



菟丝子拟雌激素活性的谱效相关性研究

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摘要 目的 探求不同产地菟丝子指纹图谱的雌激素样作用,为建立“指纹图谱与药效关系”的中药质量标准控制提供依据。方法 HPLC建立菟丝子不同产地的指纹图谱,子宫增重法和MTT实验筛选出菟丝子雌激素样作用的有效成分,采用双变量相关分析谱效关系。结果 建立了菟丝子药材的指纹图谱,确立26个色谱峰为共有峰。与空白组和阳性对照组比较,20号产地对小鼠子宫增重和MCF-7细胞增殖作用显著。其雌激素作用为多种化学成分共同作用的结果。结论 菟丝子不同产地的指纹图谱与其雌激素作用有一定的对应关系。

关键词: 菟丝子 雌激素活性 子宫增重 MTT 双变量相关

Abstract: Objective To explore the relationship between the estrogen-like effect of seeds of *Cuscuta chinensis* and the fingerprints of the seeds of *Cuscuta chinensis* from different habitats, thus to provide a basis for the establishment of Chinese medicine quality standards based on the relationship between the fingerprinting and pharmacodynamics. METHODS The fingerprints of seeds of *Cuscuta chinensis* samples from different habitats were established by HPLC, and the active ingredients of seeds of *Cuscuta chinensis* with estrogen-like effect were screened by uterotrophic method and MTT assay, and the spectrum-activity relationship was analyzed by bivariate correlation analysis. RESULTS Twenty-six peaks of seeds of *Cuscuta chinensis* Lam. were identified as common peaks by HPLC. It was shown by uterotrophic and MTT assay that the seeds of *Cuscuta chinensis* from No. 20 habitat could significantly promote the proliferation of MCF-7 cells and the increase of uterus weight compared with the blank control group and the positive control group. It was shown that the estrogenic effect of seeds of *Cuscuta chinensis* was the combined effect of a variety of chemical constituents. CONCLUSION There exists correlation between the fingerprints of the seeds of *Cuscuta chinensis* from different habitats and their estrogenic activity.

Keywords: seeds of *Cuscuta chinensis*, estrogenic activity, uterotrophic, MTT, bivariate correlation

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