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TITLE

Sodium alginate based new bioadhesive and rapid oromucosal absorptive sublingual tablet system for intraoral drug delivery

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Oromucosal delivery of drugs promotes rapid absorption and high bioavailability, with subsequent almost immediate onset of pharmacological effect. However, many oromucosal delivery systems are compromised by the possibility of the patient swallowing the active substance before it has been released and absorbed locally into the systemic circulation. With this approach, optimal exposure of active substances to the dissolving fluids is combined with Bioadhesive retention of drug in the oral cavity. This paper introduces a new tablet system for sublingual administration and rapid drug absorption. The tablet is based on an ordered interactive mixture of components, consisting of carrier particles partially covered by fine dry particles of the drug, in this case piroxicam. In the interests of increasing retention of the drug at the site of absorption in the oral cavity, a Bioadhesive component was also added to the carrier particles. Tablets containing 5, 10, 15 and 20 mg of piroxicam were tested in vitro. The tablets disintegrated rapidly and dissolution tests revealed that piroxicam was dissolved from the formulation almost instantly. These results indicated that the bioadhesive component prevented the piroxicam from being swallowed (the fraction swallowed was considered smaller compared to other mucosal delivery systems), without hindering its release and absorption. This new sublingual tablet formulation may also hold potential for other substances where a rapid onset of effect is desirable.

Biography

Vaishali Kate completed her graduation in pharmacy from Dr. B. A. M. University, Aurangabad and currently she is doing post graduation at Tatyasaheb Kore college of Pharmacy, Kolhapur. She has published more than 03 papers in reputed journals and serving as research scholar at PG department.