PREPARATION AND EVALUATION OF MELOXICAM CHEWABLE TABLETS FOR BETTER ORAL DELIVERY

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ABSTRACT

In the current study, meloxicam (MXM) chewable tablets were formulated and evaluated with an aim of improving its solubility, bioavailability and masking its bitter taste in order to create an effective oral drug delivery system. Meloxicam (BCS class II drug), non steroidal anti-inflammatory drug (NSAID) with analgesic and antipyretic properties, acts by inhibition of prostaglandin synthetase leading to inhibition of prostaglandin synthesis. MXM chewable tablets were made by three different techniques: AG (aqueous granulation), NAG (non-aqueous granulation) and DC (direct compression). The chewable tablets of MXM so prepared were assessed for various parameters, namely, palatability test, hardness, weight variation, mechanical strength, disintegration, friability, percent assay and *in vitro* testing for dissolution profile. The variation found in dissolution profile for all prepared batches was in the order: DC>NAG>AG. The percent assay was found within the range (90-110%). Observations from palatability study showed good overall tolerance levels for DC and AG and moderate tolerance levels for NAG.