



Original Contribution

A CASE OF THE SUBCLAVIUS POSTICUS MUSCLE

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ABSTRACT

During routine dissections, we observed the subclavius posticus muscle in the cervical region. This muscle was on the left side and innervated by a branch of suprascapular nerve. The omohyoid muscles and the subclavius muscles were normal. The anomaly observed in this dissection should be considered as neural or vascular compression syndromes.

Key words: Subclavius posticus, aberrant muscle

INTRODUCTION

The subclavius posticus muscle arises from the first rib cartilage, inserts into the upper margin or the coracoid process of the scapula and is innervated by a branch of the subclavius nerve or the suprascapular nerve or sometimes the accessory phrenic nerve (1 - 4)

CASE REPORT

During the routine dissection of the cervical region of a male cadaver, we observed an aberrant muscle. After the clavicle and the subclavian vein had been removed, we determined this abnormal muscle as the subclavius posticus muscle. This muscle was on the left side and innervated by a branch of suprascapular nerve. It arose as a tendon from the first rib cartilage, ran over the subclavian artery, the brachial plexus and the anterior serratus muscle. It inserted into the upper margin of the scapula just down the insertion of the inferior belly of the omohyoid muscle. The omohyoid muscle and the subclavius muscle were usual [Figure 1].

DISCUSSION

Sato et al. had classified the aberrant muscles which run between the first costal cartilage

and the upper margin of the scapula into two categories. According to the innervation, it may have been either a duplication of the inferior belly of the omohyoid muscle or the subclavius posticus muscle. The subclavius posticus muscle was described by Akita et al. (1) as an aberrant muscle between the inferior belly of the omohyoid and the subclavius muscle. Akita (2) reported a common developmental matrix for these muscles. Accordingly, the matrix is divided into three parts and the middle part becomes the aberrant muscle. Forcada (3) reported two groups of variations of the aberrant muscles at the costoclavicular space- the scapulaclavicular muscle and the sternochondroscapular muscle. The subclavius posticus muscle belongs to the latter group. Rosenmüller in 1800, Eisler in 1912 reported this muscle. Ten subclavius posticus muscles (one of these cases was bilateral) and one excess inferior belly of the omohyoid muscle were reported by Akita et al. in 124 cadavers. One aberrant muscle innervated by the accessory phrenic nerve which runs between clavicle and scapula was also reported. This muscle was considered as a fusion of the subclavius and the subclavius posticus (2). Okinaga et al. and Miyauchi reported a case of subclavius posticus muscle (5, 6). The subclavius posticus muscle innervated by suprascapular nerve was reported (3, 4). Miura et al. reported a case of double omohyoid muscle innervated by ansa cervicalis (7). Akita reported that it was necessary to consider detailed innervation to

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determine true origin of the aberrant muscles (1). In our case, the subclavius posticus muscles innervated by a branch of suprascapular nerve.

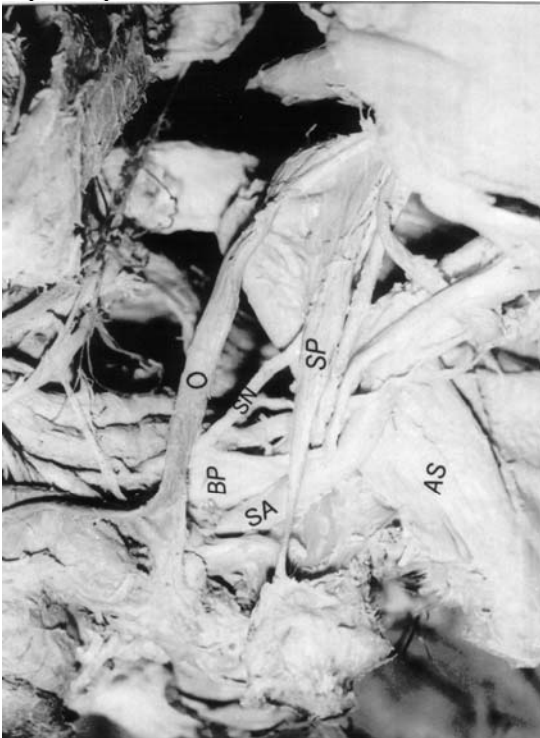


Figure 1: The left subclavius posticus muscle
 SP: subclavius posticus muscle, O: omohyoid muscle, SA: subclavian artery, BP: brachial plexus, AS: anterior serratus muscle, SN: suprascapular nerve

Aberrant muscles at the costoclavicular space were reported as a possible cause of thoracic outlet syndrome (2, 3). It may be diagnosed by Magnetic Resonance Imaging of the supraclavicular region of the patients with

thoracic outlet syndrome, especially in those with symptoms of venous compression (2, 8).

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