

A Review on Advanced Nasal Drug Delivery System

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Abstract: Nasal drug administration has been used as an alternative route for the systemic availability of drugs restricted to intravenous administration. This is due to the large surface area, porous endothelial membrane, high total blood flow, the avoidance of first-pass metabolism, and ready accessibility. The nasal administration of drugs, including numerous compound, peptide and protein drugs, for systemic medication has been widely investigated in recent years. Drugs are cleared rapidly from the nasal cavity after intranasal administration, resulting in rapid systemic drug absorption. Several approaches are here discussed for increasing the residence time of drug formulations in the nasal cavity, resulting in improved nasal drug absorption. The article highlights the importance and advantages of the drug delivery systems applied via the nasal route, which have bio adhesive properties. Bio adhesive, or more appropriately, Mucous adhesive systems have been prepared for both oral and per oral administration in the past. The nasal mucosa presents an ideal site for bio adhesive drug delivery systems.

Keywords: Nasal, Nasal drug delivery system, route of administration, Nasal Bioavailability

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