



How acupuncture works

A revealing new study on acupuncture comes from an unlikely source: electrical engineers

By Zoe Li, Hong Kong Editor 23 August, 2011



Two sides of the same coin: acupuncture stimulates the flow of qi, as well as the flow of endorphins.

The electrical engineering department of Columbia University and the medicine faculty of the University of Hong Kong (HKU) have collaborated on a study that proves how acupuncture works.

Professor Edward Yang of Columbia, acupuncture specialist Dr. Li Geng and former HKU medicine faculty dean Professor Lam Shiu-kum spearheaded the eight-year study, which shows that acupuncture works by stimulating the production of endorphins in the area where acupuncture is administered.

The study was published in the "European Journal of Physiology" in June. Researchers were in Hong Kong yesterday to discuss their work.

When an acupuncture needle pierces tissue while being manually oscillated, slow-moving acoustic waves are sent into the muscles, triggering calcium flow.

Calcium interacts with white blood cells to produce endorphins that help alleviate symptoms such as pain and nausea.

The effectiveness of acupuncture depends on how accurately the needle hits the acupoints. The acoustic waves generated by acupuncture can travel between six and eight centimetres along the grain of pierced muscle only when the needle is inserted on an acupoint.

If the needle is a centimetre off of the acupoint, it can still be effective, even though the waves generated will travel only three to four centimetres.

The study does not explain why this happens, but it does find that muscles have a memory of the waves and can even recreate the waves themselves.

Yang and his team tested on rats and rabbits before conducting experiments on about 30 University of Hong Kong student volunteers.

Via South China Morning Post.