

Case report



## MULTIDISCIPLINARY COOPERATION BETWEEN COMPLEMENTARY AND CONVENTIONAL MEDICINE WITH PATIENT SUFFERING FROM MYOFASCIAL PAIN SYNDROME

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### ABSTRACT

**Introduction:** Pain and vertigo in the neck zone are a common problem which leads to temporary and even permanent incapacity of work. The problems in the neck deteriorate the quality of life, and that makes people turn to the services of the health care system. The medications prescribed by conventional doctors have a symptomatic effect, which discourages patients and they more often start looking for the methods of complementary medicine as a part of their complex treatment. The cooperation complementary-conventional medicine could contribute to faster improvement with the patient suffering from myofascial pain syndrome.

**Case report:** A 63-year-old female patient in the menopause, with over 30 years length of service as a bank employee, visited The Medical University of Varna and the University centre of East medicine with the following complaints: pain and vertigo in the whole spine for many years, hypertonic crises and tachycardia. She had been prescribed a medication treatment for a long time by a large team of specialists (neurologist, cardiologist, physiotherapist, psychiatrist). It didn't have a systematic or continuous effect, and that was the reason why the patient was incapable of work. The frequent absence from work and the feeling of inadequacy in life are the reasons for the patient to search for help by means of unconventional methods (complementary medicine), which is practised by members of the University centre of East medicine – Varna.

**Conclusion:** The cooperation between complementary and conventional medicine offers new opportunities for applying the holistic approach in treatment with patients suffering from myofascial pain syndrome.

**Keywords:** complementary medicine, myofascial pain syndrome, reflex therapy, physical therapy

### INTRODUCTION

Chronic pain and the limited range of motion in the neck area are a serious health problem, which is often neglected by the patients. A lot of people have similar complaints, and quite a few of them report about symptoms like pain and stiffness in the area of the shoulder-arm complex and the neck, headache and dizziness. The patients overlook their condition and start looking for help from the healthcare professionals at a later stage when the clinical picture has already worsened. The traditional (conventional) medicine – medication therapy, physiotherapy, manual therapy can be applied in the treatment of the patients' symptoms, however, with temporary and short-term effect. The collaboration complementary-conventional medicine reveals unused till now opportunities for a successful way to overcome the disease and restore the working capacity of the patient [1].

Many structures, located in the neck and the shoulder-arm complex make it really hard to differentiate and diagnose the pathology in this area. Due to many behavioural, professional and domestic factors, a lot of preconditions often occur for change in the musculoskeletal and nervous systems. The stress from the everyday life, as well as the non-compliance with the recommendations for the ergonomics of the sitting posture, can create conditions for functional disorders of the human support system [2]. As a result of the depletion of the compensatory and substitutive mechanisms of the organism, a complicated clinical picture arises, in which the leading cause of the problem could be the myofascial pain syndrome.

In clinical practice, the myofascial pain syndrome is defined as musculoskeletal pain, limited range of motion and referred pain. Dizziness, staggering and discoordination syndrome can be observed in some of the

cases. The main cause of these complaints is the formation of active or latent trigger points in the fascia of the muscles. This syndrome leads to significant incapacity at work and social isolation, which necessitates looking for the services of a specialist. The conventional medical approach to those patients is usually with a short-term effect, and after the therapy, the symptoms come back. The medication therapy, applied to those types of patients, often has side effects, which leads to new complaints and temporary work incapacity. This situation makes the patients with myofascial pain syndrome turn to another method – the complementary medicine, in search of quick and long-lasting recovery

### MATERIAL AND METHODS

The patient P.V. aged 63, currently going through menopause, with the over 30-year length of service as a bank employee looks for help in UCEM regarding the following complaints: long-lasting pain in the spine, dizziness, frequent hypertensive crises and tachycardia. The prescribed continuous medical therapy from a big team of specialists (neurologist, cardiologist, physiotherapist, psychiatrist) doesn't have a systematic or long-lasting effect, because of which the patient isn't able to work. The frequent absence from work and the feeling of deficiency in her everyday life are the reasons for P.V. to turn to unconventional methods (complementary medicine), practised by specialists in the University centre for East medicine, at the Medical University "Prof. Dr Paraskev Stoyanov" – Varna.

