Comparative Pharmacokinetic Study of Ascaridole After Oral Administration of Ascaridole and Jinghuaweikang Capsule to Rats

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SUMMARY. The objective of this study was to compare the pharmacokinetic characteristics of ascaridole following oral administration of pure ascaridole and Jinghuaweikang (JHWK) capsule. Besides, additional rats were given pure ascaridole via intravenous administration for the bioavailability study. The concentration of ascaridole in rat plasma was determined by a GC/MS method. Following oral administration of pure ascaridole and JHWK capsule, the maximum mean concentration in rat plasma (C_{max} 2701.4 ± 1282.6 ng/mL and 3008.0 ± 273.5 ng/mL) were achieved at 0.25 ± 0.09 h and 0.47 ± 0.22 h (T_{max}), and the absolute bioavailabilities were approximately 20.8 and 26.9 %, respectively. The results indicated that other ingredients in JHWK capsule might facilitate and prolong the absorption procedure of ascaridole, and thus enhance its bioavailability in rats. The present study provided the necessary information for the further investigation of Chenopodium ambrosioides L. and its preparation.

KEY WORDS: Ascaridole, Chenopodium ambrosioides L., GC/MS, Jinghuaweikang capsule, Pharmacokinetic study.

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