Pharmaceut Reg Affairs 2012, 1:4
http://dx.doi.org/10.4172/2167-7689.S1.008

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference and Exhibition on
Pharmaceutical Regulatory Affairs

November 23-24, 2012 Hyderabad International Convention Centre, India

Formulation and evaluation of Mucoadhesive nasal gels of anti-emetic drug (Metaclopramide)

P. Mohan, S. Sharma, G. Parth, M. P. Khinchi, D. Agrawal, N. Sharma and M. P. Kabra
Department of Pharmaceutics, Kota College of Pharmacy, India

The prolonged residence of drug formulation in the nasal cavity is of utmost importance for intranasal drug delivery. The objective of the present investigation was to develop a mucoadhesive in situ gel with reduced nasal mucocilliary clearance in order to improve the bioavailability of the antiemetic drug, Metaclopramide. The in situ gelation upon contact with nasal mucosa was conferred via the use of the thermogelling Methyl cellulose whereas mucoadhesion and drug release enhancement were modulated via the use of sodium alginate and polyethylene glycol polymers respectively. The results revealed that the mucoadhesive polymer increased the gel viscosity but reduced its sol gel transition temperatures and the drug release. The inclusion of polyethylene glycol polymer counteracted the effect of mucoadhesive polymer where by it decreased the gel consistency and increased the sol gel transition as well as in vitro drug diffusion. The in vitro tests performed for mucoadhesive strength and drug diffusion showed that nasal in situ gelling formulations prepared are having good mucoadhesive strength with nearly 100% drug diffusion within 4 hours. So this study points to the potential of mucoadhesive nasal gel in terms of ease of administration, accuracy of dosing, prolonged nasal residence and improved nasal bioavailability.

Biography

Paresh Mohan completed B. Pharma in 2011 from Kota College of Pharmacy, Kota (RAJ.). Presently he is an M. Pharma. (Pharmaceutics) Student in Kota College of Pharmacy, Kota (Rajasthan). Paresh is having 3 International review articles and He is attended 1 National conferences in Solan (H.P.). His Research Guide is Dr. M.P. Khinchi is having 15 International Research Articles, 20 International Review Articles and he is Attended 12 National Conferences.

pareshmhshwr90@gmail.com

Formulation and evaluation of Diphenhydramine HCl rapid release gelcaps 25 mg

Palanisamy.P, R.Margret Chandira, B.Jaykar, A.Pasupathi and B.S.Venkateswaralu
Vinayaka Missions College Of Pharmacy, India

The objective of the present study was to develop Rapid Release Gelcaps of Diphenhydramine HCl, for treatment of Allergic symptoms and irritant cough. The Rapid Release gelcaps were prepared by Direct compression method using Pregelatinised maize starch and croscarmellose sodium in various concentrations. The granules showed satisfactory flow properties and compressibility. All the 8 formulations showed acceptable pharmacopoeial standards. The result of formulation B8 (40 mg Pregelatinised maise starch and 12 mg Croscarmellose sodium) Rapid Release of Diphenhydramine HCL. Successful formulation was found stable after evaluation for physicochemical parameters when kept for 30 days at room temperature, 40^0C ± 2 & 75 % RH and 2-8^0C. It concluded that gelcaps containing Diphenhydramine HCl (40 mg Pregelatinised maise starch and 12 mg Croscarmellose sodium) provide a better option for Rapid release of drug.

Key words: Diphenhydramine HCl, Rapid Release gelcaps, Pregelatinised maise starch, Croscarmellose sodium.

palanisamy2907@gmail.com