

Vital Medicine – Dr. Keith Scott-Mumby

THE NATURE OF MERIDIANS

In February 1937 the prestigious British Medical journal carried an article by Sir Thomas Lewis describing a hitherto unknown network of cutaneous nerves.' He called it the 'nocifensor system' and deduced, from his experiments, that it was an independent cutaneous nerve system, unrelated to known pathways and unconnected to the autonomic nervous system. It was composed, not of nerve fibres, but a network of thin lines, similar to meridians.

In 1985 Pierre de Vernejoul at the University of Paris carried out a definitive and much-quoted experiment. He used a radioactive marker, technetium 99m, which he injected into subjects at classic acupuncture points. He then used gamma camera imaging to track the subsequent movement of the isotope. He was able to show that the tracer migrated along the classic meridian lines, travelling quite quickly: a distance of 30 cm in 4-6 minutes. [P. de Vernejoul *et al.*, 'Etude Des Meridiens D'Acupuncture par les Traceurs Radioactifs', *Bull. Acad. Natle. Med.* Vol. 169 (22nd October 1985): 1071-5.] As a control he made a number of random injections into the skin (not at acupuncture points) and also injected the tracer directly into veins and lymphatic channels. There was no significant migration of the tracer at other sites than an acupuncture point. What this simple but helpful study proved beyond doubt is that meridians are definitely real 'vessels' but they conform to no macroscopic anatomical structures whatever.

So if meridians are not nerve-conducting channels or other anatomically visible vessels, what are they? How is the energy conducted?

The answer is almost certainly via the collagen fibres of the connective tissues. As the name suggests, connective tissue fills in between the main organs and layers. There is thus a continuum of liquid crystalline water-bound collagen fibres running throughout the whole body. Recent studies have shown that these are not just mechanical fibres but that they have dielectric and conductive properties which make them sensitive to pressure, pH, local ionic composition and surrounding electromagnetic fields. In fact these collagen fibres, like a network mesh of fine electrical fibrils, form the ideal conductor medium in which many of the electro-magnetic phenomena described in this book may take place.

Even just disturbing and stressing these fibres gives off an electrical potential. You will notice when you have electro-acupuncture, as described in the Chapter 4, that the practitioner has the knack of 'massaging' the point he or she is testing, to wake it up and release this electrical potential in order to make a successful reading.

Remarkably, and very conveniently for us, this network of semi-conductor material can enforce a one-direction flow on the electrical current, acting rather like an electrical circuit with one-way gates called diodes. Once again, scientific testing has validated ancient wisdom and shown that the acupuncture meridians flow in one direction only - that which was described by the original *Nei Ching* text.