At the time of taking physiotherapeutic anamnesis and status, the patient reports about the following complaints: pain in the spine, limited rotational movements in the neck area, morning stiffness and short-term dizziness. As a result of poor posture at work, in the zones of the cervical and thoracic sections of the spine, there are often trigger zones, because of which the palpation was purposefully oriented towards mm. suboccipitales, m. trapezius, m. supraspinatus, m. erector spinae, m. sternocleidomastoideus. During the palpation the following pathological results were established: trigger points in the aforementioned muscles, irradiating pain in the orbital and temporal areas. Moreover, after strong pressure on the trigger point of m. trapezius, there was a referred pain towards the head, and of m. supraspinatus towards the hand. Methods from complementary and conventional medicine were combined as

it follows:

- Acupuncture and acupressure on the trigger and acupuncture points;
- massage;
- ischemic manual compression;
- post-isometric relaxation;
- stretching;
- positional therapy;
- active physiotherapy;
- training on how to change the pathological working posture

There was a two-week course of acupuncture on the trigger points; each procedure took 30 minutes, with the purpose to decrease the pain and general tension, myorelaxation and improvement of sleep. In combination with acupuncture, acupressure was applied in the distally located segments, as well as massage of the paravertebral musculature (30 minutes) and ischemic manual compression of the painful zones in the neck and arm muscles (30-40 second-pressure per point). In order to decrease the spasm and increase the elasticity of the muscle fibres the methods of the postometric relaxation and stretching were used, with emphasis on m. trapezius è m. sternocleidomastoideus. For keeping the achieved result therapeutic gymnastics was included, initially starting with relieved posture and we also recommended the patient preventive steps for maintenance of the normal position of the body every day and at work.

The tool for evaluating the intensity of pain in the trigger points was a visual analog scale. In order to figure out the movement capacity in the cervical section a flexion-rotation test was added. The degree of muscle weakness was determined by using manual muscle testing.

### RESULTS

Thanks to the collaboration complementary-conventional medicine we reached a positive effect even after the first procedure. The patient reported about general improvement of her condition and tone, a significant decrease of the symptoms, as a result of which the intake of medication was stopped. After the fifth procedure the dizziness disappeared and we established a positive change in her motivation, enhanced everyday activities and significant re-socialization. The conclusions based on comparison before and after the therapeutic course are:

**Table. 1.** Recovery and 2-week follow-up

Before		Complementary therapy (10-day-treatment course)	After	
VAS	6		acupuncture massage PIR Stretching Education in EDA	VAS
Flexio-rotation test	positive	Flexio-rotation test		negative
MMT (sternocleidomastoideus)	2	MMT (sternocleidomastoideus)		4
(trapezius upper part)	3	Education in EDA	(trapezius upper part)	4

## DISCUSSION

A number of authors use the method “dry needle” in trigger points and medication as a choice of treatment for myofascial pain syndrome in the neck and shoulder-arm complex [4, 5]. The method together with the use of medicine has a number of complications, and because of this in the examination, we included classical acupuncture in the biologically active and painful points in order to reduce pain, cause myorelaxation, improve the psycho-emotional tone, sleep and working capacity [7, 8]. Thus the anticipated result had a complex, favourable impact on the whole organism.

Another alternative treatment of this syndrome is some techniques used for relaxation and stretching, with the help of which we successfully complete and build up the complementary medicine therapy [9]. These facts gave us the idea to combine the methods of complementary and conventional medicine in order to achieve a more successful, painless and long-lasting result. Still, on the first day, the patient felt a big difference in her psychosomatal condition, and on the fifth day, the pain and the dizziness were totally gone. It turned out that acupuncture was the reason for the fast effect on her health, stimulating the inner powers of the organism, while the conventional

methods keep the accomplished result [10].

In our case with the patient having a myofascial pain syndrome, similarly to other scientific research, we also applied: preventive strategies which aim to establish healthy habits of the body posture at work; techniques for standing upright and bending. This way we achieved consistency in keeping the therapeutic result, as well as decreasing the risk of provoking the old symptoms.

## CONCLUSION

Conventional medicine has a temporary and short-term effect on the health status of patients with a myofascial pain syndrome, as the medication therapy often leads to the appearance of side unwanted effects. This syndrome and the use of only conventional methods don't give the needed result. Another alternative, which is most frequent in the treatment of this syndrome, is acupuncture which has a quick and analgesic effect compared to traditional physical factors, but there are contradictory statements for the duration of the achieved result. These statements give the idea of searching for individual and holistically directed methods, combining conventional and unconventional medicine for more successful and long-lasting results [11, 12].

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