

Clinical study on the efficacy of *Swarnamrita prashana* (ayurvedic compound drug) in recurrent attacks of cough in children

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Background: Certain diseases may not be life threatening but increasingly annoying and irritating to the individual in his routine activity. A very common condition is cough, which is increasingly prevalent now-a-days, demanding greater concern over it.

Objectives: The study is designed with an aim to evaluate the effect of *Swarnamrita prashana* in recurrence of cough and its associated complaints.

Materials and Methods: Study was carried out in the out-patient department and in-patient department of Kaumarabhritya, Sree Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka. 30 children satisfying diagnostic criteria and aged 3-8 years were included and daily 1 ml of *Swarnamrita prashana* was administered early morning on empty stomach for a period on 30 days. The graded response subjective and objective clinical parameters were assessed before and after treatment.

Results: The effect of *Swarnamrita prashana* on treatment provided 43.83% reduction in duration of bouts of cough/month, 69.22% reduction in sleep disturbance, 37% reduction in ronchi, 40% reduction in duration of bouts of cough/hour, 49% reduction in duration of bouts of cough, 61.90% reduction in rales, 66.70% in nature of sputum, 66.70% reduction of inflammation of pharynx, 50% reduction in inflammation of tonsils and 65.21% reduction in dyspnea.

Conclusion: Thus, *Swarnamrita prashana* was proved to be effective in recurrent attacks of cough in children.

Biography

Arun Raj G. R. was born at Kollam district, Kerala. He did his B.A.M.S graduation from Kerala University (2004-09). Currently, he is pursuing post graduation in Kaumarabhritya (Ayurvedic Pediatrics) from Rajiv Gandhi University of Health Sciences at Sree Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka. He has published about seven papers in various national and international journals. To add, he has presented 11 papers in different National and International seminars. He achieved the best presenter award at the 2nd National seminar conducted at Ahalia Ayurveda Medical College, Kerala on 'TamakaShvasa'. Currently, he is working on evaluating the efficacy of an Ayurvedic compound drug (KumarabharanaRas) in the management of chronic tonsillitis in children.

Variation in the contents of rutin, hyperoside and chlorogenic acid in *Fragaria L.* from Lithuania

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In Lithuania, two species of the genus *Fragaria L.* (*Rosaceae*), *F. vesca L.* and *F. viridis* Weston, occur naturally in the wild and two others, *F. moschata* Weston and *F. × ananassa* Duchesne ex Rozier are found escaped from cultivation. All these species are important as crop wild relatives of extensively cultivated strawberries. A comparative analysis of extracts from leaves and fruits of the three wild *Fragaria* species was performed by means of reversed phase high-performance liquid chromatography (HPLC). The main objective of this study was to establish the variation pattern in the content of chlorogenic acid, rutin, and hyperoside in leaves and fruits of the native Lithuanian species *F. vesca*, *F. viridis*, and *F. moschata*, collected in the wild and conserved *ex situ* in a field collection as genetic resources of horticultural crops. Studies on between-accession variation of the contents of these secondary metabolites were carried out as well. The data were statistically processed with analysis of variance (ANOVA), cluster analysis (CA) and principal component analysis (PCA). Significant difference between secondary metabolites content in leaves and fruits was detected by PCA. The leaves of the *Fragaria* species tested had significantly higher rutin content than fruits ($p \leq 0.05$). The hyperoside content presented the same trend as rutin and was higher in the leaves than in the fruits. ANOVA revealed significant differences for quantitative characters evaluated at both accessions and species levels. Accessions of the three *Fragaria* species showed remarkable differences in chemical composition depending on the provenance of plants.

Biography

Edita Bagdonaite has completed her Ph.D. at the age of 29 years from Institute of Botany and Vilnius University. She has published more than 15 papers in reputed journals. In order to improve her knowledge in plant metabolite research by the HPLC and TLC techniques, E. Bagdonaite has visited the Medicinal Plant Institute in Poznan (Poland), Warsaw Agricultural University (Poland), P. J. Šafarik University (Slovakia) and Semmelweis University (Hungary).