Korean Constitutional Acupuncture: History, Theory

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Purpose: The aim of this project is to arrange acupuncture treatments using the constitution theories.

Methods: We collected articles on the constitution. We figured out the treatment method, the theoretical system, based on principle about the Korean Constitutional Acupuncture. The historical basis of these components were studied, along with the diagnostic and therapeutic skills necessary to begin applying this methodology.

Results: Arrangement of the acupuncture treatments using the constitution theories — Eight constitution acupuncture - Taeguek acupuncture - 24 Meridian constitution acupuncture - 64 Constitution 640 meridian acupuncture - Oh-sang constitution acupuncture - Sa-am acupuncture based on Sa-sang constitution - Du-sol Sa-sang acupuncture

Conclusion: Contribution to the standardization and systemization of the Five Elements acupuncture treatment. Problems and future research of Sa-sang constitution acupuncture

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Protective activity of Illicium verum against atherosclerosis in ApoE−/−mice

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Purpose: Illicium verum Hook. fil. Illiciaceae (Illicium v.) has been traditionally used in herbal medicine for treating many inflammatory diseases, including skin inflammation and rheumatism. We investigated its use as a preventive agent against inflammatory and vascular diseases in a murine model of atherosclerosis using ApoE−/− mice fed on a high-fat diet (HFD).

Methods: We investigated the effect of Illicium v. on cytotoxicity, NF-kB activity, and adhesion molecule expression in TNF-α stimulated HASMCs. ApoE−/− mice, fed a HFD and treated daily for 12 weeks by oral administration of either Illicium v. (100 or 200 mg/kg) or atorvastatin (10 mg/kg), were evaluated for atherosclerotic lesions and inflammatory responses by performing Oil red O and iNOS staining, respectively. Expression of inflammatory cytokines (i.e., NF-kB, TNF-α, IL-1β, COX, IkB-α, iIkB-αβ) and adhesion molecules in the aorta were measured by western blot analysis.

Results: In TNF-α-stimulated HASMCs, Illicium v. treatment decreased NF-kB transcriptional activity, and NF-kB protein levels were reduced in a dose-dependent manner over a range of 10-100 μg/mL Illicium v. Also, Illicium v. attenuated the expression of adhesion molecules that are responsible for inflammation in these cells. In animal experiments, treatment with Illicium v. or atorvastatin counteracted the characteristic changes in body weight, blood pressure, and lipid levels seen in HFD-fed ApoE−/− mice. In addition, Illicium v. treatment reduced aortic atherosclerotic plaque lesions and the immunoreactivity of iNOS activation. The aortic expression of inflammatory adhesion molecules and cytokines, which is characteristic of HFD-fed ApoE−/− mice, was attenuated by 12-week treatment with daily oral administration of Illicium v. or atorvastatin, and the most potent effect was seen with the herbal tincture.

Conclusion: The beneficial effects of Illicium v. are consistent with a significant decrease in the iNOS-mediated inflammatory response, resulting in reduction of inflammation-associated gene expression. Treatment with Illicium v. may be the basis of a novel therapeutic strategy for hyperlipidemia-atherosclerosis.

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Acupuncture stimulation at HT7 alleviates maternal separation-induced behavioral changes in rat pups

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Purpose: A possible application of acupuncture in alleviating depression-like behavioral changes and regulating serotonin signaling and neurotrophic factors in the prefrontal cortex (PFC) of maternally-separated rat pups was investigated in this study.

Methods: On postnatal day 15, rat pups were maternally-separated and received acupuncture stimulation at acupoint HT7 or ST36 once a day for 7 days. On postnatal day 21, the tail suspension test was performed and the PFC was harvested. Tissue levels of serotonin (5-HT) and 5-hydroxyindole-3-acetic acid (5-HIAA) were then measured by high-performance liquid chromatography and expression of serotonin transporter (5-HTT), brain-derived neurotrophic factor (BDNF) and glial-derived neurotrophic factor (GDNF) were assessed by western blotting.

Results: Levels of 5-HT and 5-HIAA were not significantly changed, but the 5-HIAA/5-HT ratio was significantly increased by maternal separation. The immobility time of maternally-separated rat pups was increased, and increased 5-HTT expression and reduced BDNF and GDNF levels were observed in the PFC. But acupuncture stimulation at HT7 alleviated the behavioral change and regulated the changes of 5-HIAA/5-HT ratio, 5-HTT, BDNF and GDNF.

Conclusion: Acupuncture stimulation at HT7 can relieve maternal separation-induced changes, and we propose that regulation of the 5-HIAA/5-HT ratio and of 5-HTT expression...