



***Carica Papaya* and Nicosan affect the pharmacokinetics of Ciprofloxacin in rabbit**

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Ciprofloxacin, an antibacterial agent active against gram positive and negative bacteria, functions in inhibiting microbial DNA. Nicosan and *Carica papaya* (CP) L (Family: caricaceae) have good antisickling properties. Ciprofloxacin is well prescribed for patients with SCA and interacts with metallic compounds which are present in plants. Therefore possible interaction between these agents was investigated. Twenty four rabbits were divided into three groups of eight each. Animals of group 1 were control and received by oral route ciprofloxacin, 20 mg/kg body wt, Group 2 received ciprofloxacin, 20 mg/kg body wt + aqueous extract of CP, 10 mg/kg body wt, Group 3 received ciprofloxacin, 20 mg/kg body wt + nicosan, 5 mg/kg body wt. Blood samples were collected at 0, 1, 2, 3, 4, 5, and 6 hr post dosing and plasma ciprofloxacin estimated. With CP, ciprofloxacin showed significant increase ($P>0.05$) in $t_{1/2el}$ and T_{max} with a significant decrease ($P>0.05$) in C_{max} , V_d and CL compared to the control. Decreased C_{max} and increased T_{max} indicate reduced drug absorption which is evident by reduced AUC. In the presence of nicosan, there was a significant decrease ($P>0.05$) in $t_{1/2el}$ with resultant increase in V_d compared to the control. These suggest that an interaction could be present between ciprofloxacin and CP or nicosan. Thus, concomitant dosing of ciprofloxacin with CP or nicosan should not be overlooked.

Biography

Dr Grace Ukpo is a Senior Lecturer in the Department of Pharmaceutical Chemistry, Faculty of Pharmacy at the University of Lagos, Nigeria. She is a graduate of Chemistry of the University of Benin, Nigeria. In addition she obtained M.Sc in Medicinal Chemistry from the University of Maryland, Baltimore, Maryland, USA and Ph.D from the University of Lagos, Nigeria. She has published 20 papers in reputable journals. She is lecturing and conducting research in Pharmaceutical Chemistry at the University of Lagos.