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## Formulation and Evaluation of Oral Thin Films of Amlodipine Besylate.

Miss: Sheema Tanveer Shaikh and Dr. Prasad G. Ghugarkar

Dr. N. J. Paulbudhe College of Pharmacy Ahilyanagar, Maharashtra

**Abstract:** The utmost accepted route of dispensation is oral route for the reason of low cost and improved patient compliance. Tablets and capsules are the highly prevalent dosage forms taken via oral route, however many pediatric & geriatric patients notice it problematic to consume and do not take their medicines as prescribed. To overcome these difficulties, several fast-dissolving oral thin film drug delivery systems are developed.

This is convenient and uncomplicated to use compared to other delivery modes like orally disintegrating tablets. Oral fast dissolving film is comparatively a novel dosage form in which thin film is formulated employing hydrophilic polymers, which rapidly disintegrate or dissolves on tongue or in the buccal cavity. It is a substitute platform for molecules that go through high first pass metabolism.

The purpose of the current work was to prepare and evaluate oral thin films for sublingual dispension of Amlodipine besylate. Amlodipine besylate is a calcium channel blocker used in the medication of hypertension, angina and other heart diseases. Films were prepared using HPMC (15cps, 60cps), PVA, and HPC as different film-forming agents (3 and 4% (w/v)). Poly ethylene glycol 400 was used as plasticizer and SSG as disintegrant. Sodium saccharine was utilized to hide the unpleasant taste of the API. Films were formulated by solvent casting technique and estimated for weight variation, disintegration time, tensile strength, folding endurance. It can be decided after the analysis that the Amlodipine oral thin films for sub lingual dispension can be a potential innovative drug dosage form...

**Keywords:** Amlodipine Besylate, Oral thin film, Novel drug delivery system, first pass metabolism, hydrophilic polymers, HPMC, Solvent casting method

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