



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.11 No.09, pp 277-289, 2018

A Review on Mucoadhesive Microspheres

Anjaneyulu Vinukonda^{1*}, RaviSankar Kunderu², Sailaja Gunnam³

¹Manufacturing Science & Technology, Alembic pharmaceuticals Ltd, Baroda, Gujarat, India.

²Department of Pharmaceutics, KVSR Siddhartha College of Pharmaceutical Sciences, Vijayawada, Andhra Pradesh, India

³Department of Pharmaceutics, Malla Reddy Pharmacy College, Maisammaguda, Dhulapally, Secunderabad, India

Abstract : Several approaches have been developed to prolong the residence time of the dosage forms at the absorption site and one of them is the development of controlled release mucoadhesive system.

Mucoadhesive polymers have recently gained interest among pharmaceutical scientists as a means of improving drug delivery. Microspheres are small in size and due to this small size they have efficient carrier capacity. They generally have the potential to be used for targeting and controlled release of the drug. The binding of mucoadhesive properties to the microspheres has additional benefits such as much more intimate contact with the mucus layer, effective absorption and increased bioavailability of the drugs due to a large ratio of surface area to volume. This review gives an overview about the potential uses of mucoadhesive microspheres as a novel carriers for improving drug delivery through various modes of administration such as oral, nasal, ocular, topical, vaginal and rectal administration or for systemic effects and also focuses on the types of mucoadhesive polymers, method of preparation of microspheres and their evaluation in vitro and in vivo respectively.

Keywords: Mucoadhesion, Mucoadhesive polymers, Microspheres.

Anjaneyulu Vinukonda *et al* /International Journal of ChemTech Research, 2018,11(09): 277-289.

DOI= <http://dx.doi.org/10.20902/IJCTR.2018.110934>
