

Molecular Basis of Meridians

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One of the most intriguing puzzles in Chinese medicine is that nobody has yet found any trace of meridians, despite the incredible usefulness of meridians in diagnosis and treatment of diseases. We favor the explanation that meridians are made up of aligned stable water clusters that have an electric dipole moment, with a positive charge on one end and a negative charge on the other. Since these stable water clusters are made up of only water molecules, it is impossible to find them among ordinary water in the tissue.

The properties of stable water clusters have been studied by many researchers (see "[Proceedings of the First International Symposium on Physical, Chemical and Biological Properties of Stable Water Clusters](#)" World Scientific, 1997). In particular, [Professor Benjamin Bonavida](#) at the University of California, Los Angeles, has shown that water, which contains stable water clusters, significantly improves the immune ability of white blood cells.

If meridians are made up of water clusters, they will conduct electricity better because water conducts electricity better than ordinary tissues in the human body. Hence, it fits the experimental data that body-surface conductivity is found to be higher on acupoints than on other points of the skin. If our theory is correct, meridians will also act like tubes with water in them. Water conducts sound along the tube easily without diffusing. Furthermore, the negative and positive charges of stable water clusters fits the concept of *yin* and *yang*.

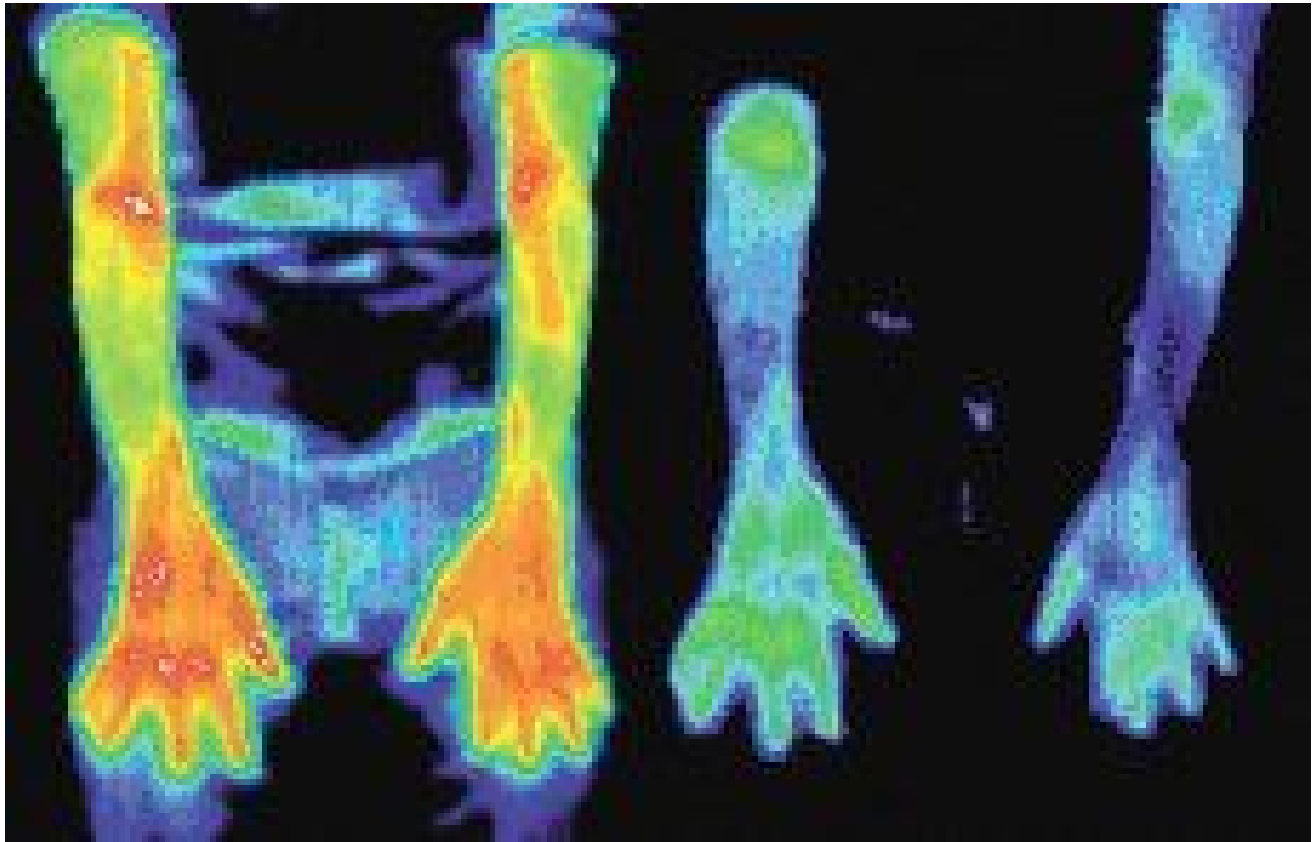


Fig. 1: The infrared images of a woman with arthritis before (Fig. 1a) and after (Fig. 1b) drinking meridian water are shown. The maximum temperatures of the right and left hand before were 44.8C and 44.5C. The maximum temperatures after drinking meridian water dropped to 43.9C and 42.4C.

To design an experiment to test our theory, we need a nanoprobe, which can detect negative and positive charges in the tens and hundreds of nanometers (nm). The nanoprobe is inserted into the acupoint to probe the electric potential inside. Presumably, it will discover a negative charge at some precise point. As the nanoprobe is inserted further into the acupoint about the size of stable water clusters (30 nm to micron size), positive charge will be found. If the nanoprobe is inserted into other points of skin where there is no known acupoint, no separation of positive and negative charges will be found in the cluster size.

Currently we can produce a large quantity of water that contains a significant number of stable water clusters, which we will call *meridian water*. We took infrared images of the volunteers before and after they drink the meridian water. Most medicines can only help people with specific diseases. Meridian water is different. When meridians are blocked or damaged, the stable water clusters will repair them.

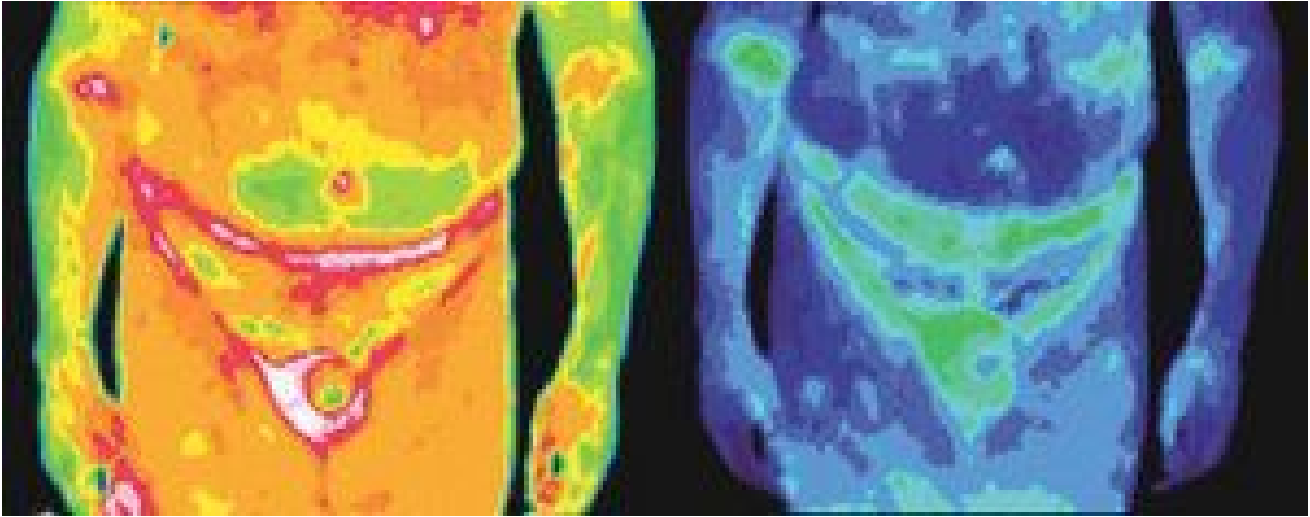


Fig. 2: The infrared images of a male with prostate cancer taken before (Fig. 2a) and 30 minutes after (Fig. 2b) drinking meridian water. The maximum temperatures of the genital area before and after were 41.4C and 39.9C, respectively.

