



DEVELOPMENT AND OPTIMIZATION OF ORO DISPERSIBLE FILM

Tagre Y.G., Wakade R.B.

Sudhakar Rao Naik Institute of Pharmacy, Pusad, Maharashtra

ABSTRACT

Aim: Development and Optimization of Oro dispersible film.

Objective: Fast dissolving drug delivery system offers a solution for those patients having difficulty in swallowing tablets/capsules etc. The present investigation was undertaken with the objective of formulating of fast dissolving oral thin films allowing fast reproducible drug dissolution in oral cavity thus bypassing first pass metabolism, to enhance the convenience and compliance by the elderly and pediatric patients.

Materials and Methods: Fast dissolving oral thin films were prepared by solvent casting method with using different film-forming polymers like HPMC, PVA, PVP and Gelatin as natural polymer. PEG 400, glycerol as a plasticizer and mannitol as filler and sweetener. Oral thin films were evaluated for weight variation, thickness, surface pH, folding endurance, drug content, disintegration time, and invitro dissolution studies.

Results: Oral thin films based on evaluation studies HPMC and Gelatin showed optimum performance against other formulations. The prepared films were clear, transparent, and had a smooth surface.

Conclusion: It was concluded that the fast dissolving oral thin films can be made by solvent casting technique with enhanced dissolution rate, better patient compliance and effective therapy.

KEYWORDS: Solvent casting, hydrophilic polymer, invitro dissolution, oral thin films, patient compliance.

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