Preparation and evaluation of melt in mouth tablets using herbal de-worming extract

Shreyas K S, Swetha Srinivasa, Rajarajeshwari N and Namita Naikkhanvte
Visveswarapura Institute of Pharmaceutical Sciences, India

The present study deals with the novel design and development of mouth dissolving de-worming tablets especially for pediatrics and geriatrics. According to 'WHO', 241 million children representing 68% of the total, in the 1-14 years in India are estimated to be at risk of soil transmitted helminthes are parasitic worms. Generally, the treatment involves administering synthetic drugs like albendazole which can cause nausea, diarrhoea, vomiting, jaundice and chemical cholestasis. This present study is designed to develop mouth dissolving tablets containing new plant extract of Diospyros montana (Family-Ebenaceae) leaf which showed significant anthelmintic activity in our previous study. Tree is distributed throughout the Western Ghats of India, Sri Lanka and Australia. For pediatrics, administration and acceptability of drug plays an important role. Hence, an attempt was made to develop flavored melt in mouth tablets which are patient friendly, traveler friendly and can be administered without water. The tablets were prepared by wet granulation technique using different ratios of binder, super-disintegrate (NS 300), sweeteners, Instacoat flavor. The developed tablets were evaluated for various quality control parameters like appearance, taste, drug content, weight variation, thickness, hardness, in vitro disintegration time and friability. Results indicated successful formulation of mouth dissolving tablets with pleasant taste and satisfactory mouth feel with optimum physicochemical properties. The developed formulation was subjected to in vitro anthelmintic activity on Pheretima posthuma and found to exhibit significant level of activity when compared with marketed formulation.

Biography
Shreyas K S is a Research Associate under the guidance of Dr Rajarajeshwari N at Visveswarapura Institute Of Pharmaceutical Sciences, Rajiv Gandhi University of Health Sciences.

shreyasks95@gmail.com

Notes: