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Pharmacokinetics, Tissue Distribution and Excretion of Vitexin in Mice

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***SUMMARY*. Pharmacokinetics, tissue distribution and excretion of vitexin (VIT) were studied after intravenous and oral administration to mice at dose of 10 mg/kg and 30 mg/kg, respectively. A sensitive and specific HPLC method with internal standard was developed and validated for the pharmacokinetic studies of VIT. The results showed that VIT was rapidly and widespreadly distributed throughout the whole body after administration and the oral bioavailability of VIT was 3.91 %. The highest VIT level after intravenous dose was obtained in gallbladder, followed by lung, liver and kidney. While, the highest VIT level after oral dose was observed in gallbladder, followed by intestine, stomach, and spleen. The total cumulative excretion percentage of VIT in 24 h after intravenous and oral administration are 31.83 ± 3.85 % (22.72 ± 2.23 % in urinary excretion; 9.11 ± 1.69 % in fecal excretion) and 10.77 ± 2.34 % (2.92 ±1.05 % in urinary excretion; 7.85 ± 1.45 % in fecal excretion), respectively.**

KEY WORDS: Excretion, HPLC, Pharmacokinetics, Tissue distribution, Vitexin.

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