Formulation and Evaluation of Mouth Dissolving Film For The Treatment Of Hypertension

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Abstract

The aim of the present investigation was to prepare Olmesartan medoxomil Mouth Dissolving Film using the HPMC E-15 by the solvent casting method. The systems were evaluated for various *in vitro* parameters like colour, transparency, surface of film, thickness, folding endurance, surface pH, % elongation, % drug content and *in vitro* dissolution study. Polymer showed good film forming capacity. Film was colour less and semi-transparent. The drug- polymer interactions were studied by FT-IR and results suggested no interaction between drug and polymers. The dissolution time was found to be less than 3 minute and it was found that no residue remained after dissolution in the media. Propylene glycol (10 % w/w) was used as the plasticizer which gave good elasticity to the film. The drug content of the film was found to be more than 99 %. *In vitro* dissolution studies were performed by using Dissolution Apparatus USP II. Among the various batches E8 showed highest release and they released more than 99% drug within 180 sec. From all the formulations, Formulation E8 was selected as the optimized formulation and evaluated further for stability study. The formulation was found to be stable for period of study (30 days).