



Cervical Muscle Spasm Treatment in Acupuncture in Bangladesh: A Case Study

Dr. SM. Shahidul Islam^{1*}, Dr. Boxu Lang², Sabina Yasmin³, Dr. Rehana Akter Lima⁴

¹Visiting Consultant, Acupuncture Specialist, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chamelibag, Santinagar, Dhaka, Bangladesh

²Chief Chines Medicine Practitioner, Taizhou Municipal Hospital, Zhejiang, China

³CEO, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chamelibag, Santinagar, Dhaka, Bangladesh

⁴Medical Officer, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chamelibag, Santinagar, Dhaka, Bangladesh

*Corresponding Author

Dr. SM. Shahidul Islam

Visiting Consultant & Acupuncture Specialist, Suo-Xi Hospital (Acupuncture), Dhaka, Bangladesh

Article History

Received: 27.06.2024

Accepted: 01.08.2024

Published: 14.08.2024

Abstract: Background: There were double-blind studies in which cyclobenzaprine hydrochloride (Flexeril) and diazepam (Valium) were tested for their effectiveness in treating neck and low-back pain. Clinical assessments (graded), patient self-ratings, goniometry, motion analysis by computer and electromyography of controlled movements were all employed in the study. All therapy groups showed statistically significant improvements in clinical outcomes after two weeks, with Cyclobenzaprine hydrochloride showing a statistically significant advantage. Improvements in electromyography were the most noticeable, with the Cyclobenzaprine group seeing statistically significant improvements. In clinical muscular spasms, myoelectric activity does not increase; the opposite is true. Electromyography and computer analysis coupled with complicated electro goniometry show improved myoelectric activity in the back muscles when prescribed strenuous motions are stressed. **Methods:** This inquiry took place at Suo-Xi Hospital at Shaan Tower, Chamelibag, Shantinagar, Dhaka, Bangladesh. A 34-year-old male patient has been complaining of neck pain for the last three years. **Results:** Follow-up research showed promising outcomes. He no longer felt neck pain which he had been experiencing for three years. Cervical muscle spasm patients may benefit from acupuncture, according to the findings of this study.

Keywords: SUOXI Healthcare Limited, Cervical muscle spasm, Cervical region, Mobilization, Manipulation, Stretching, Chinese method, Acupuncture, Neck pain.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

There is a spectrum of potential adverse effects that might be brought on by radiation treatment to the head and neck, some of which are more moderate than others. Xerostomia, dysphagia, muscle atrophy, and soft tissue fibrosis are some of the potential adverse effects of this medication. Osteoradionecrosis, hypothyroidism, and inflammation of or necrosis of the spinal cord are three additional adverse effects that may occur as a

result of radiation treatment for the head and neck. There is evidence that trismus may occur both acutely and chronically as a result of irradiating the upper aero intestinal tract, with or without the use of concomitant chemotherapy [1]. It has been noticed that radiation treatment for cervical cancer might produce severe chronic bladder spasms [2-4], and this has been reported]. Radiation therapy is often used to treat cervical cancer. In the past, radiation-induced trismus caused by secondary myokymia of

Citation: SM. Shahidul Islam, Boxu Lang, Sabina Yasmin, Rehana Akter Lima (2024). Cervical Muscle Spasm Treatment in Acupuncture in Bangladesh: A Case Study. *Glob Acad J Med Sci*; Vol-6, Iss-4 pp- 210-212.

the masseter muscle after therapy for palatal cancer was successfully treated with botulinum toxin [5]. This condition manifested itself as a drooping of the eyelids. The inability to properly seal one's mouth is one of the defining characteristics of this illness. In contrast, none of the accounts that have been uncovered throughout the course of the research that has been carried out so far describe the patient experiencing severe spasms in the neck muscles as a result of radiation therapy intended for the neck. The purpose of this study is to offer the concept of painful post-irradiation muscular spasms of the head and neck musculature, more specifically of the sternocleidomastoid muscle, as well as the use of botulinum toxin A as a possible means of assisting in the treatment of the illness. This study will also look at the use of botulinum toxin A as a possible means of assisting in the treatment of the illness. Specifically, the muscle that is often referred to as the sternocleidomastoid.

CASE REPORT

A man in his thirty-four who had been experiencing steadily increasing neck pain for the last

three years sought treatment at our facility. The patient was subjected to our standard line of questioning throughout the inquiry. He is a service holder who has been a subject of diabetes speculation for the last year. There was nothing noteworthy discovered in the patient's family history when it was investigated. We investigated an X-ray of cervical region and it turned out showing that that patient was having cervical muscle spasm. There we had a hunch that the patient was suffering from cervical muscle spasm, which he had been putting up with for the last three years. As a kind of therapy, we opted to do acupuncture on the patient's cervical region. The term "Chinese acupuncture" refers to a modern form of the ancient practice of acupuncture that combines the needling techniques used in traditional Chinese medicine with Western medical understanding of specific regions of the cervical region. It is a method that has been shown to be very successful in treating both acute and chronic conditions affecting the central nervous system. The patient was also treated with mobilization, manipulation, physiotherapy, stretching.



