CONCLUSION

In conclusion, a case of the temporomandibular disorder in a Sydenham's chorea patient responding to acupuncture is presented. The acupuncture may be worth trying as part of a comprehensive treatment approach for these patients since this condition is otherwise difficult to treat.

Rodrigo Galo,¹ Carolina P Torres,² Marta M M G Contente,² Jaciara M Gomes da Silva,² Maria Cristina Borsatto²

¹ Department of Prosthodontics and Dental Materials, School of Dentistry of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil; ² Department of Pediatric Dentistry, School of Dentistry of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil

Correspondence to: Professor M C Borsatto, Department of Pediatric Dentistry, School of Dentistry of Ribeirão Preto, University of São Paulo, Av. do Café s/n, Monte Alegre, 14040-904 Ribeirão Preto, Brazil; borsatto@forp.usp.br

Competing interests: None.

Ethics approval: Obtained from the Ethics Committee of CAAE, 0053,0.138,000-09.

Patient consent: Obtained.

Provenance and peer review: Not commissioned; externally peer reviewed.

Acupunct Med 2009;**27**:188–189. doi:10.1136/aim.2009.001065

REFERENCES

- Stollerman GH. Rheumatic fever in the 21st century. Clin Infect Dis 2001;33:806–14.
- Mercadante MT, Busatto GF, Lombroso PJ, et al. Psychiatric symptoms of rheumatic fever. Am J Psychiatry 2000;157:2036–8.
- Cardoso F, Eduardo C, Silva AP, et al. Chorea in fifty consecutive patients with rheumatic fever. Mov Disord 1997;12:701–3.
- 4. Colony HS, Malamud N. Sydenham's chorea: a clinicopathologic study. *Neurology* 1956;6:672–6.
- Buchanan DN. Pathological changes in chorea. Am J Dis Child 1941;62:443–5.
- Naidu S, Narasimhachari N. Sydenham's chorea: a possible presynaptic dopaminergic dysfunction initially. *Ann Neurol* 1980;8:445–7.
- Man PL, Chen CH. Mechanism of acupunctural anesthesia. The two-gate control theory. *Dis Nerv Syst* 1972;33:730–5.
- List T, Helkimo M. Tenderness and acupuncture points in the masseter muscle: a correlation study. *J Orofac Pain* 1988 2;23:134–6.

Neuroanatomical basis of acupuncture treatment for some common illnesses

Dr Cheng is to be commended for his article on the neuroanatomical basis of acupuncture.¹ However, Cheng has based his conclusions on the analysis of acupuncture formulae for common illnesses, as prescribed by five acupuncture academies. This approach, using consensus acupoints, is unfortunately vague, since they are surface markings intended as guides for acupuncturists, whereas target receptors are often deeply situated and can vary from person to person. Furthermore, the diagnoses are



Figure 1 Trophedema.

also vague: for example, "low back pain" is a common unspecific complaint that can be derived from many different causes; likewise, sciatica.

In commenting on the Gunn model for pain of radiculopathic origin, he referred to muscle shortening, but neglected the other segmental manifestations of peripheral neuropathy. 'Neuropathy' (ie, altered function in the peripheral nerve, with or without altered structure) includes dysfunction not only in the motor, but also in the sensory and autonomic (vasomotor, pilomotor, sudomotor) nervous systems. He has also not mentioned the electromyographic evidence of neuropathy in tender muscles, including increased insertion activity, polyphasic action potentials and prolongation of motor-unit action potentials. Frequently, a partial interference pattern is obtained despite maximum voluntary effort.² Needle stimulation is generally effective in causing both physical evidence of neuropathy as well as abnormal potentials to resolve.

Trophedema (see figure 1), 3 a significant sign of radiculopathy and smoldering parainflammation, 4 has not been mentioned.

Cheng commented on the "local effect" produced by needling. Physiologically, except when there is total denervation, there can be no local effect as any stimulation immediately creates a spinal reflex: this is the difference between Galvanic and Faradic stimulations.

The many practitioners who use the radiculopathy model depend on consistent physical signs of radiculopathy to identify the offending segment(s), thereby quickly locating neuropathic muscles needing stimulation.

