



RECOMMENDED ARTICLES

In this issue of the journal, recommended articles are selected from the *Korean Journal of Acupuncture* (ISSN: 1229-7933) and from the *Journal of Pharmacopuncture* (ISSN: 1226-4849), which were published in the Korean language.

(1) Korean Journal of Acupuncture, Vol 27, No. 2, 1–11, 2010

Understanding of the WHO Standard Acupuncture Point Locations in the Western Pacific Region: General Guidelines

Sung-Tae Koo, Yong-Suk Kim, Yun-Kyoung Yim, Sun-Mi Choi, Sung-Keel Kang

Abstract

Objectives: The aim of the study is to explain the general guidelines of the WHO standard acupuncture point locations (APLs). Understanding the general guidelines will enable experts to make clear use of the standard APLs for education, research and practice.

Methods: In the beginning of the development of the standard APLs, experts drew general guidelines to achieve mutual agreement among three nations (Korea, China, and Japan) on the standard APLs. The guidelines include point-locating methods, syntax of descriptive sentences, landmarks on the body's surface, reference acupuncture points, usage of anatomical terminology, and proportional bone measurements.

Results: We found some considerable problems in the practical use of the APLs due to the strict application of anatomical terms, even in ancillary phrases such as the regions of the body, in the sentence for each description.

Conclusion: We hope that this study will help readers understanding of the newly developed standard APLs and result in increased application of acupuncture points and that it will be a reference for revising the WHO standard APLs in the future.

Key Words: WHO, Standard acupuncture point location, General guideline

(2) Korean Journal of Acupuncture, Vol 27, No. 2, 13–24, 2010

Antioxidative and Anti-inflammatory Effects of *Aurantii Fructus Immaturus* Pharmacopuncture

Sung-Jin Kim, Sang-Kyun Park

Abstract

Objectives: Ulcerative colitis is a chronic inflammatory disease of the gastrointestinal tract. We investigated whether *Aurantii fructus immaturus* (AFI) pharmacopuncture had antioxidative and anti-inflammatory effects.

Methods: In *in-vitro* experiments, 1,1-diphenyl-2-picryl hydrazyl (DPPH) free radical scavenging activity, superoxide dismutase (SOD) activity, prevention of H₂O₂-induced cell death in RAW264.7 cell line, DNA fragmentation, and cyclooxygenase-2 mRNA expression induced by lipopolysaccharide (LPS) were analyzed to investigate the antioxidative and the anti-inflammatory effect of AFI pharmacopuncture. In the *in-vivo* experiment, a murine model of dextran-sulfate-sodium (DSS)-induced colitis was used to examine the effect of AFI pharmacopuncture on CV12 at different doses of 5 μ L 0.5 μ L 0.05 μ L. Body weight, colon length and macroscopic features were investigated.

Results: AFI pharmacopuncture showed DPPH free-radical scavenging and SOD activity in a dose-dependent manner. AFI pharmacopuncture showed a protective effect against H₂O₂-induced cell injury and attenuated LPS-induced COX-2 mRNA expression. In a DSS-induced colitis murine model, however, AFI pharmacopuncture at CV12 had no anti-inflammatory effects.

Conclusion: The present results suggest that AFI pharmacopuncture extract may have anti-inflammatory and antioxidative effects in *in vivo* test, but further research on the underlying mechanism is required.

Key Words: *Aurantii fructus immaturus*, Antioxidative, Anti-inflammation, Dextran sulfate sodium, Inflammatory bowel disease

(3) Korean Journal of Acupuncture, Vol 27, No. 2, 25–34, 2010

Effects of *Cornu Cervi Parvum* Pharmacopuncture on the Blood Composition and Antioxidative Activity in Rats

Kee-Byoung Lee, Sang-Kyun Park

Abstract

Objectives: This research was conducted to investigate the effects of *Cornu cervi parvum* pharmacopuncture with regard to the blood composition and antioxidative activity in rats.

