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We Can Avoid Vasovagal Syncope with the Simple Positioning Rule

Basit Pozisyonlama Kuralı ile Vazovagal Senkoptan Korunabiliriz

📵 Ebru Kübra Taşpolat, 📵 Mustafa Turgut Yıldızgören*, 📵 Fatih Bağcıer

University of Health Sciences, Başakşehir Çam and Sakura City Hospital, Clinic of Physical Medicine and Rehabilitation, İstanbul, Turkey *Fizikon Medical Center, Department of Physical Medicine and Rehabilitation, Konya, Turkey

Dear Editor;

Myofascial trigger points constitute a common and complex entity that manifests with different symptoms depending on their localization. Conventional techniques and invasive treatment approaches are used (1). Invasive treatment modalities include dry needling, local anesthetic administration, and botox injections. During treatment, side effects may appear directly depending on the needle penetration sites or indirectly in autonomic nervous system activation. Complications like neurovascular injuries, pneumothorax damage, and abdominal wall damage are side effects of the needle penetration site (2). On the contrary, vasovagal syncope is an indirect side effect caused by autonomic nervous system activation (3).

Vasovagal syncope is the transient loss of consciousness resulting from instantaneous cerebral hypoperfusion characterized by rapid onset, short duration, and complete spontaneous recovery. Various conditions, including pain, stress, needle phobia, and prolonged standing, can trigger it. Vasovagal syncope can be observed after prodromal symptoms like nausea, pallor, sweating, dizziness, tinnitus, gray out, and faintness (3). Therefore, the physician should be aware of this and monitor the patient for such symptoms. Notably, vasovagal syncope can be encountered both during and after treatment. Therefore, monitoring the patient for up to 10 minutes following treatment would be beneficial.

An important issue that should be addressed while applying myofascial trigger point therapy is ensuring the physician's and patient's correct positioning during needling. This way, the physician can ensure procedural ergonomics and access the treatment site easily. Another critical issue, which can be overlooked, includes the practices adopted at outpatient clinics wherein myofascial trigger point therapy is administered. At the same time, the patient is in a seated position (Figure 1a). Considering this, the authors recommend administering the treatment while the patient lies, regardless of the involved

muscle (Figure 1b) (4). Although unnecessary, this approach minimizes the possibility of vasovagal syncope. Although case presentations in the literature suggest the association of thicker needles with vasovagal syncope, there is no clear information about such an association (3).

The algorithm suggested here is to ensure verbal or physical communication with the patient during treatment. If prodromal symptoms appear, the first step is to provide the patient with a safe environment, not overreact, and elevate the patient's legs (4). Nothing is probably required other than terminating treatment and observing the patient (5). It is recommended to refer the patient to the emergency department if the symptoms persist or the patient does not feel well. In relatively rare cases, when the patient loses consciousness, the patient's head should be turned to one side to facilitate breathing. It is recommended to check the vital signs, perform electrocardiography, and immediately conduct necessary medical interventions (4).

In conclusion, vasovagal syncope is not a rare occurrence. Studies in this field would be very important for predicting the

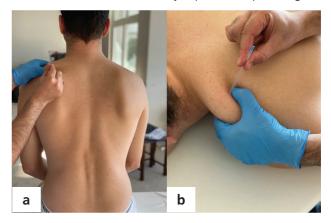


Figure 1. Two different patient position a) dry needling treatment for upper trapezius muscle in a sitting position, b) dry needling treatment for upper trapezius muscle in a supine position

Address for Correspondence/Yazışma Adresi: Ebru Kübra Taşpolat Asst, University of Health Sciences, Başakşehir Çam and Sakura City Hospital, Clinic of Physical Medicine and Rehabilitation, İstanbul, Turkey

possible risks and reducing the rate of autonomic reflexes. When encountered, an algorithmic intervention approach should be planned.

Keywords: Myofascial trigger point, vasovagal syncope, positioning, dry needling

Anahtar kelimeler: Miyofasyal tetik noktası, vazovagal senkop, pozisyonlama, kuru iğneleme

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