In Vitro Study on Interaction of Ketotifen Fumarate with Metformin Hydrochloride

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SUMMARY. The present study was designed to study the in vitro interaction of ketotifen fumarate and metformin hydrochloride in aqueous media at different pH values using Job’s continuous-variation analysis and Ardon’s spectrophotomeric measurement. Job’s analysis indicated the formation of 1:1 complex between ketotifen fumarate and metformin hydrochloride at the studied pH values. On the other hand, the values of stability constants (between negative values and 1), as calculated from Ardon’s plot, mean that the formation of complex due to interaction between the drugs is readily dissociable. Thus the findings of the study suggest that both drugs can be safely co-administered. However, further studies involving animal models are needed to ascertain the exact nature of interaction between them in vivo.

KEY WORDS: Ardon’s method, Job’s method, ketotifen, metformin, stability constant.

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