

## Exploring the connection between meridians and fascia.



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**A**cupressure, like acupuncture, is an energy medicine that influences the flow of Qi in the body. It utilises acupoints that lie along the meridians or channels of Qi and it is by influencing these channels that changes in the body are affected. There are many ways of influencing points: by inserting needles (acupuncture), applying pressure by the fingers or tools (acupressure), conveying heat (moxibustion), using microcurrents of electricity (electro-acupuncture), and more recently, by targeting the points with lasers. Some practitioners use crystals, flower essences and homeopathic remedies to influence the points.

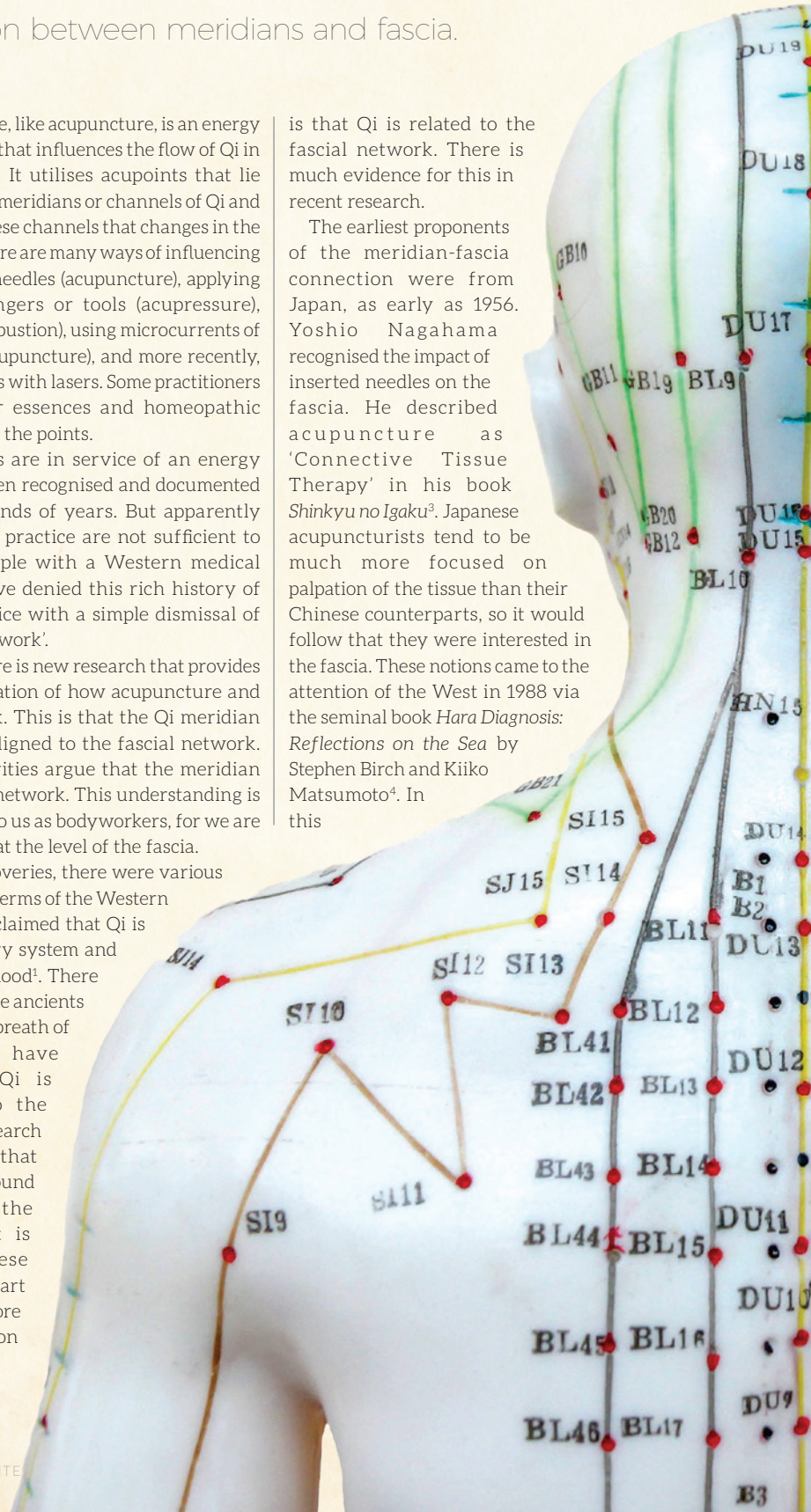
All these methods are in service of an energy medicine that has been recognised and documented in China for thousands of years. But apparently millennia of clinical practice are not sufficient to persuade many people with a Western medical perspective who have denied this rich history of Asian medical practice with a simple dismissal of 'acupuncture doesn't work'.

