In this issue of the journal, recommended articles are selected from the Korean Journal of Acupuncture (ISSN: 1229-7933) published in Korean and from the Journal of Pharmacopuncture (ISSN: 2093-6966) published in English.


The Effect of Intradermal Acupuncture on Three Patients with Pain: Three Case Reports

Ji-Young Kim, Soon-Joong Kim, Su-Hyeon Jeong

Abstract
This study was performed to evaluate the effects of intradermal acupuncture on patients with pain. Three patients suffered from pain, one each with shoulder pain, low back pain, and wrist pain. Each was treated with intradermal acupuncture, and the outcomes were measured by using the McGill pain questionnaire short form, the visual analogue scale and the pain rating score. After intradermal acupuncture treatments, we found recovery from three patients who suffered from pain. Through this study, we suggest that intradermal acupuncture treatment is effective in curing patients with pain. In the future, well-designed, controlled studies involving large numbers of patients are needed to define the effect of intradermal acupuncture for patients with pain.

Key Words: intradermal acupuncture; pain


Effect on the Melanogenesis in B16F10 Cells of Saururus chinensis BAILL Extract for Pharmacopuncture

Soo-Kyung Kim, Dae-Sung Kim, Won-Hong Woo, Yeun-Ja Mun

Abstract
Objectives: The purpose of this study was to investigate the melanogenesis inhibition effect of Saururus chinensis BAILL (SC) on B16F10 melanoma cells.

Methods: The SC used in this study was a fractionated ethanol extract produced by using hexane, ethyl acetate, butanol as water. We confirmed the inhibitory effects on the tyrosinase activity and the melanogenesis for all fraction samples.

Results: The hexane fraction of Saururus chinensis BAILL (HSC), the ethyl acetate fraction of SC (ESC), and the butanol fraction of SC (BSC) were discovered to inhibit the tyrosinase activity and the melanogenesis both in the absence and in the presence of α-MSH. However, the water fraction of SC (WSC) affected neither the tyrosinase activity nor the melanogenesis. In addition, no fractions inhibited the catalytic activity of cell-free tyrosinase from B16F10 melanoma cell lines.

Conclusions: These results suggest that HSC, ESC and BSC reduce pigmentation by indirectly regulating tyrosinase.

Key Words: saururus chinensis BAILL; tyrosinase activity; melanin; whitening
Effects of Low-level Laser Treatment at the LR2 and the LR8 Acupoints on Liver Damage Induced in D-GalN in Rats
Wang-In Kim, Dae-Hwan Youn, Chan-Hun Choi, Chang-Su Na

Abstract
Objectives: This study was performed to investigate the effect of invasive laser acupuncture treatment at the Liver Brook (LR2) acupoint and the Liver Sea (LR8) acupoint on liver damage induced by D-galactosamine (D-GalN) in rats.
Methods: Liver damage was induced by D-GalN. The experimental rats were divided into two groups: the control group and the low level laser treatment (LLLT) group. The control group was classified into smaller groups. The intact group had no liver damage and no treatment. The D-GalN group had liver damage induced by D-GalN, but not treated. The LLLT group had liver damage induced by D-GalN that was treated at the LR2 or the LR8 acupoint with 532-658- or 904-nm invasive laser acupuncture. The treatment was carried out three days at a time for 15 cycles at both acupoints. To examine the mechanism of the effect of invasive laser acupuncture, we measured the contents of aspartate transaminase (AST), alanine transaminase (ALT), alkaline phosphatase (ALP), and thyrotropin binding inhibitor immunoglobulin (TBIL) in serum, the complete blood count (CBC) in blood and the super oxide dismutase (SOD) in liver tissue.
Results: The body weight increased in all groups. The AST activity was decreased significantly compared with the control group and was decreased in the LLLT groups receiving 532-nm and 904-nm invasive laser acupuncture, but the ALP was increased in the LLLT group receiving 658-nm invasive laser acupuncture at the LR8 acupoint. The TBIL level was significantly decreased in all LLLT groups. The SOD in the liver tissue of rats for the LLLT groups was increased compared to that in the control group. The SOD activity indicated that LLLT could help the cellular defense mechanism by preventing scavenging by hydrogen peroxide. The WBC, was increased in the D-GalN control group compared to the intact group and the LLLT groups.
Conclusions: These results suggest that invasive laser acupuncture treatment at the LR2 or the LR8 acupoint reduces activation of hepatic enzyme and damage to liver tissue. Thus, the effects of invasive laser acupuncture are nearly identical to those of the traditional acupuncture for the treatment of hepatocytotoxicity.
Key Words: acupuncture; Jadad scale; pain; RCT; shoulder; STRICTA; systematic review
http://dx.doi.org/10.1016/j.jams.2012.11.005

Identification and Analysis of the Chloroplast rpoC1 Gene Differentially Expressed in Wild Ginseng

Abstract
Panax ginseng is a well-known herbal medicine in traditional Asian medicine, and wild ginseng is widely accepted to be more active than cultivated ginseng in chemoprevention. However, little has actually been reported on the difference between wild ginseng and cultivated ginseng. Thus, to identify and analyze those differences, we used suppressive subtraction hybridization (SSH) sequences with microarrays, real-time polymerase chain reaction (PCR), and reverse transcription PCRs (RT-PCRs). One of the clones isolated in this research was the chloroplast rpoC1 gene, a β-subunit of RNA polymerase. Real-time RT-PCR results showed that the expression of the rpoC1 gene was significantly upregulated in wild ginseng as compared to cultivated ginseng, so, we conclude that the rpoC1 gene may be one of the important markers of wild ginseng.
Key Words: Panax ginseng; rpoC1 gene; wild ginseng; suppressive subtraction hybridization (SSH); markers of wild ginseng

Compositional Differences of Ojeok-san (Wuji-san) Decoctions Using Pressurized or Non-pressurized Methods for Variable Extraction Times
Jung-Hoon Kim, Chang-Seob Seo, Seong-Sil Kim, Hyeun-Kyoo Shin

Abstract
This study compared Ojeok-san (Wuji-san in Chinese) decoctions produced using different extraction methods for variable times. Decoctions were extracted in pressurized or non-pressurized conditions for 60, 120, and 180 mins. We investigated the Ojeok-san extract yield, the total soluble solid content, the hydrogen ion concentration (pH), and the reference compound content. The extract yield and the total soluble solid content were higher in decoctions produced by non-