which was not the case in the index patient ^[1]. Rather than neuritis, the index patient suffered from entrapment of the ulnar nerve (chronic pressure injury) due to the unphysiologic course of the nerve along the cubita.

Secondly, it is incomprehensible why the varus position of the humerus was not surgically corrected shortly after the trauma. In order to restore the anatomical and physiological or near-physiological position of the ulnar nerve and triceps muscle, it would have been most logical to return the humerus to a physiological shape.

The third point is that, surprisingly, no atrophy of the muscles innervated by the ulnar nerve has been reported ^[1]. Entrapment of the ulnar nerve is often associated not only with muscle weakness but also with muscle atrophy ^[2]. Was there any evidence of weakening or atrophy of the muscles supplied by the ulnar nerve, such as the flexor carpi ulnaris, the medial half of the flexor digitorum profundus, the abductor digiti mini, the flexor digiti minimi, the opponens digiti minimi, the two medial lumbrical muscles, the adductor pollicis muscle, the seven interossei and the palmaris brevis muscle? Did needle electromyography of any of these muscles reveal abnormal spontaneous activity, enlarged polyphasic motor unit action potentials or a clear interference pattern?

The fourth point is that it is not clear how the patient could rock climb while experiencing pain during push-ups ^[1]. Similar movements are typical for rock climbing and are one of the most common movement patterns in rock climbing.

The fifth point is that the results of the nerve conduction tests of the ulnar nerve were not reported. In order to assess the extent and nature of the damage to the ulnar nerve, it would have been imperative to perform nerve conduction studies of its motor and sensory fibers to assess the extent of the damage.

The sixth point is that it is incomprehensible why the radial nerve was not affected. The radial nerve runs around the dorsal side of the humerus and is frequently damaged in humeral fractures ^[3]. Were the nerve conduction studies of the radial nerve normal or was there denervation of the medial head of the triceps muscle? Is it conceivable that the snapping of the triceps is due to under-innervation of one of its parts rather than an unphysiological position of the muscle?

To summarize, this interesting study has limitations that put the results and their interpretation into perspective. Removing these limitations could strengthen the conclusions and reinforce the message of the study. All outstanding questions need to be addressed before readers can uncritically accept the study's conclusions. Before the snapping of the triceps and ulnar nerves can be held responsible for the fourth and fifth finger sensory disturbance and cubital pain, a lesion of the radial nerve must be excluded.

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