

ABSTRACT

Objective: Formulation of rapidly dissolving tablets using different amount of sublimating agents were prepared by the technique of sublimation in order to obtain new formulation containing Diclofenac sodium for Arthritis disease treatment.

Methods: Twelve different formulations were prepared using different concentration of super disintegrating agents. The best and the optimum formulation were chosen for the main aim of the study to prepare the RDT by sublimation technique.

Eight different formulations of rapidly dissolving tablets of Diclofenac sodium were prepared, which contain Camphor and ammonium bicarbonate in various combinations. Tablets were prepared by direct compression method and physicochemical parameters were evaluated.

Result: All the formulation gave the satisfactory result in terms of physicochemical property, wetting time disintegration time and dissolution time.

Conclusion: The best rapidly dissolving tablet performance and best in vitro drug release profile were achieved by using camphor at 10% concentration. The chosen tablet containing 25 mg of Diclofenac sodium released drug within 10 min to achieve the desired therapeutic concentration.

Keywords: Diclofenac sodium, Rapidly dissolving tablets, Camphor, Ammonium Bicarbonate, Cumulative release pattern, Disintegration time.