Management of spinal cord disorders through Varmam and Thokkanam - Siddha external therapy methods
Shinnaraj Selvarajan
Siddha Regional Research Institute, India

In recent days, all over the world the human race is suffering from various spinal cord disorders, which are defined as a group of disorders that affect the spinal cord including the nerves, tendons, muscles, and joints and supporting structures such as inter-vertebral discs etc., thus producing simple to severe pain. Due to the above mentioned conditions, the human beings are not able to perform their day to day activities in appropriate manner. The same may lead to some level of disability and morbidity. To overcome these issues, the general public is depending on some analgesics, anti-inflammatory and so on. The said medicines produce only symptomatic relief and the sufferers have to depend on those drugs for long time. In addition to that prolonged use of pain killers are creating the way for various adverse effects such as stomach upset, constipation, diarrhea and dizziness. Apart from that resistance and tolerance may partly account for the diminishing analgesic responses. Keeping in view of the above mentioned unavoidable effects of the allopathic medicines to find out a new method for treating the spinal cord issues is the need of the hour. To counter the problems related to spinal cord various methods and medicines are mentioned / documented in Siddha classical literatures/texts. Among them Varmam (pressure manipulation therapy) and Thokkanam (physical manipulation therapy) are very effective external therapy methods in treating the spinal disorders. Varmam and Thokkanam tone up nervous system, boost blood circulation, rejuvenate and eliminate toxic substances. These methods are in practice for more than the period of 5000 years in the Indian continent. After observing and confirming the effectiveness of these methods, the outpatient department at Siddha Regional Research Institute (SRRI), Thiruvananthapuram (Tvpm), Kerala, India is extending the support and treated more than one thousand patients without any noticeable contraindications. The team of physicians of SRRI, Tvpm came to observe through Integrative Medicine Outcomes Scale (IMOS) that these external therapy methods are remarkably improving the quality of life of the sufferers of spinal cord disorders.

Electro acupuncture treatment alleviates central post-stroke pain by inhibiting brain neuronal apoptosis and aberrant astrocyte activation
Gui-Hua Tian1,3, Shan-Shan Tao1, Man-Tang Chen1, Yu-Sang Li2, You-Ping Li2, Hong-Cai Shang1, Xiao-Yi Tang1 and He-Bin Tang2
1Beijing University of Chinese Medicine, China
2South-Central University for Nationalities, China
3Sichuan University, China

Electroacupuncture (EA) is reported as an effective approach to relieve the central post-stroke pain (CPSP). However, the underlying mechanism remains unclear. To address this issue, this study investigated the mechanisms of action of different frequencies of EA treatment for CPSP. A CPSP model was constructed in rats by performing a single injection of collagenase to left ventral posterolateral nucleus of the thalamus. The EA-treated groups then received the EA treatment at one of three frequencies [2, 2/15 (2 Hz alternating with 15 Hz) and 15 Hz] for 30 min daily for five days in total. The pain-related behavioral responses (thermal, cold and mechanical hyperalgesia), neuronal apoptosis and glial activation, and the expression of pain signal transmission-related factors (β-catenin, COX-2 and NK-1R) were assessed using behavioral tests, Nissl staining, TUNEL staining and immunohistochemical staining, respectively. The low-frequency EA treatment significantly 1) reduced brain tissue damage and hematoma sizes and 2) inhibited neuronal apoptosis, thereby exerting abirritation effects. Meanwhile, the high-frequency EA treatment induced a greater inhibition of the aberrant astrocyte activation, accompanied by the down-regulation of COX-2 and β-catenin expression, which further reduced the expression of NK-1R, thereby alleviating inflammation and producing strong analgesic effects. Together, these findings suggest that the neocortex and hippocampus have a close relationship with the generation of CPSP. EA treatments at different frequencies may exert abirritation effects by inhibiting brain neuronal apoptosis and aberrant astrocyte activation in the brain.