

Solubility enhancement techniques

Prashant Patil and Sameer Patel

Tatyasaheb Kore College of Pharmacy, India

A mong all newly discovered chemical entities about 40% drugs are lipophilic and fail to reach market due to their poor aqueous solubility. For orally administered drugs solubility is one of the rate limiting parameter to achieve their desired concentration in systemic circulation for pharmacological response. Problem of solubility is a major challenge for formulation scientist, which can be solved by different technological approaches during the pharmaceutical product development. Solid dispersion, Micronization, Salt formation, are some of the vital approaches routinely employed to enhance the solubility of poorly soluble drugs but each approach has some limitation and advantages. Novel techniques like Nano-suspension, Supercritical processing, Cryogenic technology may allow greater opportunities in the delivery of poorly soluble drugs. The solubility behavior of drugs remains one of the most challenging aspects in formulation development. The present review is devoted to various traditional and novel techniques for enhancing drug solubility to reduce the percentage of poorly soluble drug candidates eliminated from the development.

Biography

Prashant Pandurang Patil has completed their bachelor degree in pharmacy from Shivaji University Kolhapur. Currently Mr.Prashant pursuing master degree in Pharmaceutics from Tatyasaheb Kore college of Pharmacy Warananagar. He attended several conferences and have sound knowledge of writing scientific literature.

mprashanth02@gmail.com

Gastro-protective activity of *Ficus nervosa* bark in wister albino rats

Prateek Kulshrestha¹ and D.Pradeep Kumar²

¹CM College of Pharmacy, India

²Sri Venkateshwara College of Pharmacy, India

I n Indian traditional system of medicine, *Ficus nervosa* Heyne ex Roth (Lour) belonging to the family *Moraceae* is used for its curative property in treating fever, asthma, ulcer, inflammatory disorder. Hence an effort was made to investigate the anti-ulcer activity of various extract of bark of *Ficus nervosa*. The main objective of this work is to explore the plant, *Ficus Nervosa* Heyne ex Roth (Lour) bark and it is semi purified active fraction for their therapeutic potential in the In Vivo model of antiulcer activity. The effect of chloroform, ethyl acetate and ethanolic extract of *Ficus nervosa* bark was investigated in rats to evaluate the anti-ulcer activity by using aspirin, alcohol and pyloric ligation models experimentally induced gastric ulcer. The parameters taken to assess anti-ulcer activity were volume of gastric secretion, pH, free acidity, total acidity and ulcer index. The results indicate that the ethanolic extract 200mg/kg significantly decreases the volume of gastric acid secretion, pH, free acidity, total acidity and ulcer index with respect to standard. The study clearly indicates the *Ficus Nervosa* act as an ulcer protective agent in ulcer score and acid content investigation studies. However further studies must be conducted to overcome to lacuna that we are experienced in these research work.

Biography

Prateek Kulshrestha has completed his B.Pharmacy from Pulla Reddy Institute of Pharmacy and is now pursuing M.Pharmacy with specialization of Pharmaceutics in CM College of pharmacy. He has presented various poster and oral presentations at national level and has also qualified GPAT and PG CET.

prateek.kul18@gmail.com