Trigger points and acupuncture points for pain: correlations and implications

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Abstract

Trigger points associated with myofascial and visceral pains often lie within the areas of referred pain but many are located at a distance from them. Furthermore, brief, intense stimulation of trigger points frequently produces prolonged relief of pain. These properties of trigger points--their widespread distribution and the pain relief produced by stimulating them--resemble those of acupuncture points for the relief of pain. The purpose of this study was to determine the correlation between trigger points and acupuncture points for pain on the basis of two criteria: spatial distribution and the associated pain pattern. A remarkably high degree (71%) of correspondence was found. This close correlation suggests that trigger points and acupuncture points for pain, though discovered independently and labeled differently, represent the same phenomenon and can be explained in terms of the same underlying neural mechanisms. The mechanisms that play a role in the genesis of trigger points and possible underlying neural processes are discussed.

Review

J Altern Complement Med

. 2008 May;14(4):353-9.

doi: 10.1089/acm.2007.0810.

Can classical acupuncture points and trigger points be compared in the

treatment of pain disorders? Birch's analysis revisited

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• PMID: 18576919

• DOI: <u>10.1089/acm.2007.0810</u>

Abstract

Background: A 1977 study by Melzack et al. reported 100% anatomic and 71% clinical pain correspondences of myofascial trigger points and classical acupuncture points in the treatment of pain disorders. A reanalysis of this study's data using different acupuncture resources by Birch a quarter century later concluded that correlating trigger points to classical acupuncture points was not conceptually possible and that the only class of acupuncture points that could were the a shi points. Moreover, Birch concluded that no more than 40% of the acupuncture points examined by Melzack et al. correlated clinically for the treatment of pain (correlation was more like 18%-19%).

Objective: To examine Birch's claims that myofascial trigger points cannot conceptually be compared to classical acupuncture points and that most (at least 60%) of the classical acupuncture points examined by the study of Melzack et al. are not recommended for treating pain conditions, negating their findings of a 71% clinical pain correspondence of trigger points and acupuncture points.

Methods: Acupuncture references and literature were reviewed to examine the validity of the Birch study findings.

Results: Acupuncture references support the conceptual comparison of trigger points to classical acupuncture points in the treatment of pain disorders, and their clinical correspondence in this regard is likely 95% or higher.

Conclusions: Although separated by 2000 years temporally, the acupuncture and myofascial pain traditions have fundamental clinical similarities in the treatment of pain disorders. Myofascial pain data and research may help elucidate the mechanisms of acupuncture's effects.

Complement Ther Med

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. 2016 Jun;26:28-32.

doi: 10.1016/j.ctim.2016.02.013. Epub 2016 Feb 22.

Traditional Chinese Medicine acupuncture and myofascial trigger needling: The same stimulation points?

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• DOI: 10.1016/j.ctim.2016.02.013

Abstract

Background: Acupuncture originates in China, and its effectiveness has been well documented in musculoskeletal pain disorders and other conditions. A widely accepted contemporary medical treatment option for myofascial pain is trigger point needling. Although there are many differences between Traditional Chinese Medicine acupuncture theory and the myofascial trigger point needling framework, it is argued that the stimulation sites for these two needling modalities are similar.

Discussion: In this paper we examined the correspondence between Traditional Chinese Medicine acupoints and myofascial trigger points. Based on this correspondence, we considered exploration of Ah-shi points from four aspects: pain recognition, distal Ah-shi points, Anti-Ah-shi points, and management approaches.

Summary: The extent of correspondence is influenced by definitions of acupoints. Myofascial trigger points are significantly correlated to Traditional Chinese Medicine acupoints, including primary channel acupoints, extra acupoints, and Ah-shi points. Considering the correlation between MTrPs and acupoints and the rarely-studied research area of Ah-shi points, it may be reasonable to incorporate research findings of

myofascial trigger points into further investigations into Ah-shi points. Correspondence between myofascial trigger points and acupoints enhances contemporary understanding of the mechanism of action of acupuncture, and may serve to facilitate increased integration of acupuncture into clinical management.