The Gunn rationale for intramuscular stimulation has been reviewed and endorsed by many physiologists. Dr James Henry,

Scientific Director, Chair in Central Pain, Professor of Psychiatry and Behavioral Neurosciences and Anesthesia, McMaster University:

[Intramuscular stimulation] is based on Cannon's hypotheses regarding homeostasis and the dysfunction that arises in a physiological system when this homeostasis is interrupted, such as by denervation or withdrawal of normal neuronal function (spondylosis is a common cause)—when a unit is destroyed in a series of efferent neurons, an increased irritability to chemical agents develops in the isolated structure or structures, the effect being maximal in the part directly denervated. It has been shown that all structures, including their associated spinal reflexes, can develop supersensitivity. In contemporary terms, this would account for the central sensitization that is being so wellcharacterized as accounting for neuropathic pain, as well as some of the peripheral signs that accompany neuropathic pain.5

A reviewer of a report on acute respiratory distress syndrome commented:

I think this report is extremely fresh and thought provoking. It certainly provides an entirely new paradigm for viewing [acute respiratory distress syndrome]. The use of physiologic principles adds strength to the rationale behind the treatment. The end result is remarkable. An "eastern" view of his report could be adding "chi" to deficient meridians. Dr Gunn's use of modern "western" physiologic principles to explain ancient wisdom is part of the vital link that Integrative Physicians strive for. The use of physiologic principles to explain complex phenomenon in a fresh new way should be a cornerstone for Integrative Medicine. This is necessary if Integrative Medicine is to become a respected aspect of Medicine in general. In the end, the results speak for themselves, and fortunately this time the results are good.6

Acupuncture can be considered as a most useful modality for treating spondylosis and the ensuing radiculopathy. In doing so, it can alleviate a wide variety of secondary effects.

C Chan Gunn

Correspondence to: Dr C Gunn, Institute for the Study and Treatment of Pain, 5655 Cambie Street, Lower Floor, Vancouver V5Z 3A4, Canada; istop@istop.org

Competing interests: None declared.

Provenance and peer review: Not commissioned; not externally peer reviewed.

Acupunct Med 2009;**27**:189–190. doi:10.1136/aim.2009.001644

Letters

REFERENCES

- Cheng KJ. Neuroanatomical basis of acupuncture treatment for some common illnesses. Acupunct Med 2009;27:61–4.
- Gunn CC, Milbrandt WE. Tenderness at Motorpoints. J Bone Joint Surg 1976;58-A:815–25.
- Gunn CC. Neuropathic myofascial pain syndromes. Chapter 28. In Loeser JD, Butler SH, Chapman RC, et al. Bonica's management of pain. Third edn. Lippincott Williams and Wilkins, 2001.
- 4. Nature Insight, 2008;454(No7203).
- Henry, JL. Letter to the Editor. Pain Res Manage 2008:13.
- Gunn CC. Acute respiratory distress syndrome successfully treated with low level laser therapy. J Complement Integr Med 2005;2.
- Bradley WG. Disorders of peripheral nerves. Blackwell Scientific Publications, 1974.

Author's response

The omission in my recent paper¹ of other aspects of Dr Gunn's² model for myofascial pain of radiculopathic origin is not meant to be a refutation, rather it is only for the sake of brevity. As a matter of fact, the term "intramuscular stimulation" used numerous times in the paper is borrowed from Dr Gunn, one of the first people to put forward a scientific neuroanatomical model for the mechanism of acupuncture treatment of myofascial pain. Dr Gunn's comments and elaboration of his model of intramuscular stimulation are much appreciated.

Kwokming Cheng

Correspondence to: Dr Kwokming Cheng, North East Medical Services, 128 N Mayfair Ave, Daly City, CA 94015, USA; kicheng@sbcglobal.net

Competing interests: None declared.

Provenance and peer review: Not commissioned; not externally peer reviewed.

Acupunct Med 2009;27:190. doi:10.1136/aim.2009.001743

REFERENCES

- Cheng KJ. Neuroanatomical basis of acupuncture treatment for some common illnesses. Acupunct Med 2009;27:61–4
- 2. Gunn CC. Letter. Acupunct Med 2009. [THIS ISSUE]



Neuroanatomical basis of acupuncture treatment for some common illnesses

C Chan Gunn

Acupunct Med 2009 27: 189-190 doi: 10.1136/aim.2009.001644

Updated information and services can be found at: http://aim.bmj.com/content/27/4/189

These include:

References

This article cites 2 articles, 1 of which you can access for free at: http://aim.bmj.com/content/27/4/189#BIBL

Email alerting service Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to: http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to: http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to: http://group.bmj.com/subscribe/