How acupuncture works

The intelligent tissue model of how acupuncture works

Central to the model is the notion that all bodily tissue interprets organ information conveyed on electromagnetic waves (p.333).

This ability in the tissue was probably present throughout the body’s evolution. Assuming that (just as it does today) all bodily tissue always possessed the ability to interpret organ information conveyed on electromagnetic waves, then as soon as the first rudimentary digestive organs evolved, the body shape and the sense organs may have gradually evolved in response to organ information. In other words, an animal’s body may have evolved to serve its abdominal organs. There is much evidence in Chinese medicine to support this notion—in each of the sense organs being associated with a particular abdominal organ (p.88) and also in the paths of the meridians. Each path tends to reflect the function of the associated organ (pp.351-353), and the layout of the meridians on the limbs exactly corresponds with the functional relationships between the organs (pp.345-351).

This suggests that throughout evolution, all bodily tissue was able to interpret organ information, and this caused the shape of the limbs, head and torso to form in response to this information. If this was the case, this would mean that the tissue that now correlates with the path of a particular meridian (say, the heart meridian), formed in that particular position to reflect the function of the related organ (the heart) and also its relationships with the other organs. This would mean that today, this bodily tissue that is situated along that meridian (in this case, the heart meridian), evolved to “listen to” and respond to the heart (its normal function, its physical condition, and its particular types of stress), so that this situation has now resulted in a body-shaped filtering system for organ information, as follows.

The information from all the organs is combined into a single, complex wave; but along each meridian, only the information from a particular organ is now responded to by the local tissue along that meridian. And it is this (in effect) filtering system that now produces the meridians. The tissue along a particular meridian, emphasizes the organ information
from the related organ, so that when the organ is stressed in any way, this produces anomalies at various locations along its related meridian. At the key acupoints, the tissue would become tender when pressed; or if the organ function were weak, the skin at its key acupoints may feel cold to the touch; if the organ had “heat” (in Chinese medicine terms), the skin at its key acupoints may become reddened, or even feel warm to the touch. Also boils (acne), stiff or painful joints, or even shooting pains along a meridian may be produced by this same mechanism.

When the tissue at any of these key acupoints is needled, this appears to relax the tissue (i.e. causes it to shed its borrowed stress and hence return to normal function), and this pattern of the tissue returning to normal function, is also communicated body-wide on the same electromagnetic waves. The wave pattern of this transformation would be specific to a particular organ (the organ that caused the anomaly at the needled acupoint), and when this pattern (of the tissue shedding the stress that was borrowed from that particular organ) reaches that organ, this appears to persuade the organ to follow this same pattern and it also returns to normal function.

Hence, the meridians, rather than consisting of dedicated anatomical structures, are simply distal tracts of normal tissue that are affected by organ function (p.355).

*This explains all acupuncture-related phenomena*

In this way, this simple fact of bodily tissue interpreting organ information conveyed on electromagnetic waves, is able to explain every acupuncture-related phenomena familiar to Chinese medicine. Not only does it explain what meridians are, how they are produced, and how acupuncture works, but it is also able to explain how Chinese medicine organ pulses are produced (p.302), how organ information is able to radiate between people, so that we can feel when other people are upset, or even sometimes pick up their symptoms (pp.363-369). And the common phenomena listed on pages 52-53 are now explained as follows.

When an acupoint is needled successfully, the sensation felt at the acupoint by the patient (the so called “de chi” sensation) occurs when the related organ starts to correct its function and, in effect, release its stress. This process of the organ function transforming back to normal is reflected at the needled acupoint (due to the local tissue interpreting this new organ information), and this is what produces the sensation felt by the patient. This explains why, when the needle is first inserted, there is sometimes no sensation. But then, when the needle is stimulated, there reaches a point when the appropriate local tissue relaxes, and this causes the related organ to release its stress, which process is reflected at the acupoint. And this also explains why the degree of the sensation is proportional to the
degree of stress in the organ. When that stress is high (and consequently the acupoint was tender when pressed), the needle sensation often occurs the moment the needle is inserted, with no stimulation. On the other hand, when an organ’s function is already normal, or near to normal, and one of its key acupoints is needled, it can be very difficult to obtain a needle sensation. This is because there is no great change of function to be induced in the organ, therefore a needling sensation (which is the reflection of a change in organ function) cannot be obtained.