Keywords: Acupoints; Acupuncture trigger point therapy; Ah-shi points; Dry needling; Intramuscular needling; Myofascial trigger point needling; Myofascial trigger points; Pain; Traditional Chinese Medicine acupuncture.

Review

Chin J Integr Med

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. 2017 Feb;23(2):83-90.

doi: 10.1007/s11655-017-2800-6. Epub 2017 Mar 7.

Evidence and expert opinions: Dry needling versus acupuncture (II): The American Alliance for Professional Acupuncture Safety (AAPAS) White Paper 2016

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PMID: 28265852

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Abstract

In the United States and other Western countries, dry needling has been a topic in academic and legal fields. This White Paper is to provide the authoritative information of dry needling versus acupuncture to academic scholars, healthcare professionals, administrators, policymakers, and the general public by providing the authoritative

evidence and expertise regarding critical issues of dry needling and reaching a consensus. We conclude that Dr. Travell, Dr. Gunn, Dr. Baldry and others who have promoted dry needling by simply rebranding (1) acupuncture as dry needling and (2) acupuncture points as trigger points (dry needling points). Dry needling simply using English biomedical terms (especially using "fascia" hypothesis) in replace of their equivalent Chinese medical terms. Dry needling is an over-simplified version of acupuncture derived from traditional Chinese acupuncture except for emphasis on biomedical language when treating neuromuscularskeletal pain (dry needling promoters redefined it as "myofascial pain"). Trigger points belong to the category of Ashi acupuncture points in traditional Chinese acupuncture, and they are not a new discovery. By applying acupuncture points, dry needling is actually trigger point acupuncture, an invasive therapy (a surgical procedure) instead of manual therapy. Dr. Travell admitted to the general public that dry needling is acupuncture, and acupuncture professionals practice dry needling as acupuncture therapy and there are several criteria in acupuncture profession to locate trigger points as acupuncture points. Among acupuncture schools, dry needling practitioners emphasize acupuncture's local responses while other acupuncturists pay attention to the responses of both local, distal, and whole body responses. For patients' safety, dry needling practitioners should meet standards required for licensed acupuncturists and physicians.

Keywords: acupuncture; acupuncture points; consensus; dry needling; evidence; expertise; invasive therapy; trigger points.

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The Correspondence Between Some Motor Points and Acupuncture Loci

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Maria Varela and Robert Oswald

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A similar correlation was found between motor points and acupoints

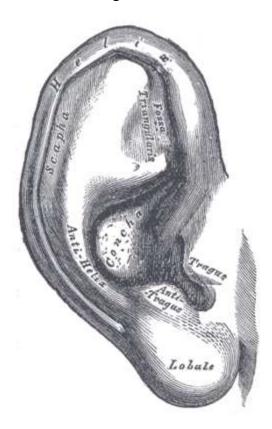
Abstract

A double blind study was conducted to establish the possible correspondence between some motor points and acupuncture loci. THe protocol calls for the acupuncturist marking the first group of volunteers with invisible ink at the acupuncture loci. Then the motor points in the same volunteer are found by electrodiagnosis. The error is made visible by UV illumination. In the second group, the procedure is reversed. A statistical analysis of the error yields the following classes of correspondences: (a) Excellent: 1st Dorsal Interosseus (hand) = LI-4; Abductor Pollicis Brevis = Lu-10; Abductor Minimi Digiti = SI-4; 1st Dorsal Interosseus (foot)=LI-3; Tibialis Anterior = Curious Locus; Orbicularis Oculi = GB-I; Frontalis = GB-14; Splenius Capitis = GB-20; Sternocleidomastoid = LI-18; Semi-Spinalis Capitis = BI-10. (b) Good: Opponens Pollicis = Curious Locus; Peroneus Longus = Curious Locus; Flexior Digitorum Longus = Ki-3 (Ki-6); Trapezius (upper) = GB-21; Rectus Abdominis=Ki-15; Vastus Medialis = Sp-10.

