

[本期目录](#) | [下期目录](#) | [过刊浏览](#) | [高级检索](#)[\[打印本页\]](#) [\[关闭\]](#)**简报****HPLC法同时测定氧化槐果碱、槐定碱和苦参碱**吴志娇¹, 赵红¹, 薛英¹, 胡新明¹, 毛一卿², 谭焕然²

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摘要:

建立了同时测定氧化槐果碱、槐定碱和苦参碱的HPLC(高效液相色谱)方法。用VP-ODS(维普C18柱)150mm × 4.6 mm, 5 μm 色谱柱, 柱温40 °C, 流动相为0.01mol/L pH 8.5磷酸盐缓冲溶液-甲醇(40 : 60), 流速 1.0 mL/min, 紫外检测器波长215 nm。结果表明, 3种生物碱在确定的色谱条件下得到很好的分离, 且在所选质量浓度范围20~200 mg/L 内线性关系良好, 回收率范围97.2%~102%。

关键词: 槐果碱 槐定碱 苦参碱 高效液相色谱**Simultaneous determination of oxysophocarpine, sophoridine, and matrine by HPLC**WU Zhi-Jiao¹, ZHAO Hong¹, XUE Ying¹, HU Xin-Ming¹, MAO Yi-Qing², TAN Huan-Ran²

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Abstract:

An HPLC method for simultaneous determination of oxysophocarpine, sophoridine, and matrine was proposed. VP-ODS column (150 mm × 4.6 mm, 5 μm) was used in the experiment. Column temperature was 40 °C, mobile phase was 0.01 mol/L phosphate buffer solution (pH 8.5)-methanol (40 : 60), UV detection wavelength was 215nm, and flow rate was 1.0 mL/min. The results indicated that the three kinds of alkaloid were separated effectively and showed good linearity within the selected concentration range.

Keywords: oxysophocarpine sophoridine matrine HPLC**收稿日期** 2010-05-17 **修回日期** 2010-09-06 **网络版发布日期****DOI:****基金项目:**

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参考文献:

- [1] Hu J P, Yang J H. Determination of matrine in Yanshu injection by HPLC [J]. Chinese Journal of Hospital Pharmacy, 2003, 23(1): 15-16 (in Chinese). 胡君萍, 杨建华. 高效液相色谱法测定岩舒注射液中苦参碱的含量
[J]. 中国医院药学杂志, 2003, 23(1): 15-16.

- [2] Li P F, Wang Z, Shen B, et al. Simultaneous determination of matrine, oxymatrine, sophocarpine, sophoramine by RP-HPLC

- [J]. Lishizhen Medical and Materia Medica Research, 2004, 15(2): 76-77 (in Chinese). 李培凡, 王智, 沈彬, 等. 反相高效液相色谱同时测定苦参碱、氧化苦参碱、槐果碱和槐胶碱的含量
[J]. 时珍国医国药, 2004, 15(2): 76-77.

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[3] Wu D, Liang J, Lian J W, et al. Simultaneous RP-HPLC determination of oxysopho-carpine oxymatrine and matrine in compound kushen injection
[J]. Journal of Shenyang Pharmaceutical University, 2006, 23(4):220-223 (in Chinese). 吴迪,梁健,廉建伟,等. RP-HPLC法同时测定复方苦参注射液中氧化槐果碱、氧化苦参碱和苦参碱的含量
[J]. 沈阳药科大学学报,2006,23(4):220-223.

[4] Jiang Y L, Zhang S Y, Lü H Z. Determination of oxymatrine and matrine in kushen tablets by HPLC
[J]. Lishizhen Medical and Materia Medica Research, 2006, 17(11):2204-2205 (in Chinese). 姜艳玲,张善玉,吕惠子. 高效液相色谱法同时测定苦参片中苦参碱和氧化苦参碱的含量
[J]. 时珍国医国药,2006,17(11):2204-2205.

[5] Gulnar S, Haji A A, Shi M H, et al. Simultaneous determination of contents of sophoridine, oxymatrine and oxysophocarpine in seed of Sophora alopecuroides by HPLC
[J]. China Journal of Chinese Materia Medica, 2007, 32(24):2619-2622 (in Chinese). 古丽娜·沙比尔,阿吉艾克拜尔·艾萨,石明辉,等. HPLC同时测定苦豆子中槐定碱、氧化槐果碱和氧化苦参碱的含量
[J]. 中国中药杂志,2007,32(24):2619-2622.

[6] Zhang A H, Zhang Y H. HPLC simultaneous separation and determination of sophoridine, matrine, oxymatrine, sophoramine, sophocarpine
[J]. Chinese Journal of Pharmaceutical Analysis, 2008, 28(6):964-966 (in Chinese). 张爱华,张悦晗. 高效液相色谱法同时分离测定氧化苦参碱、槐定碱、槐胺碱、苦参碱、槐果碱
[J]. 药物分析杂志,2008,28(6):964-966.

[7] Wang Y Q, Ma Y Y, Wu Yan, et al. Fingerprint and quantitative analysis of Kushen despensing granules by high performance liquid chromatography
[J]. Chinese Journal of Analytical Chemistry, 2006, 34(12):1792-1793 (in Chinese). 王一奇,马源源,吴雁,等. 苦参配方颗粒的高效液相色谱指纹图谱研究及定量分析
[J]. 分析化学研究简报,2006,34(12):1792-1793.

[8] Song Y Q, Wei Y H, Liu W J, et al. Simultaneous determination of sophoridine , matrine and sophocarpine in sophora alopecuroides cream by HPLC
[J]. China Pharmacy, 2008, 19(24):1878-1879 (in Chinese). 宋玉琴,魏玉辉,刘文静,等. HPLC法同时测定苦豆子乳膏中槐定碱、苦参碱和槐果碱的含量
[J]. 中国药房,2008,19(24):1878-1879.

[9] Liu Q, Liu Y G, Zheng Y S, et al. Determination of 4 Kinds of alkaloids in sophora flavescens ait by HPLC
[J]. Lishizhen Medical and Materia Medica Research, 2006, 17(11):2211-2212 (in Chinese). 刘倩,刘永刚,郑玉胜,等. 苦参药材中4种生物碱的含量测定
[J]. 时珍国医国药,2006,17(11):2211-2212.

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