



Isolated Suprascapular Neuropathy: A Cause of Subluxation or a Result of Subluxation

Omuz Subluksasyonunun Bir Nedeni ya da Sonucu Olarak: İzole Supraskapular Nöropati

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To the editor,

A 25-year-old man was referred to rehabilitation clinic for his left shoulder pain. His pain started six years ago after a fall. The pain was increasing with repetitive arm motions and exercises. In addition, the patient suffers from the pain even during rest and nights. A few years later after trauma, recurrent subluxation occurred in his left shoulder. On examination, he did not have restriction in his shoulder range of motions but shoulder flexion and abduction were painful at the 90 degrees. On muscle strength testing, external rotation and abduction of the shoulder were moderately weak (4/5). Reflexes and sensation were intact. Posterior-superior region of the shoulder was painful with palpation. Anterior Apprehension Test for anterior instability was positive. Examination showed prominent atrophy of the posterior superior left scapular area. X-ray images were normal. The electrodiagnostic examination was normal except for chronic axonal lesion of the left suprascapular nerve. Ultrasound for the suprascapular nerve was unremarkable. Magnetic resonance images showed Hill-Sachs and, Bankart lesions (Figure 1a, 1b). Rehabilitation program was performed to the patient. In this case, we are aiming to present that shoulder subluxation may be resulting from suprascapular neuropathy.



Figure 1. Magnetic resonance images showing Hill-Sachs (A) and, Bankart lesions (B)

The suprascapular nerve originates from the upper trunk of the brachial plexus. It is responsible for sensory innervation of posterosuperior shoulder joint and motor innervation of supraspinatus and infraspinatus muscles (1). Suprascapular nerve entrapment may be caused by repetitive use, direct trauma, transverse scapular ligament injury, ganglion cyst, tumors or massive retracted rotator cuff tears, and this can result in various clinical symptoms, including pain in the posterosuperior aspects of the shoulder and weakness in forward flexion and external rotation (2). The glenohumeral joint is mainly stabilized by muscles (periscapular muscles, rotator cuff, biceps) tendons and ligaments (3). While, it is known that trauma is the major reason for subluxation, suprascapular nerve damage induced by subluxation is a rare condition. Any reason developing supraspinatus or infraspinatus muscle weakness may also cause shoulder subluxation (4).

We think that post-traumatic suprascapular nerve damage may bring about shoulder subluxation after years. In clinical practice, physicians should keep in mind both the chronic shoulder pain and recurrent shoulder subluxation as a result of the suprascapular neuropathy.

Conflicts of Interest: The authors reported no conflict of interest related to this article.

Key Words: Chronic shoulder pain, recurrent subluxation, suprascapular neuropathy

Anahtar Kelimeler: Kronik omuz ağrısı, rekürren subluksasyon, supraskapular nöropati

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