

Evaluation of Basic Chemical Profile of “Chandraprabha vati” Using Organoleptic Characteristics, Physiochemical Parameters, Phyto Chemical Analysis and TLC Fingerprinting

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During the past two decades, herbal medicines attracted attention to a greater extent also in western countries because of their high pharmacological activities with low toxicity and minimum complications. Herbal drugs are obtained from the natural resources such as plant and animal materials and these are used for making medicines where the quality control with proper integration of scientific techniques and traditional knowledge seem important. The quality of herbal drugs depend upon authentication of genuine drug, harvesting the best quality raw material, assessment of intermediate and finish product and detection of harmful and toxic ingredients. Based on the above rationale the present study was undertaken with an aim to detect basic chemical profile of prepared Chandraprabha vati which is one of the effective and very popular Ayurvedic formula consisting of 37 ingredients including herbs and minerals. This formulation is made by many companies but still no stable standard parameters are identified regarding the basic chemical profile of Chandraprabha vati. Therefore, this study was undertaken to recognize of consistency of Chandraprabha vati as per WHO guidelines on quality controls and standardization of medicinal plant materials using some organoleptic characteristics (physical characteristics), physiochemical parameters, phyto chemical analysis and identification of chemical markers using TLC fingerprinting.

The organoleptic characteristics revealed that the Chandraprabha vati has no impurities and physiochemical parameters revealed moisture content of the Chandraprabha vati was 1.0289% w/w. Ash values were measured and values were given following percentages. Total ash percentage was 18.063%w/w. The percentage of water insoluble ash value was lowest

(4.386%) followed by acid insoluble (11.86%) and water soluble ash values (24.281%). Ethanol soluble extractable percentage was 46.879 %w/w. The pH value of Chandraprabha vati was 5.32.

Preliminary phyto chemical analysis indicated the presence of alkaloids, flavonoids, carbohydrates, sterols and triterpenoids, tanins and phenolic compounds and the TLC studies on water soluble extractive fraction was studied and given 11 spots. This identified consistency and developed TLC fingerprint from basic chemical profile of Chandraprabha vati would be helpful to develop standard quality indicators of Chandraprabha vati.

Key words: Basic Chemical Profile; Chandraprabha vati; Organoleptic Characteristics; Physiochemical Parameters; Qualitative Screening; TLC Fingerprinting.