Regular Article Received: February 26, 2012 Revised version: April 4, 2012 Accepted: April 5, 2012

Effect of Different Hydrophillic Binders on the Dissolution Profiles of Mefenamic Acid

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SUMMARY. The aim of this study was to elaborate the effect of hydrophilic binders on the release profiles of matrix tablets containing mefenamic acid. Mefenamic acid tablets were prepared using wet granulation method. The investigated hydrophilic binders included starch, pectin, tragacanth and honey. It was found that there was a decrease in the percentage of drug release with the increase in the binder (except tragacanth) concentration, i.e. sustained release behavior was obtained. Zero order model was best fit to all dissolution profiles (indicating controlled release behavior) except that of honey based formulations which followed Higuchi kinetics. It can be concluded from all above stated results that pectin might be considered as a good binder for the tablet formulation of mefenamic acid as compared to lactose as a standard one. Hence the present study justifies the use of pectin as substitute of starch as a binder.

KEY WORDS: Dissolution, Honey, Hydrophilic binders, Mefenamic acid, Pectin, Starch, Tragacanth.

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362 ISSN 0326-2383