Oral transmucosal drug delivery – Current status and future prospects

Abstract

Oral transmucosal drug delivery (OTDD) dosage forms have been available since the 1980s. In contrast to the number of actives currently delivered locally to the oral cavity, the number delivered as buccal or sublingual formulations remains relatively low. This is surprising in view of the advantages associated with OTDD, compared with conventional oral drug delivery. This review examines a number of aspects related to OTDD including the anatomy of the oral cavity, models currently used to study OTDD, as well as commercially available formulations and emerging technologies. The limitations of current methodologies to study OTDD are considered as well as recent publications and new approaches which have advanced our understanding of this route of drug delivery.