

## 药物研究

## HPLC 法测定参鱼化痰口服液中黄芩苷的含量及急性毒性作用研究

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**摘要:**目的 建立“参鱼化痰口服液”中黄芩苷含量的测定方法,并观察该制剂的急性毒性,为临床安全用药提供依据。方法 采用 HPLC 测定参鱼化痰口服液中黄芩苷的含量,并测定其最大给药剂量。结果 HPLC 测定黄芩苷含量在  $0.312\ \mu\text{g} \sim 1.248\ \mu\text{g}$  范围内线性关系良好( $r=0.9993, n=6$ ),平均回收率为  $99.29\%$  ( $\text{RSD}=0.46\%, n=6$ );小鼠灌胃参鱼化痰口服液最大耐受量  $1200\ \text{g/kg}$ ,相当于人体用药日剂量的 1200 倍。结论 该质量控制方法稳定,小鼠实验用药安全范围较宽,无毒性作用

**关键词:**参鱼化痰口服液;最大给药剂量;急性毒性;高效液相色谱法

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## HPLC Determination on Flavonoid Content and Acute Toxicity Studies in Shenyu Huatan Oral Liquid

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**Abstract Objective:** To establish a determining method for flavonoid content in the Shenyu Huatan Oral Liquid and observe its acute toxicity, providing a safe basis for its clinical application. **Method:** HPLC was used to determine its content and define the maximal dose. **Results:** The flavonoid content in the range of  $0.312\ \mu\text{g}$  and  $1.248\ \mu\text{g}$  is with good linear relation ( $r=0.9993, n=6$ ) and the average recovery rate was  $99.29\%$  ( $\text{RSD}=0.46\%, n=6$ ). The maximal dose of the mouse taking the liquids was  $1200\ \text{g/kg}$ , amount to 1200 times than the amount a person takes a day. **Conclusion:** HPLC is stable in controlling the drug's quality and the Shenyu Huatan Oral Liquid has a wide safety range in application with no toxicity.

**Key words** Shenyu Huatan Oral Liquid, maximal dose, acute toxicity, HPLC

慢性阻塞性肺疾病(简称“慢阻肺”, COPD)是以气流受限为特征的常见、多发、高死亡的慢性呼吸系统疾病,是肺气肿和慢性支气管炎的总称,主要症状为长时间咳痰、咳嗽以及气短,属于中医学“喘证”“肺胀”“咳嗽”“痰饮”等范畴<sup>[1-2]</sup>。在我

国, COPD 是威胁健康的主要疾病之一。“参鱼化痰口服液”是陕西中医药大学第二附属医院院内自制制剂,是由鱼腥草、桑白皮、黄芩、瓜蒌、苦杏仁、浙贝母、丹参、水蛭、当归、厚朴、干姜等十一味中药制成的口服制剂。本品为棕红色的液体,味微苦,具

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