ABSTRACT

New era is an era of Novel Drug Delivery Systems. Formulation research is oriented towards increasing the efficacy of existing drug molecule through novel concepts of drug delivery. Haloperidol is widely used as an antipsychotic drug, which is a potential drug candidate for developing into MMT. In the present work an attempt has been made to formulate and evaluate MMT of Haloperidol. The basic approach followed in this study was to incorporate a combination of superdisintegrants in optimum concentrations which can minimize disintegration time. The various superdisintegrants used in the present study were SSG, CCS and CP. Various batches of MMT were prepared by direct compression method and using conventional tablet machine. The formulated MMT were evaluated for various physicochemical parameters, disintegration time and for in vitro drug release. All the batches of the formulations possessed required physicochemical parameters. The disintegration time of various formulations ranged from 24.62 to 29.33 seconds. The most satisfactory formulation possessed minimum disintegration time of 24.62 seconds and released maximum amount of drug in shortest duration of time of 12 min and also was found to be stable during stability studies conducted for 1 month as per ICH guidelines Q1C.

Keywords: MMT; Haloperidol; Direct compression; Physicochemical parameters; Disintegration time; in vitro drug release; stability studies.