Conclusions: Some variables can predict outcome in acupuncture or topiramate treatment of CM patients. Identifying predictors of prognosis of both treatments for CM may help improve outcomes in future work.
Keywords: acupuncture, chronic migraine, prognostic factors, prophylaxis, topiramate

http://dx.doi.org/10.1016/j.jams.2015.12.004

---

(4) Journal of Pharmacopuncture, Vol. 17, No. 1, pp. 51-58, 2014

Study of Single-dose Toxicity of Guseonwangdo-go Glucose Intramuscular Injection in Sprague-Dawley Rats

Su-jeong Jo, Sung-chul Kim, Yu-jong Kim, Eun-jung Kim, Kap-sung Kim, Seung-deok Lee*
*Corresponding Author's Affiliation: Department of Acupuncture & Moxibustion Medicine, Dongguk University College of Oriental Medicine, Goyang, Korea. chuckman@dongguk.edu

Abstract
Objectives: This study was performed to analyze single-dose intramuscular toxicity of Guseonwangdo-go glucose pharmacopuncture.
Methods: Eighty six-week-old Sprague-Dawley rats were divided into two large groups of forty rats; Guseonwangdo-go glucose 5% and Guseonwangdo-go glucose 20% groups. Each group was sub-divided into four smaller groups of five males and five females, with the following dosages of pharmacopuncture being administered by intramuscular (IM) injection in each group: group 1 (G1, control group): 1.0 mL of normal saline solution, group 2 (G2, low-dose group): 0.1 mL, group 3 (G3, mid-dose group): 0.5 mL, and group 4 (G4, high-dose group): 1.0 mL.
Results: No mortalities or clinical signs were observed in any group. Also, no significant changes in body weights or in hematological/biochemical analyses were observed between the control and the experimental groups during necropsy or histopathology.
Conclusion: The above findings suggest that the lethal dose of Guseonwangdo-go glucose 5% and 20% pharmacopuncture administered via IM injection is more than 1.0 mL per animal in both male and female rats. Further studies on the repeated-dose toxicity of Guseonwangdo-go glucose should be conducted to yield more concrete data.
Keywords: Guseonwangdo-go, intramuscular toxicity, pharmacopuncture, single-dose toxicity

---

(5) Journal of Pharmacopuncture, Vol. 17, No. 1, pp. 59-69, 2014

Relative Apoptosis-inducing Potential of Homeopa-thic Condurango 6C and 30C in H460 Lung Cancer Cells *in vitro*

Sourav Sikdar, Santu Kumar Saha, Anisur Rahman Khuda-Bukhsh*
*Corresponding Author's Affiliation: Cytogenetics and Molecular Biology Laboratory, Department of Zoology, University of Kalyani, Kalyani, India. prof_arkb@yahoo.co.in

Abstract
Objectives: In homeopathy, it is claimed that more homeopathically-diluted potencies render more protective/curative effects against any disease condition. Potentized forms of Condurango are used successfully to treat digestive problems, as well as esophageal and stomach cancers. However, the comparative efficacies of Condurango 6C and 30C, one diluted below and one above Avogadro's limit (lacking original drug molecule), respectively, have not been critically analyzed for their cell-killing (apoptosis) efficacy against lung cancer cells *in vitro*, and signalling cascades have not been studied. Hence, the present study was undertaken.
Methods: 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenylte- trazolium bromide (MTT) assays were conducted on H460-non-small-cell lung cancer (NSCLC) cells by using a succussed ethyl alcohol vehicle (placebo) as a control. Studies on cellular morphology, cell cycle regulation, generation of reactive oxygen species (ROS), changes in mitochondrial membrane potential (MMP), and DNA-damage were made, and expressions of related signaling markers were studied. The observations were done in a "blinded" manner.
Results: Both Condurango 6C and 30C induced apoptosis via cell cycle arrest at subG0/G1 and altered expressions of certain apoptotic markers significantly in H460 cells. The drugs induced oxidative stress through ROS elevation and MMP depolarization at 18-24 hours. These events presumably activated a caspase-3-mediated signalling cascade, as evidenced by reverse transcriptase- polymerase chain reaction (RT-PCR), western blot and immunofluorescence studies at a late phase (48 hours) in which cells were pushed towards apoptosis.

Conclusion: Condurango 30C had greater apoptotic effect than Condurango 6C as claimed in the homeopathic doctrine.
Keywords: apoptosis, Condurango 6C and 30C, caspase-3, homeopathy, non-small-cell lung cancer (H460), reactive oxygen species

(6) Journal of Pharmacopuncture, Vol. 17, No. 1, pp. 70-73, 2014

Assessment of Factors Associated with the Safety Depth of GV15 Yamen

Soo-Jung Park, Ming Jin, Jong-Cheon Joo, Young-Mi Kwon*
*Corresponding Author's Affiliation: Department of Radiology, Wonkwang University College of Korean Medicine, Iksan, Korea. kwon0mi@wku.ac.kr

Abstract

Objectives: Yamen is the fifteenth acupoint of the Governor Vessel Meridian (GV15). It is anatomically close to the medulla oblongata, so finding the safety depth of the acupoint is very important. However, few studies on the safety depth of GV15 have been done.
Methods: This study tried to measure the safety depth of GV15 by using magnetic resonance imaging (MRI) scans and to analyze the factors affecting the safety depth through multiple regression analyses. This study was carried out for patients who had a brain MRI scan while visiting Jeonju Wonkwang Hospital, Korea. The shortest distance between the glabella and the occipital protuberance (DGO), the horizontal distance between the glabella and the back of the head (DGB) and the dangerous depth (DD) were measured from the sagittal views of the MRI images. The DD is the horizontal distance from the skin's surface at GV15 to the spinal dura mater.
Results: The model suggested that the safety depth (SD) was significantly associated with gender ($\beta = 0.474$, $n < 0.0001$), DGO ($\beta = 0.272$, $p = 0.027$), and BMI ($\beta = 0.249$, $n = 0.005$) and the combination of three variables can explain the SD, with R2 $= 0.571$ (Table 3). A longer SD was associated with males and with greater BMI and DGO.
Conclusion: This study suggests that gender, BMI and DGO may be important factors when the SD of GV15 is considered clinically through a multiple regression analysis of GV15.
Keywords: dangerous depth, governor vessel meridian 15, magnetic resonance imaging, safety depth, Yamen

http://dx.doi.org/10.1016/j.jams.2015.12.005