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Research Article

STANDARDIZATION OF *VELLARUGU CHOORANAM*: A SIDDHA HERBAL DRUG

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ABSTRACT

Pharmacognostical standardization of herbal formulation is essential in order to assess the quality of drugs, based on the concentration of their active principles. *Vellarugu chooranam* is a reputed drug mentioned in the ancient books of Siddha Medicine for the treatment of *Vata* diseases, arthritis, constipation, and diabetes mellitus. The main component of *Vellarugu chooranam* is whole plant of *Enicostemma littorale* Blume (Siddha Name: Vellarugu) (Gentianaceae). In the present study an attempt has been made to standardize the *Vellarugu chooranam*. For the standardization of this drug Organoleptic properties, Phytochemical screening, Fluorescence analysis, Elemental analysis, Physicochemical parameters such as moisture content, ash values, extractability in water and ethanol were carried out. TLC and HPLC fingerprints of the *Vellarugu chooranam* were also prepared to evaluate its quality. These set of parameters were found to be sufficient to evaluate authenticity of the *Vellarugu chooranam* and can be used as reference standards for the preparation of a standardized pharmaceutical product and further quality control researches.

KEYWORDS: Herbal Drug, Parameters, Siddha Medicine, Standardization, *Vellarugu chooranam*.

INTRODUCTION

Plant materials are used throughout developed and developing countries as home remedies, over the counter drug products and raw materials for the pharmaceutical industry, and represent a substantial proportion of the global drug market [1]. Herbal medicines as the major remedy in traditional system of medicine have been used in medical practices since antiquity. The practices continue today because of its biomedical benefits as well as place in cultural beliefs in many parts of the world and have made a great contribution towards maintaining human health. Approximately 60% of the population use herbal medicines to treat medical illnesses. Therefore, reproducible standards of each plant are necessary for effective quality control to prevent adulteration [2].

The subject of herbal drug standardization is massively wide and deep. Standardization is an essential factor for herbal formulation in order to assess the quality of the drugs based on the concentration of their active principle and to ensure that every packet of medicine that is sold has the correct amount and will induce its therapeutic effect [3].

Thus, the present study deals with standardization of Siddha herbal preparation, *Vellarugu chooranam* is mentioned in the ancient books of Siddha Medicine for the treatment of *Vata* diseases, arthritis, constipation, and diabetes mellitus [4-5]. The term *Chooranam* (Powdered herbal preparation for internal use) is applied to the powder prepared by a single or a combination of two or more herbal ingredients [6-7].

Systematic protocols for standardization of *Vellarugu chooranam* is not available, hence it was decided to evaluate the qualitative and quantitative analysis for *Vellarugu chooranam* scientifically to prevent its adulteration. For the standardization of this drug Organoleptic properties, Phytochemical screening, Fluorescence analysis, Elemental analysis, and Physicochemical parameters, were carried out. TLC and HPLC fingerprints of the *Vellarugu chooranam* were also prepared to evaluate its quality.