Figure A: X-Ray showing Cervical Muscle Spasm



Figure B: Giving Acupuncture at Cervical region

On the second day of acupuncture treatment to the patient's cervical region, a significant improvement in the patient's condition was seen. After the second day of acupuncture, the patient reported that the neck pain discomfort that he had been experiencing for the previous three years was beginning to improve.

DISCUSSION

In progressive demyelinating disorders like multiple sclerosis, in which trigeminal neuralgia and bladder spasms are prominent presentations,

demyelination is known to generate pain linked with spasm. This is particularly true in conditions like multiple sclerosis, in which both symptoms are widespread. Post-irradiation muscle spasm is distinct from dystonia in that, unlike torticollis, there is no aberrant involuntary movement of a twisting and prolonged character in post-irradiation muscle spasm. Torticollis is an example of dystonia. On the other hand, it more closely resembles myokymia in terms of its clinical presentation. Myokymia is a condition that is characterized by twitching of the muscles. Evidence of continuous and irregular motor-

unit discharges must be present in an EMG in order to make a diagnosis of myokymia. There have been reports that radiation to the brachial and lumbosacral regions may cause secondary myokymia [6,7]. The EMG data required to validate a diagnosis of cervical myokymia were not collected as part of this investigation, despite the fact that this clinical entity may represent a type of the condition known as cervical myokymia. On the other hand, significant radiation-induced cranial nerve damage in the head and neck is very uncommon [8]. A male patient who was young and just 34 years old came to see us complaining of severe neck discomfort, which he had been experiencing for the previous three years. After doing our investigation, we discovered that the patient was suffering from a condition known as cervical muscular spasm. Acupuncture, treatment of the cervical area, manipulation, mobilization, stretching, and the Chinese way were all part of the patient's treatment. The patient's report of neck discomfort begins to improve during the second acupuncture treatment.

CONCLUSION

The follow-up study's findings took everyone by surprise. After the 2nd day of acupuncture the patient's cervical muscle spasm pain which he had been suffering for three years were seen improving. People with a condition called Cervical Muscle Spasm have benefited from acupuncture.

REFERENCES

1. Farquharson, D. I., Shingleton, H. M., Soong, S. J., Sanford, S. P., Levy, D. S., & Hatch, K. D. (1987). The adverse effects of cervical cancer treatment on bladder function. *Gynecologic Oncology*, 27(1), 15-23.
2. Peters, L. J., Harrison, M. L., Dimery, I. W., Fields, R., Goepfert, H., & Oswald, M. J. (1988). Acute and late toxicity associated with sequential bleomycin-containing chemotherapy regimens and radiation therapy in the treatment of carcinoma of the nasopharynx. *International Journal of Radiation Oncology* Biology* Physics*, 14(4), 623-633.
3. Withers, H. R., Peters, L. J., Taylor, J. M., Owen, J. B., Morrison, W. H., Schultheiss, T. E., ... & Hanks, G. E. (1995). Late normal tissue sequelae from radiation therapy for carcinoma of the tonsil: patterns of fractionation study of radiobiology. *International Journal of Radiation Oncology* Biology* Physics*, 33(3), 563-568.
4. Lou, J. S., Pleninger, P., & Kurlan, R. (1995). Botulinum toxin A is effective in treating trismus associated with postradiation myokymia and muscle spasm. *Movement Disorders: Official Journal of the Movement Disorder Society*, 10(5), 680-681.
5. Min, Y. B., Luschei, E. S., Finnegan, E. M., McCulloch, T. M., & Hoffman, H. T. (1994). Portable telemetry system for electromyography. *Otolaryngology—Head and Neck Surgery*, 111(6), 849-852.
6. Albers, J. W., Allen, A. A., Bastron, J. A., & Daube, J. R. (1981). Limb myokymia. *Muscle & Nerve: Official Journal of the American Association of Electrodiagnostic Medicine*, 4(6), 494-504.
7. Jamieson, P. W., & Katirji, M. B. (1994). Idiopathic generalized myokymia. *Muscle & Nerve: Official Journal of the American Association of Electrodiagnostic Medicine*, 17(1), 42-51.
8. Takimoto, T., Saito, Y., Suzuki, M., & Nishimura, T. (1991). Radiation-induced cranial nerve palsy: hypoglossal nerve and vocal cord palsies. *The Journal of Laryngology & Otology*, 105(1), 44-45.