Methods: Sprague-Dawley rats were divided into 3 groups ($n=5$ each), and two of the groups were treated with *Cornu cervi parvum* pharmacopuncture every other day for 2 weeks. The groups were classified as follows: normal control without treatment (control group), *Cornu cervi parvum* pharmacopuncture at CV4 (CV4 group), and *Cornu cervi parvum* pharmacopuncture at BL23 (BL23 group). Thereafter, blood and liver samples were obtained for blood analysis and for superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GSH-Px) activity measurements.

Results: The *Cornu cervi parvum* pharmacopuncture groups showed higher values of red blood cell count and plasma cell volume compared with the control group ($p<0.05$). However, the hemoglobin level showed no significant differences among groups. With regard to the blood picture, the concentrations of total protein and albumin in blood plasma showed no significant differences in pharmacopuncture groups, but a higher ratio of albumin to globulin was observed in the CV4 group. The white blood cell counts and the compositions of the blood showed no significant differences among groups. The pharmacopuncture groups showed higher values in SOD, CAT, and GSH-Px activities than the control group.

Conclusion: *Cornu cervi parvum* pharmacopuncture alleviates oxidative activities in rats.

Key Words: Acupuncture, *Cornu cervi parvum*, Pharmacopuncture, Stress

(4) Korean Journal of Acupuncture, Vol 27, No. 2, 71–78, 2010

Dependence of the Temperature Change of a Warm Needle's Body on Moxa-Corn Weight

Seong-Hun Ahn, Deok Hong, Oh-Sang Kwon, Yu-Lee Kim, Jae-Hyo Kim, In-Chul Sohn

Abstract

Objectives: The warm needling technique is a combination of acupuncture and moxibustion. The purpose of this study was to find the physical and the thermal characteristics of the warm needling technique in order to identify its effects and the mechanisms.

Methods: In this study, thermal changes were observed with a testo 845 device, which is an infrared thermometer specifically designed for measuring the combustion of corn-shaped moxibustion (moxa-corn). The thermal changes at the apex of moxa-corn placed on top of an acupuncture point were observed at levels 1 cm and 2 cm from the apex to understand heat conduction through acupuncture needle upon combustion of the moxa-corn.

Results: The thermal conduction through the acupuncture needle from the moxa-corn was related to the weight of the moxa-corn and was inversely related to the distance of the moxa-corn from the needle's tip and to the length of the acupuncture. The temperature at thermal conduction to the apex of the acupuncture needle from the moxa-corn was about 3–5°C.

Conclusion: The results of the present study may be useful in finding the mechanism and the effects of the warming needling technique.

Key Words: Moxibustion, Warm needling, Moxa-corn

(5) Korean Journal of Acupuncture, Vol 27, No. 2, 141–157, 2010

Effect of Acupuncture at PC7 (Daereung) on the EEG in Normal Human Subjects

Cheol-Jin Park, Sang-Ryong Lee

Abstract

Objectives: The aim of this study is to examine the effects of acupuncture at PC7 (Daereung) on the normal human EEG by using a power spectral analysis.

Methods: The EEG power spectrum exhibits site-specific and state-related differences in specific frequency bands. In this study, the power spectrum was used as a measure of complexity. Thirty (30) subjects (16 males and 14 females; average age=23.4 years) were engaged in this thirty channel EEG study.

Results: In the α (alpha) band, the power values at the Fp1, Fp2, F7, and F8 channels ($p < 0.05$) during PC7 treatment were significantly decreased. However, the power value at the Fz channel ($p < 0.05$) during non-acupoint treatment was significantly decreased. In the β (beta) band, the power values at the Fp1 and the Fp2 channels ($p < 0.05$) during PC7 treatment were significantly decreased. However, the power value at the Fz channel ($p < 0.05$) during non-acupoint treatment was significantly decreased and those at the F8 and the TCP2 channels ($p < 0.05$) during non-acupoint treatment were increased. In the θ (theta) band, the power values at the Fp1, Fp2, F7, and F8 channels ($p < 0.05$) during PC7 treatment were significantly decreased. But, the power values at the Fz channel ($p < 0.05$) during non-acupoint treatment was significantly decreased. In the δ (delta) band, the power values at the Fp1, Fp2, F7, Fz, and F8 channels ($p < 0.05$) during PC7 treatment were significantly decreased, but the power value at the Fz channel ($p < 0.05$) during non-acupoint treatment was significantly decreased. The α/β values during PC7 treatment were decreased, as were the β/θ values.

