生物药剂学与药物动力学

多索茶碱与阿魏酸钠药物动力学相互作用研究

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目的 研究多索茶碱与阿魏酸钠体内药物动力学相互作用影响情况。方法 采用 HPLC 法测定单独给予大鼠多索茶碱或阿魏酸钠后的药物动力学参数,并与同时给予两种药物(多索茶碱诱导阿魏酸钠或阿魏酸钠诱导多索茶碱)时的药物动力学参数进行比较。根据生物利用度和生物等效性评价标准,分别对单用组、诱导组的 AUCO~t、Cmax 进行方差分析和双侧 t 检验。结果 单用组对于诱导组 t1/2、ke 两个参数均有显著差异;生物利用度和生物等效性的结果显示,Cmax、AUCO~∞和 AUCO~t 均不符合生物等效标准。结论 当多索茶碱或阿魏酸钠受到彼此诱导时一种药物对另外一种药物的药动学参数有较大影响,因此在联合用药时应适当调整剂量,保证药物疗效,防止不良反应发生。

关键词 <u>药剂学</u> <u>多索茶碱</u> <u>阿魏酸钠</u> <u>药动学</u> <u>相互作用</u> <u>生物等效性</u> 分类号 R94

The pharmacokinetic interaction between doxofylline and sodium ferulate

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Abstract

Objective To study the pharmacokinetic interaction after oral administration of doxofylline and sodium ferulate in rats. Methods After oral administration of doxofylline and sodium ferulate, the drug levels in plasma were measured by HPLC. The plasma concentration-time data were accessed by DAS2.0 and the pharmacokinetic parameters were obtained. The interaction of the pharmacokinetics between doxofylline and sodium ferulate were evaluated by t test. Results The results showed that Cmax , AUC0-t and AUC0- ∞ of doxofylline group and sodium ferulate co-administration group were not bioequivalent. Significant difference was found on the pharmacokinetic parameters of doxofylline and sodium ferulate before and after co-administration. Conclusions It was shown that for the two drugs studied, each drug has obvious effect on the pharmacokinetic parameters of the other when co-administrated in vivo. It is suggested that the dose should be adjusted appropriately when doxofylline and sodium ferulate are used together in clinic to prevent potential adverse effects. Key words pharmaceutics doxofylline sodium ferulate pharmacokinetics bioequiavailability

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