Abstract

There is no end in the search for newer: better alternatives: in case of drugs it is an ongoing process to find a drug or dosage form with maximum efficacy & minimum effects.

The aim of the present study was to investigate the potential of a tranferosomes for transdermal topical delivery system of Posaconazole is widely used in potent antifungal drug. Posaconazole is a potent antifungal drug. But main problem with posaconazole is, when given orally it these are poor bioavailable due to less solubility.

Hence in this study we formulated tranferosomal gel posaconazole for better absorption through skin.

The preformulation study of drug was carried out initially in terms of identification (IR spectra), and UV absorption spectra (λ-max determination) and results directed for the further course of formulation. Optimizations of the formulations were done by variation in formulation, such as effect of lecithin, surfactant ratio, effect of various solvents and effect of surfactants. The transferosomes were formulated by thin film hydration method using surfactant such as Pluronic f127 in various concentrations. The entrapment efficiency was found to be Phosphatidyl choline (Soya Lecithin): Edge Activator ratio dependent.

Higher entrapment was found to be 88.8 for posaconazole respectively with F2 formulation. Permeation through skin was also dependent on Phosphatidyl choline (Soya Lecithin): Edge Activator ratio. The formulation F2, which showed higher entrapment efficiency, provides higher permeation of drug from transferosomal gel this fact confirms the above said. The present study conclude that transferosomes formed from Phosphatidylcholine: Pluronic f127 the ratio 85:15 (in mg) was a promising approach to improve the permeability of posaconazole through skin in topical gel formulation.