

Formulation And Evaluation Of A Herbal Lipstick A New

Master's Thesis from the year 2010 in the subject Medicine - Pharmacology, University of Dhaka (M. Pharm, in Pharmaceutical Technology), language: English, abstract: The aim of the present studies was to develop and characterize 2.6 mg sustained release matrix tablets of Nitroglycerin. Tablets were prepared by direct compression method. Methocel K15M CR and Methocel K100LV CR polymers were used as rate retarding agents in nine formulations (F-1 to F-9). The granules were evaluated for angle of repose, loose bulk density, tapped bulk density, Carr's index, Hausner ratio, moisture content, total porosity and assay. The tablets were subjected to diameter, thickness, assay, uniformity of content, assay after 1Month at 40°C+75%RH, hardness, friability, and in vitro dissolution studies. The granules showed satisfactory flow properties, compressibility, and drug content. All the tablet formulations showed acceptable pharmacotechnical properties and complied with pharmacopoeial specifications for tested parameters. The in vitro dissolution study was carried out for 8 hour using USP-2009 Apparatus-I (Rotating basket method) in distilled water as the dissolution medium. The release mechanisms were explored and explained by Zero order, First order, Higuchi, Korsmeyer-Peppas and Hixson-Crowell equations. Nine formulations were prepared by using three variable ratio of two polymers; Methocel K15M CR (25%, 20% and 15%) and Methocel K100LV CR (15%, 10% and 5%) where all the formulations (F-1 to F-9) contained 0.5% colloidal silicon dioxide and 1% magnesium stearate. Among these nine formulations, six formulations; F-2 (Methocel K15M CR: Methocel K100LV CR = 25% : 10%), F-3 (Methocel K15M CR : Methocel K100LV CR = 25% : 5%), F-4 (Methocel K15M CR : Methocel K100LV CR = 20% : 15%) F-5 (Methocel K15M CR: Methocel K100LV CR = 20% : 10%), F-6 (Methocel K15M CR : Methocel K100LV CR = 20% : 5%) and F-7 (Methocel K15M CR : Methocel K100LV CR = 15% : 15%) met the official specification of release profile. It was also found that the type and the amount of polymers significantly affect the time required for 50% (T50% or MDT) of drug release, release rate constant and diffusion exponent. Higher the MDT value indicates a higher drug retaining capacity of the polymers and vice-versa. Kinetic modeling of in vitro dissolution profiles revealed the drug release mechanism of all proposed formulations followed anomalous type or non-Fickian transport ($n > 0.43$ and n

The authors have presented all the included contents in a detailed manner in a simple and easy to understand language. This book is written with an intention to benefit students, industry professionals and research personnels involved in studying, manufacturing and developing transdermal drug delivery systems. The authors have also included the data of their research work "Formulation and Evaluation of matrix diffusion controlled transdermal patch of glipizide" to provide an illustration. A sincere effort is made to cover all the topics in a detailed yet simple manner. Recent advances in transdermal drug delivery systems have also been included. The authors feel that this book should overcome the need of referring other books for transdermal drug delivery systems.

The goal in designing sustained release is reduce the frequency of dosing or to increase the effectiveness of the drug by localization at the site of action, reducing the dose required or providing the uniform drug delivery. The use of controlled release (CR) formulations offers many potential advantages such as, sustained blood levels attenuation of adverse effects and improved patient's compliance. It is important especially in the case of antihypertensive agents, to maintain constant blood levels, as other wise, dose dumping may cause hypo tension and sub-therapeutical levels may cause hypertension. The objectives of the present study was to Develop sustained release DTZ microsphere by using different drug-polymer ratio, in vitro characterization of DTZ, maintain more uniform drug plasma concentration, reduce dosing frequency, avoidance of night time dosing, to estimate drug release profile of the formulations, to choose the best formulation(s) based on the above evaluations and finally to subject the most satisfactory formulation(s) to accelerated stability studies.

The objective of the present study was the formulation and evaluation of Nebivolol Hcl fast dissolving tablet by solid dispersions. Fast dissolving tablets are novel types of tablets that dissolve / disintegrate / disperse in saliva within few seconds without water. The major category of Nebivolol Hcl is in the treatment of hypertension, adrenergic beta-antagonist and vasodilator. It is a poorly soluble and require enhancement of solubility and dissolution rate in its formulation development.

ABSTRACT (cont.): The solution algorithm for the methodology developed in this study is based entirely on dynamic programming, and it is capable of performing network-wide signal optimization. It has been shown more computationally efficient without compromising global optimality. In addition, a heuristic search procedure has been developed. It can significantly reduce the computation and still generate comparable results. Both solution algorithms have been implemented and evaluated in a simulation testing environment, and the simulation results indicate significant improvements compared to a well-timed fixed-time control and an actuated signal. The methodology developed in this study provides a feasible computational framework that can be applied to a dynamic urban traffic control in conjunction with Advanced Traffic Management Systems and Advanced Traveler Information Systems for network-wide signal optimization. In recent years scientific and technological advances have been made in development of ocular controlled drug delivery system to overcome physiological adversities of conventional dosage form. The present investigation was focused to prepare resinate of moxifloxacin and ion exchange resin to increase the residence time and decrease the solubility of drug in ocular site and incorporated in ocular insert. Ocular insert was prepared by solvent casting method. Nine formulations of OCDDS were prepared with different concentration of polymer (HPMC, MC, and PVA). Prepared formulation was subjected to physicochemical evaluation test, In vitro release, In vivo release and accelerated stability study test. In vivo release of formulation BRF6 was shown 98.87 % at the end of 12th hrs. In vitro release of all the formulation was computed with release kinetic model to predict release rate. suggested that all formulation was followed anomalous diffusion mechanism. Optimized formulation (BRF6) was subjected to antimicrobial test and sterility test. Result clearly showed it was passed. Accelerated stability study indicated optimized formulation was stable for longer period of time

Certain drugs having poor solubility, degradation in the alkaline pH, absorbed from the proximal part of Gastrointestinal Tract and causes irritation in the stomach. Due to this

