compared to evaluate bioequivalence between two formulations, according to Korea Food and Drug Administration Guideline. The analysis of variance did not show any significant differences between the two formulations and 90% confidence limits fell within the acceptable range (80-120%) for bioequivalence. Based on these data it was concluded that two domperidone maleate tablets showed comparable pharmacokinetic profiles, which means that the Sinil Perinal®" tablet is bioequivalent to the Janssen Korea "Motirium-M®" tablet.

[PE2-9] [04/18/2003 (Fri) 09:30 - 12:30 / Hall P]

The Study on the drug pharmacokinetics according to the progression of liver disease

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We underwent this study to know correlation between the amount of portosystemic shunt/hepatic fibrosis and bioavailability parameters such as AUC, Cmax, Tmax and t1/2 of high extraction ratio drug, propranolol, in CCl4-induced liver cirrhosis model of rats.
This study describes the bioavailability study of propranolol(5 mg/kg), Shunt Index using thallium-201 per rectum scintigraphy to measure the amount of portosystemic shunt indirectly and intrahepatic hydroxyproline content performed in the CCl4-induced liver cirrhosis model of rats. In addition an analysis of interrelationship between the results of bioavailability parameters and the amount of portosystemic shunt/intrahepatic hydroxyproline content are included.
There was a significant linear correlation between Shunt Index and AUC and between Shunt Index and Cmax (e.g., r=0.604 $p<0.001$, r=0.377 $p<0.05$, respectively). Also there was a significant linear correlation between intrahepatic hydroxyproline content and AUC between intrahepatic hydroxyproline content and Cmax (e.g., r=0.581 $p<0.001$, r=0.343 $p<0.05$, respectively). And linear regression between AUC and Shunt Index and between AUC and intrahepatic hydroxyproline content was significant(e.g., r square=0.364 $p<0.001$, 0.338 $p<0.001$, respectively). These results suggest that Shunt Index may be an important marker for predicting AUC of high extraction ratio drug in patients with chronic liver disease.

[PE2-10] [04/18/2003 (Fri) 09:30 - 12:30 / Hall P]

Effects of Glucose Supplementation on the Pharmacokinetics of Intravenous Chlorzoxazone in Rats with Water Deprivation for 72 Hours

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In rats with water deprivation for 72 h (rats with dehydration), hepatic cytochrome P450 2E1 (CYP2E1) was 3-fold induced with an increase in mRNA, and glucose supplementation instead of food during 72-h water deprivation inhibited the CYP2E1 induction. Chlorzoxazone (CZX) is metabolized to 6-hydroxychlorzoxazone (OH-CZX) mainly by CYP2E1 in rats. Hence, the effects of glucose supplementation on the pharmacokinetics of CZX and OH-CZX were investigated after an intravenous administration of CZX at a dose of 25 mg/kg to control rats, rats with dehydration, and rats with glucose supplementation. Based on the results of CYP2E1, the formation of OH-CZX increased in rats with water deprivation compared with in control rats. This was proven by the following results. In rats with dehydration, the total area under the plasma