The first subject was a woman in her 60s. She had arthritis for more than 10 years. She had tried many different approaches in the past, but hasn't had any relief so far. We took the infrared images of her hands, before she drank the meridian water (Fig. 1a) and then 30 minutes afterward (Fig. 1b). White was the hottest, then red, yellow, green, blue and black as the coldest. Her hands were red with some white spots before drinking. After, the color turned green and blue. Our interpretation was that inflammation was reduced by the meridian water.



Fig. 3 The infrared images of the face and shoulder of a male with genital herpes taken before (Fig. 3a) and 30 minute after (Fig. 3b) drinking meridian water. The drop in maximum temperature of the face and shoulder was 2.1C.

The second subject was a male in his 60s who suffered from prostate cancer. Infrared images can only show that the genital area in front of the prostate was heated. They cannot tell if there is any cancer. Nevertheless, the maximum temperature in the genital area was found to be 41.4C, which is much hotter than the internal temperature of the human body (37C). However, the temperature does not come down to 37C, indicating the healing effect of the meridian water was moderate in 30 minutes

time. The genital area was shown in white. It became green, which indicated improvement.

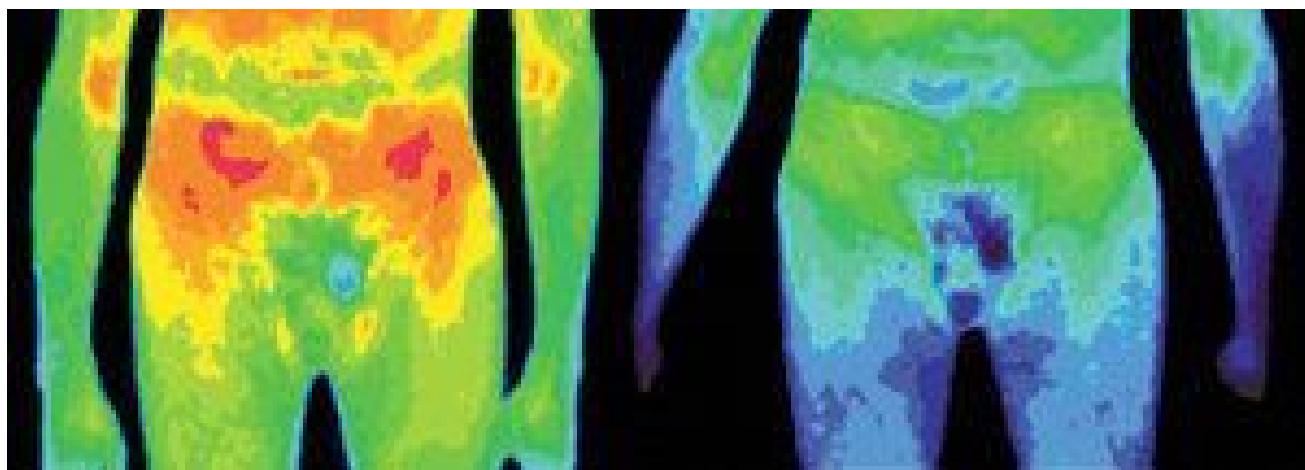


Fig. 4 The infrared images of the lower frontal surface of the same subject taken before (Fig. 4a) and 30 minute after (Fig. 4b) drinking meridian water. The drop in maximum temperature of the lower frontal surface was 2C.

The third subject was a male in his 40s. He appeared to be very healthy, thin and athletic. His only problem was that he worked too hard and was under great stress. Fig. 3 shows the infrared images of his face and upper chest area. The white and red areas on this face and upper chest most likely come from stress. After drinking the meridian water, the picture turns almost completely green, indicating almost perfect health. Fig. 4 shows his lower front part. He had genital herpes, which had outbreaks every few months when he was under great stress. Before drinking the meridian water, there was no particular symptom in the genital area. Thirty minutes later, it was almost uniformly green.

Is there any difference if the subjects drank ordinary tap water instead of meridian water. The answer was yes, for the few cases we studied in depth. The next question is: Does the effect last? From our study on a small number of subjects, the answer is that the pattern of body surface temperature will slowly rise back to its original pattern. It is necessary to keep drinking meridian water. The long-term effect of drinking meridian water remains to be studied. Anyone who wants to participate in long-term studies, please visit our Web site: www.thescienceofqigong.com.

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