The effect China Bayberry on Cytochrome P450 in Rats by Cocktail Method

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SUMMARY. The effect of China Bayberry (Myrica rubra) on cytochrome p450 isoforms CYP1A2, CYP2C9, CYP2D6, CYP3A4, CYP2C19, CYP2B6 by cocktail method has been studied. The rats were randomly divided into two groups. One group was given China bayberry once daily orally for fourteen days. Another group received orally normal saline one daily as the blank control. After fourteen days, the rats were given probe drugs, the plasma concentration of probe drugs were determined by LC-MS, data of plasma drug level time were disposed with DAS Ver 2.0. There was statistical difference in AUC, CL and Cmax of omeprazole between two groups (P < 0.05), but no statistical pharmacokinetics difference for phenacetin, tolbutamide, metoprolol, midazolam and bupropion. China bayberry and combination of drugs that are metabolized through CYP2C19 enzyme need to pay close attention to changes in the plasma concentration to avoid drug interactions that may occur.

KEY WORDS: China bayberry, CYP450, Rat pharmacokinetics.

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