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DBM-819, given intraduodenally, inhibited basal acid secretion with an ED50 value of 3.5 mg/kg. In addition, DBM-819 reduced either histamine or pentagastrin-stimulated gastric acid secretion with ED50 values of 4.0 and 5.1 mg/kg, respectively. Duration of the anti-secretory effect was about 18 h upon oral administration. Oral administration of DBM-819 dose dependently protected the gastric lesions induced by ethanol, NaOH, indomethacin and aspirin, and the duodenal ulcer induced by cysteamine, with ED50 values of 7.0, 20, 3.1, 4.0 and 6.0 mg/kg, respectively. Taken together, these results suggest that DBM-819 acts as an orally effective anti-ulcer agent in vivo, and that DBM-819 could be developed as a new therapeutic agent for peptic ulcer disease.

[PE1-25] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Effect of the pretreatment with prokinetic agents on gastric emptying as estimated from serum concentrations of orally administered ranitidine in humans

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To comparatively investigate the effect of two prokinetic drugs, cisapride and metoclopramide, on gastric emptying and intestinal transit by assessing the serum concentration of ranitidine following oral administration to healthy volunteers. Six healthy male subjects participated in a three-way cross-over study. Cisapride or metoclopramide was administered orally 30 min prior to an oral administration of ranitidine. Serum concetrations of ranitidine were determined by an HPLC method, and compared with the control group of no receiving the pretreatment. Pharmacokinetic parameters, including AUC_{inf}, C_{max}, T_{max} and $T_{1/2}$ were obtained by standard methods. In addition, the effects of these prokinetic drugs on the in vitro apparent permeability of ranitidine across the rat jejunum in the Ussing chamber, and on the in vivo intestinal transit of charcoal meals in rats were also examined. T_{max} of ranitidine in human subjects was shortened significantly by the either of the pretreatments. Even the AUC_{inf} of ranitidine was also decreased significantly in the case of cisapride pretreatment. However, no changes were observed for the values of C_{max} and $T_{1/2}$ by the pretreatments. Rat studies revealed that cisapride and metoclopropamide had no influence on the in vitro permeability of ranitidine or the in vivo intestinal transit of charcoal meals. We conclude that these prokinetic agents accelerate the gastric emptying of ranitidine, thereby decreasing the AUC_{inf} of ranitidine in the case of cisapride pretreatment. We hypothesize that the saturation of the carrier system, which is responsible for the intestinal absorption of ranitidine, is responsible for the decrease in the AUC_{inf}.

[PE1-26] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Inhibitory Effect of Curcumin on Experimental Hepatic Fibrosis <I>in vivo </I>and <I>in vitro</I>.

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Background/Aims. : In an earlier our report, we reported Curcumin had the protection effects on acute or subacute Carbon tetrachloride-induced liver damage in rats. In this present study, the