Now, however, there is new research that provides a compelling explanation of how acupuncture and acupressure do work. This is that the Qi meridian network is closely aligned to the fascial network. Indeed, some authorities argue that the meridian system is the fascial network. This understanding is of great significance to us as bodyworkers, for we are continually working at the level of the fascia.

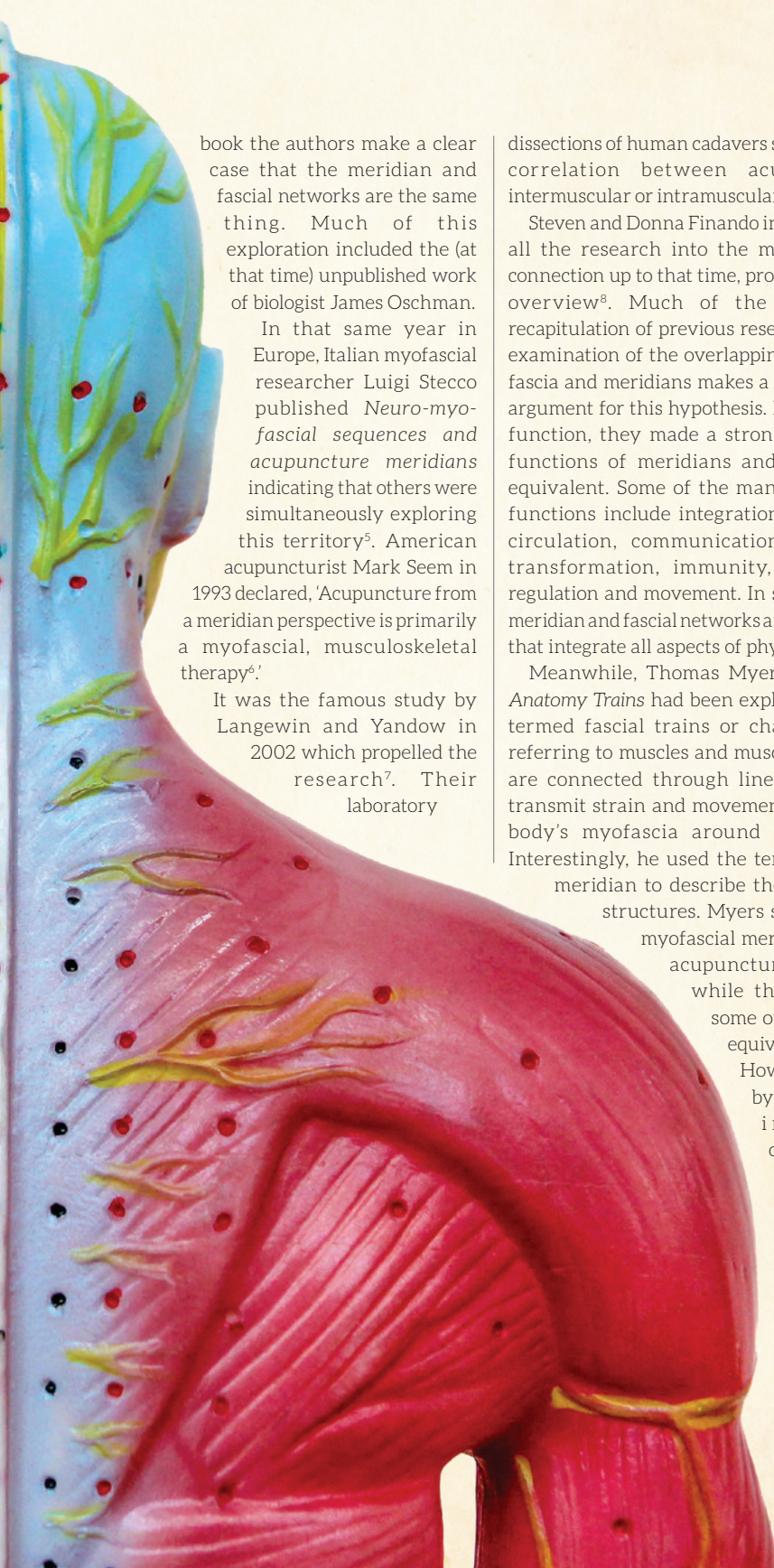
Prior to these discoveries, there were various explanations of Qi in terms of the Western medical view. Some claimed that Qi is part of the respiratory system and the oxygenation of blood<sup>1</sup>. There is validity to this as the ancients referred to Qi as 'the breath of Heaven'. Others have maintained that Qi is directly related to the nervous system. Research has indeed shown that most acupoints are found at places where the nerves branch<sup>2</sup>. It is apparent that these explanations form a part of the story. But a more compelling correlation

is that Qi is related to the fascial network. There is much evidence for this in recent research.

