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Comparative Study on the Pharmacokinetic of Lansoprazole in Gastric Ulcer and Normal Rabbits by HPLC-DAD

Xianglan JIANG [1,2], Jing WU [3], Daoquan TANG [1,2],*, Yuanyuan GAO [2], Dongzhi YANG [1,2], Ziming ZHAO [2] & Hui CHEN [2]

[1] *Department of Pharmaceutical Analysis, Xuzhou Medical College, Xuzhou Jiangsu 221004 China;*
[2] *Key Laboratory of New Drug & Clinical Application, Xuzhou Medical College, Xuzhou Jiangsu 221004, China*
[3] *Student of school of pharmacy, Xuzhou Medical College, Xuzhou Jiangsu 221004, China*

***SUMMARY*. Gastric ulcer is one of ulcerous diseases and may result in some changes of many enzymes and transporters concerned with metabolism and disposal of drug. The pharmacokinetic of drug should be different between peptic ulcer and normal animals. Lansoprazole has been one of important medicine for treatment of ulcerous diseases. So, this paper investigated the difference of pharmacokinetic profiles of lansoprazole in gastric ulcer and normal rabbits *in vivo* by HPLC-DAD method. In this work, a liquid-liquid extraction and enrichment method with RP-HPLC determination route was taken. The pharmacokinetic parameters were analyzed by double-compartmental method (DAS2.0). The pharmacokinetic parameters of lansoprazole in normal and ulcer rabbits were as follows: (614.42 ± 152.25) and (875.73 ± 316.34) mg h/L for $AUC_{(0-6.5)}$; (0.68 ± 0.12) and (0.83 ± 0.22) h for $MRT_{(0-6.5)}$, (0.52 ± 0.23) and (0.87 ± 0.42) h for $t_{1/2}$; (6.13 ± 2.11) and (2.54 ± 1.65) L/h/kg for CL, respectively. Those results indicate that the pharmacokinetic profiles of lansoprazole were changed by gastric ulcer.**

KEY WORDS: Gastric ulcer, High-performance liquid chromatography, Lansoprazole, Pharmacokinetics.

* Author to whom correspondence should be addressed. *E-mail:* tdq993@hotmail.com

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