

Preparation and Mucoadhesive Test of CSA-loaded Liposomes having different surface characteristics

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Abstract

Drug delivery via the intestinal lymphatics have the importance in terms of increased bioavailability and the possibility of directing delivery to the lymphatic system. The purpose of this study is to prepare CSA-loaded liposomes having different surface characteristics and to evaluate their mucoadhesion rate. Three types of liposomes were consisted of the following : cationic(stearylamine), anionic(phosphatidylserine), polymer-coated(chitosan) liposomes. Liposomes were characterized in accordance with the size, zeta-potential, morphology. Loading efficiency of liposomes was calculated by HPLC after ultracentrifugation 60,000rpm for 1hr. The mucoadhesive test was carried out using rat intestine. The adhesive rate of liposomes was evaluated by the Luminometer and fluorescence microscopy using 5-CF loaded liposomes. Cationic liposomes(67 %) showed better adhesive rate than other liposomes(anionic 56 %, chitan-coated 61 % liposomes).

References

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