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Formulation and Evaluation of Oral Thin Film of Cetirizine Hydrochloride

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Abstract: *The aim of present research was to develop a fast releasing oral polymeric film, with good mechanical properties, instant disintegration and dissolution, producing an acceptable taste when placed on tongue. Solvent casting method was used to prepare oral films. cetirizine hydrochloride an antihistaminic was incorporated to relieve the symptoms of allergic rhinitis. The polymers selected were HPMC 3cps and PVA. glycerin was the plasticizer used. Eight batches of films with drug were prepared using different combinations of polymer concentration. The resultant films were evaluated for weight variation, content uniformity, folding endurance, thickness, surface pH, tensile strength, % elongation, % moisture absorption, %moisture loss in vitro disintegration and in vitro dissolution. The optimized films have disintegrated within 28-60sec. The percentage release was varying with concentration of polymer. The films made with HPMC3cps 200 mg released 98.5% of drug in 2min, which was the best release amongst all.*

Keywords: Oral polymeric film, Cetirizine hydrochloride, plasticizer, solvent casting, Fast releasing.

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