The work was supported by a research grant from the Edward G. Schlieder Education Foundation of Louisiana. The first author was a NIH Research Career Development Awardee (Grant No. GM 40723-04) during the period of this investigation.

Nogier, PFM 1972 Treatise of Auriculotherapy, Maisonneuve, Moulin-les-Metz

Dr. Nogier was a Neurologist. This was the first treatise on Auriculotherapy, which the Chinese then acknowledged and formed their own chart after extensive research

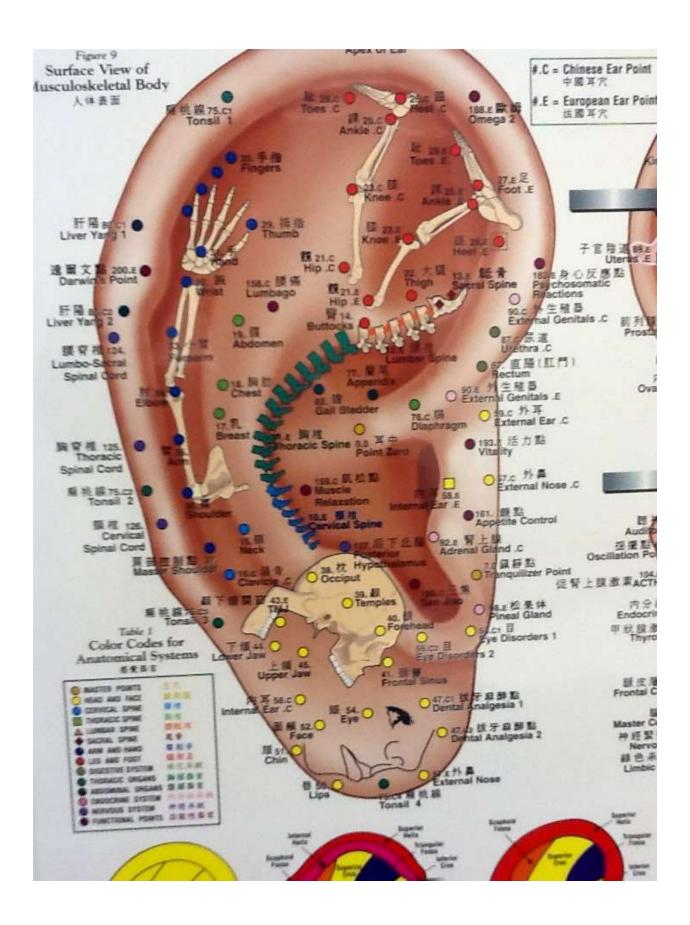


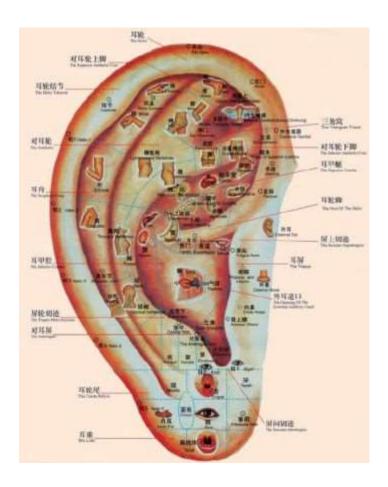
Structure

The diagram shows the shape and location of most of these components:

- <u>antihelix</u> forms a 'Y' shape where the upper parts are:
 - o Superior crus (to the left of the fossa triangularis in the diagram)
 - o Inferior crus (to the right of the fossa triangularis in the diagram)
- Antitragus is below the tragus
- Aperture is the entrance to the ear canal
- Auricular <u>sulcus</u> is the depression behind the ear next to the head
- Concha is the hollow next to the ear canal
- Conchal angle is the angle that the back of the concha makes with the side of the head
- Crus of the helix is just above the tragus
- Cymba conchae is the narrowest end of the concha
- External auditory meatus is the ear canal
- Fossa triangularis is the depression in the fork of the antihelix
- Helix is the folded over outside edge of the ear

