Acupuncture Brain Activity

One of the main stumbling blocks to greater acceptance for acupuncture in the West is the lack of understanding of how it works. This began to change with the publication of a seminal report by researchers at the Harvard Medical School.

The researchers used functional magnetic resonance imaging (fMRI) to investigate how acupuncture affects brain activity in normal subjects.

Thirteen healthy volunteers (ages 27 to 52 years) were involved in the study. They were seated in the MRI scanner and after relaxing had an acupuncture needle inserted in the LI 4 or Hegu point (located on the hand between the thumb and forefinger).

Needle manipulation caused a pronounced calming of activity in the deep structures of the brain (e.g., amygdala, hippocampus, hypothalamus, etc.), accompanied by increased signal intensity in a key sensory region of the brain’s cortex. Researchers concluded, "Modulation of this neuronal network could constitute the initiating steps by which acupuncture regulates multiple physiological systems and achieves diverse therapeutic effect."

Source: Human Brain Mapping, 2000