SCENAR THERAPY FOR MYOFASCIAL PAIN SYNDROME

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ABSTRACT

SCENAR device generates electrical impulses that are physiologically similar to neuroimpulses. Pain is the most common complaint to be dealt with in the SCENAR therapy by block of transmission of the pain impulses in the nerve endings of the peripheral nerve fibers, pain focus suppression of brain cortex, and reduction of the edema around the nerve fibers leading to reduction of pressure effect. We investigated the usefulness and effectiveness of SCENAR therapy in patients with MPS. SCENAR therapy was performed in 202 patients with MPS. The ratio of male to female was 1:4.5. The mean age was 47.3 years (range: 18-75 years). The mean follow up period was 6 months (range: 3 months-16months). The visual analogue scale (VAS) was used to assess the effectiveness of SCENAR therapy. The overall improvement of pain was 89%. Especially, the improvement of acute pain was good, and all patients presenting MPS was satisfactory. This study suggests that SCENAR therapy would be very useful new method to deal with MPS.

INTRODUCTION

Myofascial pain syndrome (MPS) is a local or regional musculoskeletal pain disorder that may involve either a single muscle or a muscle group. It develops due to any number of causes including sudden trauma to musculoskeletal tissues. It seems to occur in virtually everyone's lives at some point but becomes chronic and intractable in some cases. MPS has a significant impact on functional status, restricting occupational activities with marked socioeconomic repercussions. The management of MPS encompasses a range of different interventions, including trigger point injections, drug, exercise, patient education, physiotherapy, and alternative therapies. The treatment goals are to relieve pain, reduce muscle spasm, improve strength and range of motion, promote early return to activity, encourage active coping strategies, and ultimately improve functional status. The risks and benefits of these treatments vary. SCENAR standing for Self Controlled Energo Neuro Adaptive Regulator was first invented in Russia in mid 80s. We experienced the clinical benefit provided by SCENAR therapy and demonstrated the effectiveness of SCENAR therapy.

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METHODS

The study population was composed of 202 patients with MPS. The ratio of male to female was 1: 4.5. The mean age was 47.3 years (range: 18-75 years). SCENAR therapy was performed between August 2005 and December 2006. The mean frequency of this treatment was 3 times a week and the mean duration time per each treatment was 5 minutes. The mean follow up period was 6 months (range: 3 months- 16months). The visual analogue scale (VAS) was used to assess the effectiveness of SCENAR therapy.

RESULTS

The overall improvement of pain was 89%. Especially, the improvement of acute pain was good, and all patients presenting MPS was satisfactory.

DISCUSSIONS

SCENAR was first invented in Russia in mid 80s under space and military research program. SCENAR device generates electrical impulses that are physiologically similar to neuroimpulses. In respond to a SCENAR impulse, reflex biofeedback proceeds at real time and biological speed. By continuously using biofeedback, the SCENAR modifies each successive input signal to either amplify or dampen the form of the pathological signals that exist in the body. Pain is the most common complaint to be dealt with in the SCENAR therapy by block of transmission of the pain impulses in the nerve endings of the peripheral nerve fibers, pain focus suppression of brain cortex, and reduction of the edema around the nerve fibers leading to reduction of pressure effect. SCENAR therapy is contraindicated in patients with cardiac pacemakers due to the potential of interfering with pacemaker activity.

SCENAR therapy can be differentiated from TENS. They use electrical stimulation. However, the pulse of the SCENAR device is bipolar and has short triangle and high amplitude. The electrodes of SCENAR device were fixed. Our study suggests that SCENAR therapy would be very useful method to deal with MPS.

REFERENCES

[1] Verhoeven, K., Dijk, J.V. Decreasing pam in electrical nerve stimulation. Clinical

Neurophysiology., 7/7(2006),972-978.

[2] Khadilkar, A., Milne, S., Brosseau, L., Wells, G, et al. Transcutaneous electrical nerve

stimulation for the treatment of chronic low back pain: a systemic review. *Spine., 30* (2005), 2657-266