

A Comprehensive Review on Transdermal Patch

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Abstract: *Transdermal patches are a non-invasive method of drug administration. It is an adhesive patch designed to deliver a specific dose of medication through the skin and into the bloodstream throughout the body. Transdermal drug delivery has several advantages over other routes of administration, for instance, it is less invasive, patient-friendly, and has the ability to bypass first-pass metabolism and the destructive acidic environment of the stomach that occurs upon the oral ingestion of drugs. For decades, transdermal patches have attracted attention and were used to deliver drugs such as nicotine, fentanyl, nitroglycerin, and clonidine to treat various diseases or conditions. Transdermal drug delivery systems (TDDS) are the dosage form of adhesive patch that is placed on the skin to deliver specific dose of medication through the skin and in to the blood stream. For the delivery of therapeutic agents through the human skin for systemic effects, the comprehensive morphological, bio physical and physicochemical properties of the skin are to be considered. An advantage of trans dermal drug delivery route over other type of medication is that a patch provides not only a controlled release, but also a constant administration of the drug and eliminates pulsed entry into the systemic circulation which often causes un desirable side effects*

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