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复方溃疡膏药材麻油炸枯提取与SFE-CO_2萃取工艺的比较研究

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中文摘要：目的: 研究复方溃疡膏药材麻油炸枯提取与SFE-CO_2萃取在化学成分上是否存在差异。 方法 :采用薄层色谱法对上述2种提取物中大黄、白芷和川芎的主要指标性成分进行定性分析;采用HPLC分别对上述2种提取物中欧前胡素、阿魏酸和游离葸醌进行定量分析。 结果 :麻油提取物薄层色谱中Rf较小组分的斑点颜色相对较浅,但斑点数量与SFE-CO_2萃取物无明显差异。定量分析表明,SFE-CO_2萃取物中游离葸醌转移率明显高于麻油提取物,为麻油提取物的1.9倍;麻油提取物中欧前胡素与阿魏酸的转移率较超临界萃取的转移率稍高,麻油提取欧前胡素接近完全,SFE-CO_2萃取的转移率也可达到77.08%;而阿魏酸两者的提取率均较低,转移率均不足10%。 结论 :SFE-CO_2与传统麻油炸枯提取物主要成分大类相似,多指标含量相近。而SFE-CO_2萃取物无提取溶剂限制,有利于后续剂型的设计、改进。

中文关键词：复方溃疡膏 SFE-CO_2萃取 麻油炸枯提取 化学成分比较

Component difference of herb materials extracts with sesame oil fry and SFE-CO_2 technique for compound ulcer oil

Abstract: Objective : To compare the component difference of herb materials extracts of sesame oil fry and SFE-CO_2 technique for compound ulcer oil. Method : Qualitative analysis of main component of dahuan, baizhi and chuangxiong in two extracts above was conducted by TLC. The contents of total anthraquinones,imperatorin and ferulic acid in two extracts were determined by UV and HPLC. Result : TLC experiment found that spots color of small Rf value component in oil extract were lighter than that in SFE-CO_2 extract, but there was not obvious different between two extracts. Quantity analysis showed that SFE-CO_2 extract owned much higher transfer rate of total anthraquinones, and it was 1.9 times of oil extract. Ferulic acid was similar in two extracts, and they were all below 10%. The contents of imperatorin in oil extracts were slight higher than that in SFE-CO_2 extract. Conclusion : The components in the extracts of sesame oil fry for the herb materials of compound ulcer oil are the same as SFE-CO_2 extract. Because SFE-CO_2 extracts have no solvent limited for next preparation, it has more advantage.

keywords: compound ulcer oil SFE-CO_2 sesame oil fry chemical component

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