The practitioners of acupuncture have for a long time been engaged in studying the mechanism by which acupuncture achieves its therapeutic effects, EEG and Micro-vibration (MW) results in acupuncture. Following these studies, they proceeded to carry out Positron ECT tests in order to determine the effects of acupuncture stimulus on the physical and functional activity of the brain. Positron ECT was conducted on both healthy people and medical patients (suffering from CVA, encephaloma, etc.) who received electro-acupuncture stimulus on their Hoku and Shou Sanli. The activity of the brain under these stimuli was recorded. Charging time was 10 to 25 minutes, at a frequency of 2Hz at an intensity producing slight muscle twitching. A result of increased activity was identified in the cortex area and hypothalamus on the side of the brain where the stimuli were given. In some cases, the increase appeared on both sides, suggesting that acupuncture stimulus affects the activity of the cranial nerves over a wider area than previously thought.


Biodistribution and placental transfer of positron-emitting radiopharmaceuticals in pregnant rats were examined. Florodeoxyglucose (FDG), C-glucose/fructose (Glc/Frc), L-methionine (Met), L-leucine (Leu), adamine (Ad) and Coenzyme Q10 (CoQ) were injected into the pregnant rats in 16-18 days of gestation and their tissue distributions were determined up to 30 min. The placenta and fetus uptakes increased with time in the order of Ad<Leu<Met<Frc<FDG. The CoQ was present in high level in the placenta, but the transfer into the fetus was virtually blocked by the placenta. The placenta-to-blood ratios for all drugs increased with time, but the ratios for Ad and CoQ decreased for other drugs. The fetus-to-placenta ratios for the amino acids were always over 1, which suggested the active transport of the amino acids in the placenta. The ratios for the sugars were less than 1 and that for Ad was much less. With regard to the brain uptake the fetal brain uptake was larger than the maternal one for each drug.

Our results support the presence of the selectivity in placental transfer of drugs, even constituents in the tissues, that is the blood-placenta barriers.