Investigation of indole alkaloids in Bignonia capreolata

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Purpose: Bignonia capreolata is a perennial semi-evergreen vine from the Eastern US that was used as medicine by the Native Americans but has since fallen out of use. The aim of this analysis was to 1) verify the presence of the indole alkaloid reserpine in B. capreolata; and 2) if verified, generate an alkaloid rich fraction of B. capreolata to more accurately identify and quantify reserpine.

Methods: Initial confirmation of the presence of reserpine was performed using high performance liquid chromatography referenced with an analytical standard of reserpine. The alkaloid rich fraction was then tested via liquid chromatography and mass spectrometry.

Results: The presence of reserpine in B. capreolata has been confirmed and found to be 49 µg per gram of leaf.

Conclusion: This is the only known plant outside of the Apocynaceae plant family to contain this indole alkaloid.

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The Analysis of Research Trend on Forest Therapy in the Korean Journal

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Purpose: The purpose of this study is to understand the research trend of reports on forest therapy so far and analyze the Korean medicine therapy being applied in forest therapy programs.

Methods: We ran a keyword search on domestic databases with the following keyword ‘forest therapy, forest healing, forest treatment, recreational forest, forest bath, forest experience’. The search took place in December 2014 and there was no limit to search time. A total of 334 forest therapy articles have been selected.

Results: The number of research on forest therapy continued to rise from 1985, with 334 articles being published from 84 journals. When those 188 articles were sorted by their contents and methods, except 146 articles of survey on simple satisfaction, recognition and visiting, 94 were clinical studies, 79 were literature studies, 15 were experimental studies. Of the 94 clinical researches, there were 52 CCTs(Controlled Clinical Trials), 39 ODs(efficacy studies with either a controlled or an Other than controlled Design) and 3 RCTs(Randomized Clinical Trials). Among the clinical researches, there were a total of 21 studies that used Korean Medicine programs, and meditation was the most popular, being used in 18 studies. Herbal food and tea therapy and Qigong were used in 3 studies each, and Korean medicine music programs were used in 2 studies.

Conclusion: A systematic and standardized Korean medicine forest therapy program must be developed, and based on the program, more research treating diseases should be conducted.

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Prescription patterns of individual herbs of traditional herbal medicine in Korea: An analysis of patients’ data from a national university EMR record

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Purpose: To analyzing the tendencies of individual use of herbs for various diseases in real medical circumstances and the results as fundamental data for the standardization of herbal medicine.

Methods: The prescription database of all patients in the PNUKM Hospital was reviewed. The complete prescription data were extracted using the EMR system. The prescription frequencies of individual herbs and of major herbs were analyzed according to gender, age, and the ICD codes.

Results: For the prescription frequency of individual herbs (Glycyrrhiza radix, Zingiberisrhizomacrudus, Citripericarpium, Poria, and Angelicaegigantis radix) and of major herbs (Zingiberisrhizomacrudus, rehmanniae radix preparat, puerai radix, Angelicaegigantis radix, and astragali radix) were highly ranked based on overall age and gender. The prescription frequency of individual herbs, including Glycyrrhiza radix, Zingiberisrhizomacrudus, Poria, Citripericarpium, and Angelicaegigantis radix, showed up in the overall ICD codes. The ratio of herbal medicine by gender showed different usage patterns in each gender.

Conclusion: This study reported on the prescription tendencies of individual herbs in accordance with age, gender, and disease conditions in two methods: a simple frequency of individual herbs in prescriptions and the frequencies of herbs used as a major herb.

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