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A Review of In Vitro Dissolution Study of Metronidazole Tablet

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Abstract: The plot of this study is to obtain a deep knowledge regarding the effect of different fluids (Gastric medium, simulated gastric fluid without enzyme, ORS solution, rice water, lentil soup, watermelon juice, apple juice, mango juice, pomegranate juice, black and green tea) on dissolution of metronidazole tablet by alteration of different medium.

Study had been focused on the in vitro dissolution study of metronidazole in the presence of different fluids (Gastric medium, simulated gastric fluid without enzyme, ORS solution, rice water, lentil soup, watermelon juice, apple juice, mango juice, black and green tea) which has been commonly used in diarrheal condition. Dissolution study was performed as per mentioned in Indian pharmacopoeia.

Other general quality assessment tests of these tablets like weight variation, hardness, friability, disintegration time and assay were also determined according to established methods.

Also in the study, bio-equivalence of three metronidazole brand was assessed and studied in three different dissolution media by in vitro dissolution study. Several methods for dissolution of metronidazole comes with the limitation, so most economic, rapid UV-Visible method of analysis was used for assessment

Keywords: Metronidazole, Dissolution, In-vitro, Enzymes, Different fluids

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