

# Cooperative Effects of Monkshood Polysaccharide with Adriamycin Magnetic Albumin Microsphere Targeting Therapy on Tumor

DONG Lan-Feng, LIU Jing-Sheng, SONG Shu-Xia, WANG He-Ming, LU Zhan-Jun

*Experiment Animal Department, Hebei Medical University, Shijiazhuang 050017, China*

**【ABSTRACT】** AIM: To observe the cooperative inhibitory effects of monkshood polysaccharide (MPS) with adriamycin magnetic albumin microsphere (ADM-MAM) targeting therapy on tumor and to study the antitumor mechanism.

**METHOD:** The antitumor activity was observed using the tumor weight as index, the antitumor mechanism was studied as follows: the activity of natural killer cells and the lymphocyte transformation capacity were examined by the LDH and MTT method respectively, the apoptosis of tumor cell and the expressions of p53, FAS, FASL were examined by flow cytometry and the expressions of IL-2 and IL-12 were determined by RT-PCR. **RESULT:** The tumor weight of the mice was significantly reduced by ADM-MAM targeting therapy or cooperated with MPS compared with the control group. The activity of natural killer cells and the lymphocyte transformation capacity were obviously increased. The PI index of tumor cell was obviously decreased and the expressions of FAS and FASL were obviously increased. The expressions of IL-2 and IL-12 were significantly increased. **CONCLUSION:** The antitumor activity can be enhanced and the side effect can be reduced by ADM-MAM together with external magnetic field targeting therapy, and the effect was even better cooperated with MPS. The cooperative antitumor effect was fulfilled by enhancing the cellular immunologic function.

**【KEY WORDS】** Monkshood polysaccharide; Adriamycin magnetic albumin microsphere; Antitumor; Targeting therapy

。学术活动。

## 第七届全国药物与化学异物代谢学术会议在宁召开

2003年10月24日至29日,由中国药理学会药物代谢动力学专业委员会主办、中国药科大学承办、日本岛津公司协办的“第七届全国药物与化学异物代谢学术会议”在南京召开。出席会议的有来自美国等国家及全国各省市药理学和药物代谢动力学研究领域的研究人员共311人。

此次大会围绕“药物和化学异物代谢和动力学研究的进展思路与方法”、“中药与天然药物代谢动力学研究”等主题安排了19场精彩的大会报告。为发挥行业学会对专业技术政策的影响作用,会议专门安排了一场以“新药药代动力学研究指导原则”为主题的专家和药审中心代表的研究技术研讨会,就国家药品审评中心药代动力学研究指南的修改和制订提出宝贵了意见和建议。

在分组学术交流报告会上,近50位青年研究人员报告了近年来在药物代谢动力学研究模型、理论、代谢酶和多态性、生物分析方法和新技术应用、临床前和临床药代动力学研究等方面的研究成果,反映了我国在此领域中的研究水平。

会议期间选举产生了新一届专业委员会,我校王广基副校长当选为第一副主任委员,药学院刘晓东副院长当选为秘书长。