

Formulation and Evaluation of Buspirone Oral Disintegrating Tablets Using Banana Powder

Abstract

The present study aims to formulate and evaluate oral disintegrating tablet of buspirone. A drug that is used for the treatment of anxiety management was prepared by direct compression method using natural disintegrates. Eight formulations (F1-F8) of oral disintegrating tablets of buspirone were prepared by using natural disintegrates. The prepared tablets were evaluated for hardness, friability, thickness, drug content uniformity, water absorption, wetting time, and disintegration time and in-vitro dissolution study. Based on the results of FT-IR and DSC studies, majority of the excipients were found to be compatible with buspirone which were used for the preparation of buspirone oral disintegrating tablets. Among all the formulations F3 (containing 15mg of natural disintegrate banana powder) was considered to be the best formulation, which releases up to 98% drug in 8 minutes. From this study, we can conclude that, a formulated tablet of buspirone containing banana powder is better and effective to meet the patient compliance.