



DEVELOPMENT AND EVALUATION OF MUCOADHESIVE MICROSPHERES OF FLUNISOLIDE IN THE TREATMENT OF CHRONIC SINUSITIS

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ABSTRACT

Chronic Sinusitis is one of the most prevalent disease conditions found in the world. However till date, no effective treatment has been discovered to cure it completely. Apart from all the precarious symptoms of Chronic Sinusitis, patients are compelled to use sprays, inhalers etc. to treat it. Nonetheless, these dosage forms require frequent administration which cause inconvenience in the long run. In order to improve Patient Compliance, an effort towards developing a controlled release dosage form has been done. Here, Flunisolide microspheres were formulated by orifice-ionic gelation method, using 2 polymers viz. Chitosan and HPMC. Among all the formulations, formulation F6 showed better evaluation results. It had around 87.59% drug entrapment efficiency, 87.2% Percentage yield and around 60%

mucoadhesive strength (After 08 hours of observation). Hence it can be concluded that, microspheres prepared using drug (Flunisolide), Sodium Alginate and HPMC in the ratio of 1:2:2, were found to be the most successful and promising dosage form.

KEYWORDS: Chronic Sinusitis, Patient Compliance, Orifice ionic gelation method, Controlled release dosage, Microspheres.

INTRODUCTION

The main objective of a Pharmacist is to develop a formulation that has maximum bioavailability with minimum side effects. The aim of this article is to develop a dosage form that promises to increase patient compliance by reducing the frequency of dosing and with