The earliest proponents of the meridian-fascia connection were from Japan, as early as 1956. Yoshio Nagahama recognised the impact of inserted needles on the fascia. He described acupuncture as 'Connective Tissue Therapy' in his book *Shinkyu no Igaku*<sup>3</sup>. Japanese acupuncturists tend to be much more focused on palpation of the tissue than their Chinese counterparts, so it would follow that they were interested in the fascia. These notions came to the attention of the West in 1988 via the seminal book *Hara Diagnosis: Reflections on the Sea* by Stephen Birch and Kiiko Matsumoto<sup>4</sup>. In this







book the authors make a clear case that the meridian and fascial networks are the same thing. Much of this exploration included the (at that time) unpublished work of biologist James Oschman.

In that same year in Europe, Italian myofascial researcher Luigi Stecco published *Neuro-myofascial sequences and acupuncture meridians* indicating that others were simultaneously exploring this territory<sup>5</sup>. American acupuncturist Mark Seem in 1993 declared, 'Acupuncture from a meridian perspective is primarily a myofascial, musculoskeletal therapy<sup>6</sup>.'

It was the famous study by Langewin and Yandow in 2002 which propelled the research<sup>7</sup>. Their laboratory

dissections of human cadavers showed an 80% correlation between acupoints and intermuscular or intramuscular fascial planes.

Steven and Donna Finando in 2011 compiled all the research into the meridian-fascia connection up to that time, providing a useful overview<sup>8</sup>. Much of the article is a recapitulation of previous research, but their examination of the overlapping functions of fascia and meridians makes a more complete argument for this hypothesis. By focusing on function, they made a strong case for the functions of meridians and fascia being equivalent. Some of the many overlapping functions include integration, metabolism, circulation, communication, protection, transformation, immunity, temperature regulation and movement. In short, both the meridian and fascial networks are metasystems that integrate all aspects of physiology.

Meanwhile, Thomas Myers in his book *Anatomy Trains* had been exploring what he termed fascial trains or chains<sup>9</sup>. He was referring to muscles and muscle groups that are connected through lines of pull that transmit strain and movement through the body's myofascia around the skeleton. Interestingly, he used the term myofascial meridian to describe these connected structures. Myers stated that the myofascial meridians and the acupuncture meridians, while they may have some overlap, are not equivalent<sup>10</sup>.

However, a study by Peter Dorsher in 2009 compared Myers' myofascial meridians to acupuncture meridians and concluded that in 8 of 9 comparisons there was

'substantial or complete overlap' while the 9th (spiral line) was essentially a combination of two meridians<sup>11</sup>.

James Oschman, whose early investigations influenced Matsumoto and Birch's work mentioned above, published his latest findings in a 2016 book *Energy Medicine, The Scientific Basis* 2nd ed<sup>12</sup>. He draws together the most recent scientific research into the nature of meridians and their relationship to fascia. In a fascinating chapter entitled 'Acupuncture, Acupressure, Shiatsu and Related Therapies', Oschman describes the studies by Joie Jones and others using medical imaging and electron microscopy into the nature of acupoints<sup>13</sup>. Remarkably, the researchers were able to identify individual points as fascial structures, and that these points can change size, shape and location over time. When the acupoint bladder 67 on the little toe was influenced, the fascial structure of the point began to rotate. They discovered that the upper part of the structure rotated in one direction while the lower part rotated in the opposite direction, suggesting that different fascial planes were being affected. Further, they were able to ascertain that points further along the meridian (bladder 66 to 63) rotated in sequence at a delay of several seconds for each point. This is an important discovery, for it not only shows that the points exist, but that the points along the meridians are connected.

### **What are the implications of this research for massage therapists, remedial massage therapists and myotherapists?**

The sensations that the acupressure practitioner perceives when Qi moves in an acupoint on the client's body include a spreading warmth, tingling, softening of the tissue, and a feeling as of a wave moving through the point. These sensations are the same as those that a myofascial practitioner perceives when using a myofascial hold. Furthermore, the time that it takes for these changes to occur are the same for both techniques, about two or three minutes. This is because these two modalities are working with





the same structures, the same system.

