双波长反相高效液相色谱法同时测定蓝芩口服液中栀子苷、绿原酸和黄芩苷含量

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摘要:

目的：建立双波长反相高效液相色谱（RP-HPLC）法同时测定蓝芩口服液中栀子苷、绿原酸和黄芩苷含量的方法。方法：色谱柱Shimadzu C18（250 mm×4.6 mm，5 μm），流动相乙腈（A）-0.3%磷酸水溶液（B），梯度洗脱模式，栀子苷、绿原酸检测波长254 nm，黄芩苷检测波长280 nm，柱温30 ℃，进样量20 μL。结果：栀子苷、绿原酸和黄芩苷分别在1.05~209.20 μg/mL、0.50~99.20 μg/mL和0.52~103.00 μg/mL浓度范围内与峰面积线性关系良好，平均加样回收率分别为100.11%、99.93%和100.45%，RSD分别为1.84%、2.53%和1.30%。结论：该法简便、快速、灵敏，可用于蓝芩口服液中栀子苷、绿原酸和黄芩苷的含量测定。

关键词: 蓝芩口服液 栀子苷 绿原酸 黄芩苷 高效液相色谱法

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Simultaneous Determination of Geniposide, Chlorogenic Acid and Baicalin in Lanqin Oral Liquid by Dual-Wavelength RP-HPLC

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Abstract:

Objective: To establish the dual-wavelength reversed phase high performance liquid chromatography (RP-HPLC) method for simultaneous determination of geniposide, chlorogenic acid and baicalin in lanqin oral liquid. Methods: The Shimadzu C18 column (250 mm×4.6 mm, 5 μm) was used, with mobile phase of acetonitrile (A)- 0.3% phosphoric acid aqueous solution (B). The analysis was performed on a gradient elution program. The detection wavelength of germanoside and chlorogenic acid was 254 nm, meanwhile, baicalin was 280 nm. The column temperature was maintained at 30 ℃. And the sample size was 20 μL. Results: Geniposide, chlorogenic acid and baicalin showed good linear relationship within the range of 1.05 to 209.20 μg/mL, 0.50 to 99.20 μg/mL and 0.52 to 103.00 μg/mL. The average recovery rates were 100.11%, 99.93% and 100.45%, respectively. The RSD were 1.84%, 2.53%, and 1.30%, respectively. Conclusion: This method is simple, rapid and sensitive. It can be used for the determination of geniposide, chlorogenic acid and baicalin in Lanqin oral liquid.

Key words: Lanqin oral liquid geniposide chlorogenic acid baicalin high performance liquid chromatography