Basic Research into Japanese Acupuncture – Mechanisims of action with acupuncture –

KAIM Editorial Department

Over the years, patients have experienced (and acupuncture providers have observed and recorded) the amelioration of physical pain, improvement in a variety of psychosomatic complaints, and recovery of physical condition that can be provided by acupuncture treatment. What accounts for the success of acupuncture in these situations? A variety of theories have been developed over the last 2000 years, and have been described in the historical context of yin-yang five phase metaphysics, ki-ketsu-sui (ki energy, blood, and body fluids) and zang fu organ theory, and meridian system theory.

These inferences regarding disease-related subjective changes as experienced by patients and noted by treatment providers have been explained in detail from an acupuncture perspective, and placed within the context of yin-yang five phase metaphysics and meridian system theory. Unfortunately, acupuncturists' findings have yet not been adequately described from the perspective of scientific mechanisms of action.

However, beginning in the last half of the 20th century and extending into the 21st century, research has begun into the mechanism of the actions of acupuncture. When acupuncture stimulus is applied to percutaneous and subcutaneous receptors (primarily polymodal receptors), and this stimulus is mediated by the nervous system to act on the mechanism of endogenous analgesia, it raise the endogenous opioid level and also activates the autonomic nervous system, the endocrine system, and the immune system. The result is a variety of physiological changes, including analgesia, recovery of organ function, promotion of local and systemic circulation, and the relaxation of muscular tension.

Within the broad field of research into the efficacy of acupuncture in Japan, we focus in particular on work by Dr. Shinjiro Yamaguchi regarding the effects of blood flow of physical sensory stimului as mediated by the autonomic nervous response. We also provide here an in-depth look at the studies being conducted by Dr. Yukihito Sugawara on acupuncture stimulus and nociceptors.