

# Relationship Between Blood Radioimmunoactive Beta-Endorphin and Hand Skin Temperature During The Electro-Acupuncture Induction of Ovulation

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## Abstract:

Thirteen cycles of anovulation menstruation in 11 cases were treated with Electro-Acupuncture (EA) ovulation induction. In 6 of these cycles which showed ovulation, the hand skin temperature (HST) of these patients was increased after EA treatment. In the other 7 cycles ovulation was not induced. There were no regular changes in HST of 5 normal subjects. The level of radioimmunoactive beta-endorphin ( $r\beta$ -E) fluctuated, and returned to the preacupunctural level in 30 min. after withdrawal of needles in normal subjects. After EA, the level of blood  $r\beta$ -E in cycles with ovulation declined or maintained the range of normal subjects. But the level of blood  $r\beta$ -E and increase of HST after EA ( $r=-0.677$ ,  $P < 0.01$ ). EA is able to regulate the function of the hypothalamic pituitary-ovarian axis. Since a good response is usually accompanied with the increase of HST, monitoring HST may provide a rough but simple method for predicting the curative effect of EA. The role of  $r\beta$ -E in the mechanism of EA ovulation induction was discussed.

**KEY WORDS:** Electro-Acupuncture (EA), Hand Skin Temperature (HST), radioimmunoactive beta-endorphin ( $r\beta$ -E), ovulation, radioimmunoassay (RIA)