

LETTER TO THE EDITOR

SUCCESSFUL TREATMENT OF A RESISTANCE TRIGEMINAL NEURALGIA PATIENT BY ACUPUNCTURE

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INTRODUCTION

Trigeminal neuralgia (TN) is a neuropathic pain syndrome characterized by severe unilateral paroxysmal facial pain. Pain attacks are usually stimulated by tactile irritation within the region of the trigeminal nerve.¹ TN pain typically remits and relapses, even when patients are on conventionally used treatments, resulting in a major source of disability and poor quality of life. Various drugs, such as carbamazepine, oxcarbazepine, phenytoin, gabapentin and baclofen, have been used to treat TN.¹ Additionally, several minimally invasive approaches, such as trigeminal nerve block at the level of the sphenopalatine ganglion, microvascular decompression, radiofrequency rhizotomy and botulinum toxin injection, have been performed for the relief of pain.^{1,2} However, none of these methods are free of complications. The most common adverse effects after minimal invasive approaches are paresthesia, facial sensory loss, weakness or paralysis of masseter muscles and, rarely, loss of the corneal reflex.³ Herein, we report a female patient with TN who was intractable to previous treatment with carbamazepine, trigeminal nerve block and radiofrequency rhizotomy and was treated successfully by acupuncture.

CASE DESCRIPTION

A 66-year-old woman was referred with a typical TN pain on the left side of her face for 25 years. She was diagnosed with TN after evaluation and work-up by a neurologist. She used medications, including phenytoin (200

mg per day) and carbamazepine (600 mg per day). The pain was triggered by speaking, eating or touching. The pain was evaluated using a visual analog scale (VAS), which ranged from 0 (no pain) to 10 (worst pain imaginable). According to the VAS, the patient rated her pain as 10. She had, to date, experienced no beneficial effects from several therapeutic methods, including medication (carbamazepine, gabapentin and valproic acid), nerve block and radiofrequency rhizotomy of the infraorbital branch of the trigeminal nerve. Acupuncture treatment was initiated without making any change to her drug regime. Acupuncture needles (0.20 x 13 mm needles for the face and 0.25 x 25 mm needles for the other regions) were inserted on the typical areas that are used for trigeminal neuralgia (4). For facial neuralgia, the protocol utilized local points of TH 17 and 21, GB2, SI 18, ST 2, 3 and 7, GV 26 and LI 20; systemic points included TH 5, LI 4, ST 36, ST 44, ST 45 and LIV 3. Auricular acupuncture points were also used (Shen Men, neuro, face and lung points). Needles were not manipulated, and no attempt was made to elicit De-Qi. Every treatment session lasted about forty-five minutes, three times a week. After the fourth session, she reported that she had been relieved almost pain free. By the sixth week (14 sessions), the patient was completely free of pain (VAS = 0) and was still pain free at the end of sixth month.

DISCUSSION

TN is the most common neurologic cause of facial pain. Many patients with TN eventually may become refractory to drug treatments (1) and a few cases develop resistance to surgical treatment modalities.⁵ Additionally, serious adverse effects can occur, especially with the use of surgical methods. These patients are thus placed in a difficult situation, and they visit several physicians because of their

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intractable pain. Alternative approaches may be necessary to heal this small group of patients. Acupuncture is performed as a complementary or alternative therapeutic method for the treatment of several chronic diseases and pain control.⁶ The analgesic effect of acupuncture is due to increased levels of mediators, including endorphin, enkephalin and serotonin, in the plasma and brain tissue.⁷ Acupuncture is a highly safe procedure, with few complications reported.

Most reported adverse effects are minimal and include bruising or hematoma at the needle site, metal allergy and local infection.⁸ Thus, acupuncture, which has virtually no adverse effects, may be an alternative method of treatment for such resistant patients. We wish to alert physicians to the benefits of acupuncture for patients with resistant TN who do not respond to other traditional treatment methods.

REFERENCES

1. Zakrzewska JM, Patsalos PN. Long-term cohort study comparing medical (oxcarbazepine) and surgical management of intractable trigeminal neuralgia. *Pain*. 2002;95:259-66.
2. Türk U, İlhan S, Alp R, Sur H. Botulinum toxin and intractable trigeminal neuralgia. *Clin Neuropharmacol*. 2005;28:161-2.
3. Kanpolat Y, Savas A, Bekar A, Berk C. Percutaneous controlled trigeminal rhizotomy for the treatment of idiopathic trigeminal neuralgia: 25-year experience with 1,600 patients. *Neurosurgery*. 2001;48:524-32.
4. Quirico PE, Pedrali T. Teaching Atlas of Acupuncture. Volume 1: Channels and Points. Georg Thieme Verlag. 2007; p.19-27.
5. Sanchez-Mejia RO, Limbo M, Cheng JS, Camara J, Ward MM, Barbaro NM. Recurrent or refractory trigeminal neuralgia after microvascular decompression, radiofrequency ablation, or radiosurgery. *Neurosurg Focus*. 2005;18:e12.
6. Jellinger KA. Principles and application of acupuncture in neurology. *Wien Med Wochenschr*. 2000;150:278-85.
7. Cabýoglu MT, Ergene N, Tan U. The mechanism of acupuncture and clinical applications. *Int J Neurosci*. 2006;116:115-25.
8. White A, Hayhoe S, Hart A, Ernst E. Adverse events following acupuncture. Prospective survey of 32,000 consultations with doctors and physiotherapists. *BMJ*. 2001;323:485-6.