

Presence of toxic materials in herbo mineral formulations

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Herbo mineral preparations are the major remedial tools in ayurveda and traditional system of medicine and have made a great contribution to maintain human health. It is very accessible, affordable and considered integral to every day life and well being. But in the recent past, wide spread use of ayurveda and traditional medicine has extended far beyond its original ethnic settings and has also created many health challenges in terms of safety, efficacy and quality of these medicines. At the same time, a growing number of reports documented mild to severe fatal adverse or toxic effects of misuse or irrational use of herbo mineral medicines.

The objective of this study was to determine the safety and possible toxicity contamination that could occur in use of herbo mineral formulations. It was a random study of selected ayurvedic medicine screening for possible contamination with heavy metals i.e. Mercury.

Selected herbo mineral formulations were analysed for Hg contamination according to the Atomic Absorption Spectrophotometry (AAS) method at the Industrial Technology Institute (ITI). Mercury contamination of Yogaraja guggulu pills, Seetharama pills, Chandrapraba pills, Kaishora Guggulu pills, and Makaradwaja powder are 0.3 mg/ Kg, 47 mg/ Kg, 01.0 mg/ Kg, 0.4 mg/ Kg, 2.3 mg/ Kg, respectively. Safety exposure standards – As per EPA/FDA, US 0.1 mcg/ Kg of body weight for a 70 Kg average adult this would be 7mcg.

This study reveals that some ayurvedic medicines contain Hg at toxic levels. This is a fairly small and random study and it does not represent the whole picture of medicine in general. But it opens avenues to start more research work in the evaluation of safety and ethno pharmacological studies of herbo mineral formulations.

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