Acupuncture on some body points has been used in our hospital in the treatment of anovulatory menstrual disorder and infertility since the 1960s. 30%–50% of the patients are able to ovulate and conceive. To improve on this success rate, a series of clinical studies and experiments has been conducted to explore the pathology and ascertain the scope of application of acupuncture on related diseases.

1. Clinical Study
Firstly, patients who experience suppression of the sympathetic nerve and dilation of blood vessels after an acupuncture session have higher rates of ovulation than those with no suppression (P<0.05). The suppression was shown by an increase in the skin temperature of the hand and a decrease in the level of a β−endorphin-like immuno-reactive substance in the blood (P<0.05). This corresponds to the saying in ancient traditional Chinese medicine literature that acupuncture promotes the flow of vital energy and blood within vessels. Secondly, the naloxone test shows that patients with adequate estrogen levels, low outburst secretion level of the hypophysis gonadotrophic hormone, and normal ovarian reaction before acupuncture, showed significant results in terms of ovulation after acupuncture (P<0.05). These data also show that peripheral estrogen levels may predict central β−endorphin activity, and suggest that acupuncture promotes egg follicle growth and induces ovulation via the regulation of the central nervous system including the pituitary gland for a functional ovary (i.e., an ovary still capable of ovulating). As such, patients with poor ovarian function are not suitable candidates for this treatment.

2. Animal Experiments
Using cell and molecular biology, comprehensive studies conducted on female rats and rabbits showed that the preovulatory level of blood estrogen rises while the level of estrogen receptor in the hypothalamic acrualge nucleus drops. This is accompanied by the release of POMC mRNA, β−endorphin and hypothalamic postsynaptic m-receptor (process of endophinergic activity) (P<0.05), which in turn withdraws the tonic suppression of β−endorphin on GnRH/LH, thereby resulting in a surge in the level of LH and the occurrence of ovulation. Acupuncture induced the release of hypothalamic β−endorphin associated with a certain level of estrogen. Each time the level of POMCmRNA is lowered to a specific value, LH surge and ovulation will occur.

3. Acupuncture treatment for pubescent dysfunctional uterine bleeding
Pubescent dysfunctional uterine bleeding (PDUB) is a difficult case to deal with due to the immaturity or deregulation of the ovarian hypothalamic-pituitary function. Clinically, drugs are used as the alternative method of treatment. However, when medication is discontinued, the problem will recur. Therefore, clomiphene, a drug of choice for the induction of ovulation, is not suitable for PDUB because of its anti-estrogenic function. The mechanism for induction of ovulation with acupuncture may just provide the solution to PDUB. One hundred cases with PDUB treated with acupuncture yielded much better results. In a control study, with acupuncture, 87.7% of 30 cases resulted in ovulation; with clomiphene, the rate of ovulation is 73.00% in 30 cases; and with a low dosage of diethy-1-stilbestrol, none of the 20 cases resulted in ovulation although the bleeding was stopped.

Acupuncture has become the treatment of choice for PDUB. It has also shown effectiveness in the treatment of anorexia nervosa. This may set an example as the study of traditional Chinese medicine, particularly when juxtaposed with modern medicine and high technology, is becoming such a popular topic.