After an acupoint is needled, the patient may sometimes feel a tingling sensation propagating along the meridian, or at other key acupoints related to the same organ. Again, this sensation simply represents the changing state of the organ function. After it is stimulated by acupuncture, the organ would begin to return to normal function; in other words, it would gradually shed its stress. When this process is reflected in the tissue near the needled acupoint (due to the local tissue interpreting this new organ information), this produces a tingling sensation that moves a little way further along the meridian, in a yin-to-yang direction. That is, the stress moves to a more superficial level of the organ’s function (i.e. a more yang level), which movement is reflected at a gradually more and more yang location along the meridian (on a limb meridian, this means that it moves towards the tip of the limb). The sensation is usually only felt moving along a short section of the meridian, which reflects the fact that the majority of the stress only has a short “distance” to move to be completely shed by the organ.

In this same situation, a tingling is sometimes felt at a related acupoint. For example, if one of the back shu acupoints for the kidneys is needled (Bladder-23 Shenshu), then the patient may feel a tingling at Kidney-3 (Taixi), near their heel. Such a key acupoint for that organ (Kidney-3) would reflect any major functional improvement in the organ. Therefore, when such an improvement is induced (in this case, by needling Bladder-23), a sensitive patient may feel a tingling at this related acupoint, Kidney-3, which is simply reflecting the fact that the organ’s function is improving. This situation is reflected at the distal acupoint, even though that acupoint was not needled, which confirms that the tingling sensation was not produced directly by the needling, but by the local tissue at the acupoint interpreting the organ’s new information (which is instantly transmitted body-wide on electromagnetic waves—p.366).

When the skin at an acupoint or meridian is colder than the surrounding skin, this coolness (or absence of normal warmth) can also be explained by the local tissue interpreting organ information. Because an organ’s function is poor, the reflection of this state in the local tissue at its key acupoints and meridian may cause the temperature of the
skin in those locations to be correspondingly reduced. And when the organ’s function is corrected by acupuncture, the skin’s temperature at its related acupoints and meridian would also return to normal, which can even cause the patient to be aware of that returning warmth along the meridian.

The “electric shock” sensation
There is another occasional sensation, not mentioned above, which feels akin to an electric shock shooting along a meridian. This cannot be accounted for by any notion of chi, whose theoretical speed is far too slow for it to be able to cause such a sensation. However, the sensation can be accounted for by the intelligent tissue model.

When an acupoint is strongly stimulated and the patient feels a sensation akin to an electric shock shooting along an entire meridian, this may reflect the fact that the organ was shocked into suddenly changing its function in a significant way, rather than this happening gradually. This state would be “instantly” reflected at every location along its related meridian (theoretically, an electromagnetic wave propagates through human connective tissue 670 times faster than nerve impulses travel—p.366). But it would seem to the patient that an “electric shock” had rapidly travelled along the meridian, which could be accounted for as follows.

Even though the local tissue (including the sensory nerves) at every location along the meridian had simultaneously reflected the organ’s suddenly changed function, the activation of each sensory nerve still needed to be communicated back to the brain for the patient to become aware of the sensation. And the further from the brain each nerve was, the longer this communication would take, which would give the impression that the nerves were firing in a long sequence, starting with those nearest to the brain and progressing along the meridian. In fact, such a sensation would seem to travel along the meridian at the rate that nerve impulses travel in the body (at around 100 metres per second). But this does not mean that a substance of any sort (including electricity) had travelled along the meridian, even though this is the impression the patient would be left with.

Experimental validation of the intelligent tissue model
Though the intelligent tissue model is still regarded as an hypothesis, its key aspect has now been validated experimentally. My own published experiments have demonstrated that the tissue at key acupoints physically changes to reflect states in the related organ, and does this in real time, with no discernible delay (pp.322-333).