

Are there special routes for signals and drugs to reach every organ and cell after acupuncture stimuli?

Traditional Oriental medicine has 5000 years of history. The meridian system is lying on the base of medical treatment using oriental medicine techniques as different acupuncture stimuli. But, through all Oriental medicine history, visualizing of meridian system's routes, which is a basic framework for acupuncture treatment, has not yet been clearly defined anatomically in the human's or in the animal's body. As all other known until now routes and mechanisms in the body as nervous, vascular, lymphatic, hormonal, are well known there is obvious necessary to find out anatomical organs and physiological mechanisms which are responsible to the whole process of Oriental medicine treatment. Under the hypothesis that the acupuncture points are physically connected to the internal organs, contrast agents for magnetic resonance imaging, radioisotopes, and etc. materials have been used previously as tracers for the meridians for direct attempts to visualize the network of the entire meridian system but without success until now. In this study, we designed for the first time completely new types of experiments for meridian studies injecting some acupoints with liquid polymer which harden after several minutes. These acupuncture points are on the two bladder meridian lines, as shown in Fig. 1. Instead of previously used substances we injected liquid plastic and applied modified corrosion casting methodology making the body tissues transparent in order to visualize indurate plastic as routes of meridian system. Blue and red liquid polymers were injected in a zigzag series at the acupuncture points. Non-acupuncture points were also chosen as the control points and are marked in the figure with black (Fig.1).

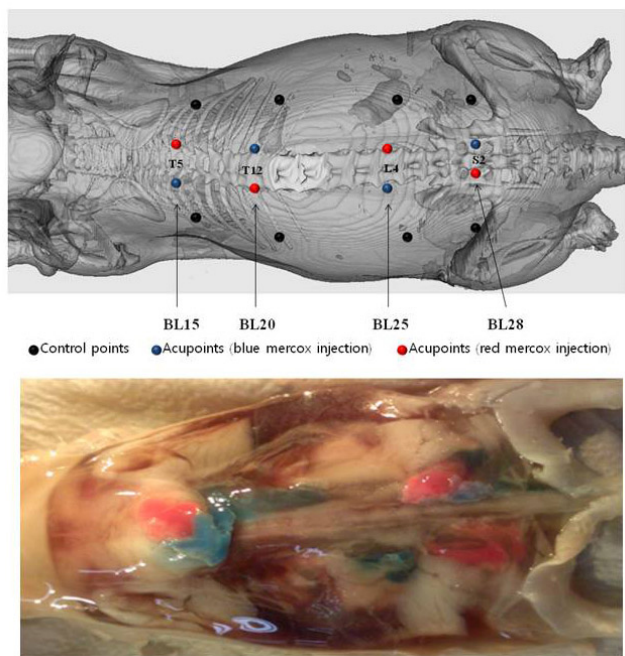


Fig. 1. Positions of acupoints on the mouse for injection of Mercox (above). Dorsal views of transparent body of the mouse after partial macerations and peeling off the skin: acupuncture point

injections (below).

We tested if this liquid polymer will distribute throughout the vascular or lymphatic vessels according to excellently vascularization of acupuncture points or will have different ways of distribution. Confirming our hypothesis, the liquid polymer promptly has own routs, different from nervous, vascular and lymphatic routes, distributing to the whole body, including deeply inside organs as heart, liver, spleen, kidney, adrenal gland, pancreas, lung, spinal-cord covers. Plastic particles is marked with different colors arrows (Fig. 2). Distribution of the plastic is according to the special characteristics of the plastic and its relation to some cells of supporting tissues as fat cells. In case of acupuncture-point injection, long tracks along the spine from the neck to the upper part of tail, as Bladder meridians are known, were observed. The polymer's speed reaching from the skin to the organ's parenchyma tissue is outstanding, despite any of the systems are not functioned in this moment because we used dead animals. That could mean, there are a special conditions and structures (as the newly rediscovered anatomical system Primo Vascular System), which permit the penetration of the polymer from skin to the organs' parenchyma for the very short time just a few minutes after the animal dead. Tracing of liquid plastic were mainly through supporting tissues as adipose tissue, the tissue between the muscles and the covers of body cavities and covers of the organs. The most surprising finding was that the polymer is found inside of the organs but reaching to the organ's cells without tracers from surface of the organ to inside the organ's tissue. We have established the existence of small colored particles from indurate plastic into all of investigated organs. When we injected one acupuncture point or non-acupuncture points plastic reached neither the deep structures of the skin nor the supporting tissues surrounding the organs and cavities. Impossibility to activate meridian system and accomplish health effect only with using one acupoint stimuli or if try to activate meridian system out of acupuncture points is confirmed by our experiment as we did not established polymer distribution after one acupoint plastic injection or out of acupuncture point injections.

