ABSTRACT

The study was undertaken to evaluate the effects of ranitidine and omeprazole on the liver function tests (bilirubin, ALP, AST and ALT).

Fifty seven patients taking ranitidine (300mg) and forty patients taking omeprazole (40mg) for the treatment of their GIT disorders were involved in the study. Another fifty apparently healthy subjects were enrolled in the study as a control group. Any factors which may interfere with study were excluded from both patients and control groups.

The biochemical hepatic parameters were estimated by colorimetric enzymatic methods supplied as kits by a well known industrial company.

The result of the study showed an elevation of ALP, AST and ALT activities in a number of patients taking ranitidine or omeprazole. The extent of the elevation of these parameters indicates a minor effect of ranitidine and omeprazole on the liver.

Distribution of the biochemical hepatic parameters according to age groups showed no significant correlation for bilirubin, a significant elevation of ALP and AST activities and no significant elevation of ALT activities for ranitidine group were found.

For omeprazole group no significant correlation for Bilirubin and no significant elevation of ALP and ALT and a significant elevation of AST activities, indicating age related effects of ranitidine and omeprazole on the liver were found.

Distribution of the biochemical hepatic parameters according to duration of therapy of both ranitidine and omeprazole yields a non significant correlation, indicating a non duration effect of both ranitidine and omeprazole on the liver. No statistical differences were found between the biochemical hepatic parameters of ranitidine and omeprazole indicating a similarity in the hepatic effect of both drugs.

The study suggests that the effect of ranitidine and omeprazole on the liver follows an idiosyncratic pattern.