- <u>Incisura anterior auris</u>, or intertragic incisure, or intertragal notch, is the space between the *tragus* and *antitragus*
- <u>Lobe</u> (lobule) attached or free according to a classic single-gene <u>dominance</u> relationship
- Scapha, the depression or groove between the helix and the anthelix
- <u>Tragus</u>



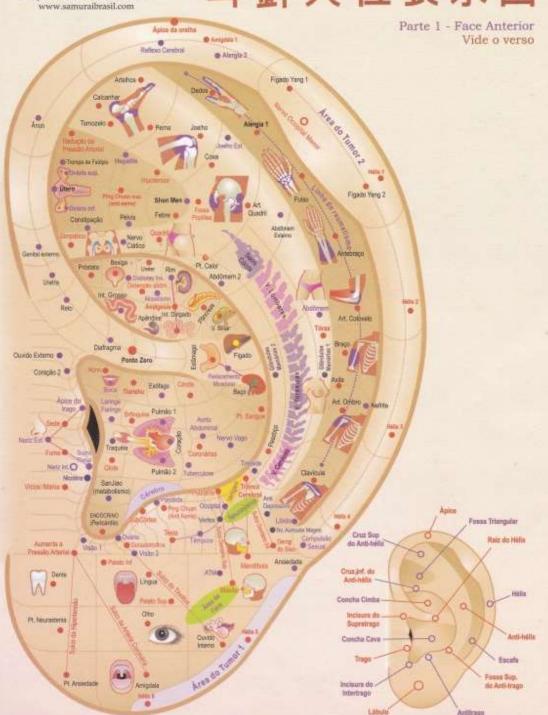


ACUPUNTURA AURICULAR

Prof°. Franco Joji Enomoto.

Acupuntura & TaiJutsu Hakushin

耳針穴位表示図



Pontos da Acupuntura Auricular Japonesa & Chinesa

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Pain

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. 1980 Apr;8(2):217-29.

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An experimental evaluation of auricular diagnosis: the somatotopic mapping or musculoskeletal pain at ear acupuncture points

T D Oleson, R J Kroening, D E Bresler

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• DOI: 10.1016/0304-3959(88)90009-7

Abstract

The present study was designed to experimentally evaluate the claims by French and Chinese acupuncturists that a somatotopic mapping of the body is represented upon the external ear. According to this system of diagnosis, areas of the auricle where there is increased electrical conductivity and heightened tenderness to touch correspond to specific areas of the body where there is some pathological condition. The hypothetical map of different bodily regions appears on the external ear as an inverted fetus, with the head represented towards the lower lobule, the hands and feet represented at the uppermost portion of the auricle, and the body in between. Forty patients were medically examined to determine areas of their body where there was musculoskeletal pain. Each patient was then draped with a sheet to conceal any visible physical problems. The physician conducting the auricular diagnosis had no prior knowledge of the patient's medical condition, but simply examined the patient's ear for areas of elevated skin conductivity or tenderness. The concordance between the established medical diagnosis and the auricular diagnoses was 75.2%. Both quantified readings of electrical current flow and subjective ratings of dermal tenderness were statistically significant in arriving at accurate diagnoses. These results thus support the hypothesis

that there is a somatotopoic organization of the body represented upon the human auricle.

An important, unexpected observation was the spontaneous report in about a third of the patients that they felt warmth, 'glowing feelings' and other sensations in distant parts of the body when the ear was stimulated. These referred sensations indicate that inputs from the ear project to central integrating structures from the ear project to central integrating structures which may play a role in the important clinical phenomenon of a referred sensation. These referred sensations, together with strong placebo suggestion, may be the basis of reports of pain relief, though the effect is no stronger than placebo stimulation alone. The fact that such sensations occur, however, is of special interest since they are further evidence of complex integrating mechanisms in the central nervous system which receive inputs from a wide range of sources and may be the basis of sensation referred to distant structures.