Conclusion: These results suggest that acupuncture at PC7 induces decreases in the α (alpha), β (beta), θ (theta), and δ (delta) wave values, as well as both the α/β and the β/θ values. Acupuncture at PC7 is thought to affect the activity of the cerebral cortex and the endocrine system.

Key Words: Acupuncture, EEG, PC7 (Daereung), Complexity, Power spectrum

(6) Journal of Pharmacopuncture, Vol 13, No. 2, 13–31, 2010

Effect of the *Bujeonhangam-tang* Extract on Hepatocellular Carcinogenesis and Hepatic Cirrhosis Induced by Diethylnitrosamine and CCl₄ in Rats

Young-Ho Moon, Jin-Hee Won, Goo Moon, Rae-Kyong Heo, Kee-Moon Seung, In-Young Lee, Myung-Joon Jang, So-Yeon Kwon, Deok-Seon Yu

Abstract

Objectives: *Bujeonhangam-tang* (BH) has been used as a traditional medicine for the treatment of tumors. This study was carried out to clarify the effect of BH extract on hepatocellular carcinogenesis and hepatic cirrhosis induced by diethylnitrosamine (DENA) and CCl₄ in rats.

Methods: The experimental groups were divided into two groups, the 8th and the 12th week administration groups, and these were subdivided into four groups: the normal group, cirrhosis- and hepatic-cancer-induced control group, and the groups administered BH extract at 320mg/kg/day (BHA) and 640mg/kg/day (BHB), respectively, under the same conditions as the control group.

Results: In the 8th week group; the body weight decreased significantly in the control group compared with the normal group. The activities of transaminase, alkaline phosphatase (ALP), and lactate dehydrogenase (LDH) were significantly increased ($p < 0.05$) in the control group compared with the normal group, but were decreased in the BHA and the BHB groups compared with the control group. Alpha fetoprotein (AFP) was increased the most in the control group compared to the BHA and the BHB groups. In the results of light microscopical observation, a number of hepatocytes were damaged in the control group compared with the normal and the BH extract administered groups. The number of hepatic p53 positive cells was reduced in the BH extract administered groups. According to the electron microscopical observation, hepatocarcinoma cells were observed more distinctly in the control group compared with the BH extract administered groups. In the 12 weeks group, the results for the body were similar to those for the 8th week groups. The transaminase and ALT activities were significantly increased ($p < 0.05$) in the control group compared with the normal group. LDH was significantly ($p < 0.05$) increased in the control group compared with the normal group but was significantly ($p < 0.05$) decreased in the BHB group. Alpha fetoprotein (AFP) was increased the most in the control group among the experimental groups. The superoxide dismutase (SOD) activity was significantly ($p < 0.05$) increased in the control group, but the catalase activity was not increased ($p < 0.05$) compared with the normal. The number of hepatic p53 positive cells was increased in the control group. The results of electron microscopical observation were similar to those for the 8th week group.

Conclusion: These results suggest that administration of BH extract suppresses or retards DENA- and CCl₄-induced hepatocellular carcinogenesis and hepatic cirrhosis in rats.

Key Words: Bujeonhangam-tang, Hepatocellular carcinogenesis, DENA, CCl₄

(7) Journal of Pharmacopuncture, Vol 13, No. 2, 67–73, 2010

Pilot Clinical Study of *Hwangryunhaedok-tang* Pharmacopuncture Therapy for the Treatment of Post-stroke Depression

Juntae Je, Sangkwan Lee

Abstract

Objectives: The purpose of this study is to determine the efficacy and the safety of *Hwangryunhaedoktang* pharmacopuncture (HHT-PA) therapy as a treatment for post-stroke depression (PSD) in stroke patients.