

论文

微透析结合RP-HPLC研究盐酸平阳霉素在家兔血中的药代动力学

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摘要:

采用微透析技术研究盐酸平阳霉素在体药代动力学, 用Supelco RP-amide C<sub>16</sub>柱进行样品的HPLC分析, 盐酸平阳霉素的血药浓度用3P87程序处理。结果表明, 家兔静注盐酸平阳霉素后, 透析液中的药物浓度在1.04~66.56 μg·mL<sup>-1</sup>时, 浓度与峰面积有良好的线性关系(R<sup>2</sup>=0.999 4)。微透析探针的在体回收率为(42.8±3.4)%(n=6)。所测血药浓度经3P87程序拟合后, 药-时曲线符合二室模型, T<sub>1/2α</sub>及T<sub>1/2β</sub>分别为14.9及60.3 min。因此, 该方法可用于盐酸平阳霉素药代动力学研究。

关键词: 盐酸平阳霉素 微透析 反相高效液相色谱法 血药浓度

Pharmacokinetics of pingyangmycin hydrochloride in rabbits determined by microdialysis coupled with RP-HPLC

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Abstract:

Microdialysis coupled with RP-HPLC was used to study the blood pharmacokinetics of pingyangmycin hydrochloride in rabbits. Supelco RP-amide C<sub>16</sub> column was adopted for the analysis of pingyangmycin hydrochloride. The data was analyzed with 3P87 program. The calibration curve was linear in the concentration range from 1.04 to 66.56 μg·mL<sup>-1</sup> (R<sup>2</sup>=0.999 4). The in vivo recovery of microdialysis probe was (42.8±3.4)%(n=4). The concentration-time curve of pingyangmycin hydrochloride was fitted to two-compartment model. T<sub>1/2α</sub> and T<sub>1/2β</sub> were 14.9 and 60.3 min, respectively. The method is proved to be accurate, simple and suitable for the pharmacokinetics study of pingyangmycin hydrochloride in rabbits.

Keywords: microdialysis RP-HPLC blood drug concentration pingyangmycin hydrochloride

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