My primary modality is acupressure. But if a point is very blocked and is not responding to treatment, I will engage a myofascial hold of the area until I feel these sensations. The point will then be more responsive to the acupressure. The reverse also applies. If a myofascial hold is not responding, choosing significant acupoints in the area for acupressure can open the broader area.

Knowledge of the meridian pathways is of great value to the myotherapist. For example, if the lumbar region is congested and slow to respond to myofascial techniques, points on the bladder meridian in the hamstrings, knee, calf, ankle and foot can help to release the lumbar tension patterns. Similarly, head tension and headaches that relate to stagnation in the gallbladder meridian, might be treated with points lower down the channel in the pelvis, lateral leg and foot.

Holding pairs of points that relate to each other provides a powerful, synergistic effect because the points help to release each other. Often these point pairs are on the same primary meridian but they could be related in other ways, such as an anterior/posterior relationship, or via the many other kinds of channels in the complex web that is the Qi body.

Massage therapists, remedial massage therapists and myotherapists who are interested in exploring this method are

encouraged to use meridian charts to investigate how an area of obvious tension may be related to another area of blockage elsewhere along the meridian. A point location book that I recommend to my students is Chris Jarmey's *A Practical Guide to Acupoints*<sup>13</sup>. Jarmey was a British shiatsu practitioner, and as a bodyworker, provides guidance for the manual therapist as well as the acupuncturist in treating points.

Point work can be integrated into myofascial work in creative ways. When holding a myofascial stretch, place the hands over known acupoints and focus your attention there. While doing an arm unwinding, place your fingers in such a way as to contact points of channels that are congested. When massaging the back, take note of areas of particular tightness and hold bladder points in those areas while gliding the other hand down the channel to disperse stagnation.

Knowledge of the meridian network provides a new dimension when working on the muscular and fascial systems. We can utilise the modern understanding of fascia while taking advantage of thousands of years of clinical study that is Chinese medicine.

#### REFERENCES

1. Zhong L, Huang B, Chen J, Oxygen metabolism and meridian qi, National Library of Medicine 2012. <https://pubmed.ncbi.nlm.nih.gov/22493934/>
2. Michael Corradino, 'Acupuncture and Neurology', Qiological Podcast 146, May 19 2020. <https://www.qiological.com/podcasts/>

3. Quoted in Birch S & Matsumoto, K Hara Diagnosis: Reflections on the Sea, Paradigm 1988, p. 208.

4. *ibid*.

5. Stecco L, Sequenze neuro-mio-fasciali e meridiani agopunturei, Dal Molin 1988

6. Seem M, A New American Acupuncture 1993, p. 17.

7. Langevin H & Yandow J, 'Relationship of Acupuncture Points and Meridians to Connective Tissue Planes' in The Anatomical Record 2002, 269, p. 257-265.

8. Finando D & S, 'Fascia and the mechanism of acupuncture' in Journal of Bodywork and Movement Therapies 2011, 15, p. 168-176.

9. Myers T, Anatomy Trains, Churchill Livingstone 2001

10. *ibid* 5.

11. Dorsher P, 'Myofascial Meridians as Anatomical Evidence of Acupuncture Channels' in Medical Acupuncture Vol 21 Number 2, Nov 2009

12. Oschman JL, Energy Medicine 2nd ed. Elsevier 2016

13. *ibid* p. 221

14. Jarmey C & Bouratinos I, A Practical Guide to Acupoints 2nd ed Lotus 2018

John Kirkwood has been practising and teaching acupressure for 37 years. Originally trained in Jin Shin Do Bodymind Acupressure in California, he went on to study with a range of teachers of bodywork and acupuncture before returning to Australia to found The Acupressure Centre in 2006. He now teaches his own style of Five Element Acupressure in six states while maintaining a clinic in the Adelaide Hills. He is the author of two books published by Singing Dragon Press: *The Way of the Five Elements* and *The Way of the Five Seasons*. This year John is presenting *Massage & Myotherapy Australia's National Seminar Series* in seven Australian cities with a seminar entitled *Acupressure for Head, Neck and Shoulder Pain Patterns*. John will be presenting 'Acupressure for Lower Back and Leg Pain' at the 2022 *Massage & Myotherapy Australia National Conference* in May.