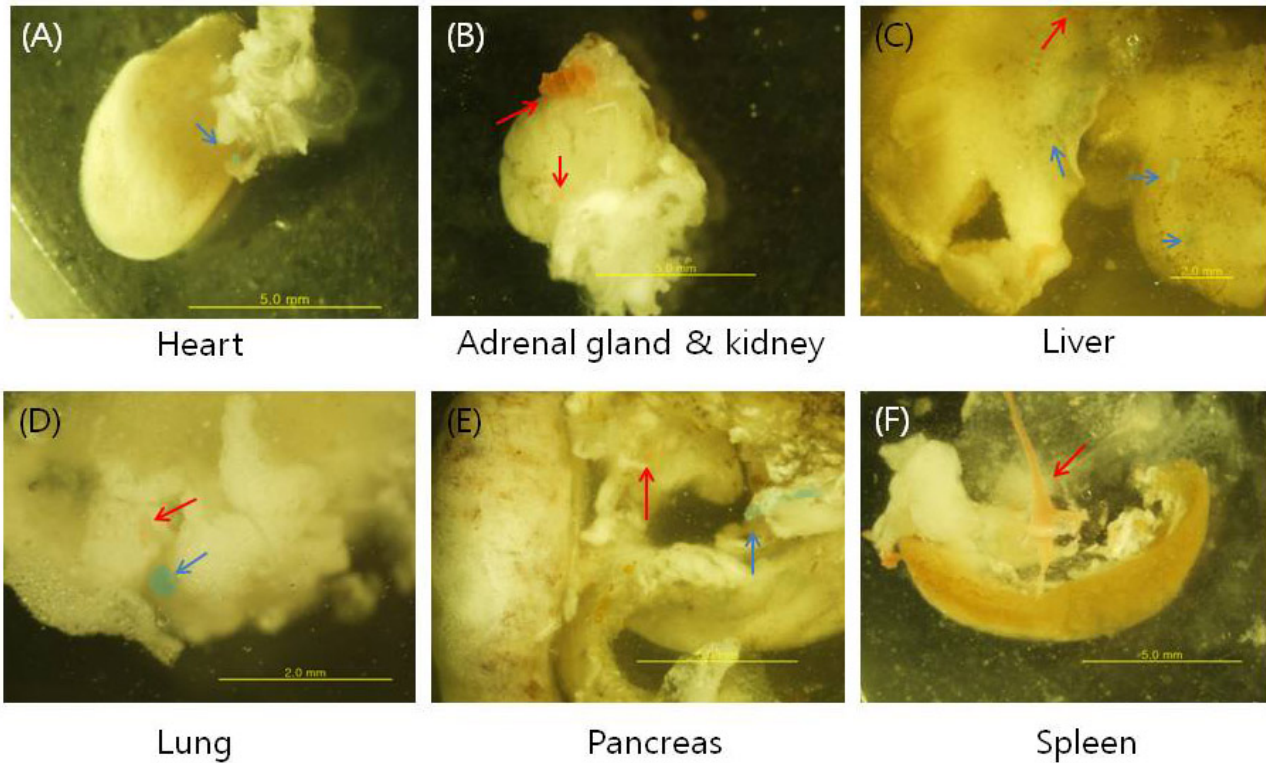


Fig. 2. Red and blue Mercox particles marked with arrows found in various organs.

We can conclude, there are a special conditions and structures which permit the penetration of the tracer from skin to the organs' parenchyma for the very short time, just a few minutes after the animal dead. As newly rediscovered for the science anatomical system Primo Vascular System (PVS) is hide most frequently into same supporting tissues reaching to the every organ and every single cell we suggested that the routes of liquid polymer we used trough out the skin injection follow not only the meridians but the PVS distribution as their anatomical organs. These findings proofs that PVS and meridians have unbreakable relations, as supporting organ's tissues and hiding inside them PVS are the anatomic base of the meridian system's routs delivering signals and drugs to the parenchyma of the organs. We have explained distribution of the plastic through supporting tissues due to their characteristics but we cannot explain how the plastic particles penetrated deeply inside cells of the all organs we investigate without any trace.

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Publication

[Tracing Mercox Injected at Acupuncture Points Under the Protocol of Partial Body Macerations in Mice.](#)

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