CHAPTER 40

PHARMACY PHARMACEUTICS

Doctoral Thesis

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Development and Evaluation of Matrix Type Transdermal Drug Delivery System of Lisinopril in Rats and Human Volunteers.

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Abstract

Deals with the formulation and evaluantion of the matrix type transdermal drug delivery system for lisinopril using a natural polymer i.e. Chitosan. This natural polymer offers several advantages like biocompatible, biodegradable, non-toxic and cost effectiveness along with displaying suitable controlled release characteristic of the controlled drug delivery system. The drug delivery by transdermal route could show sustained plasma profile over long period of time. This could minimize the risk of fluctuations of drug plasma levels. Finally it is non-invasive technique, easy to terminate the action by removing the patch from the site and most importantly it improves the patient compliance.

Contents

1. Introduction. 2. Literature review. 3. Drug, Polymer and solvent profiles. 4. Role of chitosan in transdermal drug delivery. 5. Materials and methods. 6. Open-labelled pilot studies in normal human healthy volunteers. 7. Results. 8. Discussion. 9. Conclusion. Bibliography and Appendix.