

论著

## 氧化苦参碱对淋巴细胞增殖和调节性T细胞 (Tr) 数量的影响

伍斌<sup>1</sup>, 曾耀英<sup>3△</sup>, 蔡小嫦<sup>2</sup>, 施军<sup>2</sup>, 丛林<sup>2</sup>, 王通<sup>3</sup>, 曾祥凤<sup>3</sup>

1 中南大学湘雅一医院皮肤科, 湖南 长沙 410008; 暨南大学 2 附属第一医院皮肤科, 3 组织移植和免疫中心教育部重点实验室, 广东 广州 510632

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**摘要** 目的: 分析氧化苦参碱(OMT)对小鼠外周血调节性T细胞(Tr细胞)数量及其对刀豆蛋白A(Con A)刺激的小鼠淋巴结T细胞增殖的影响,探讨OMT治疗ACD的免疫学机制。方法: 建立DNFB诱发的小鼠ACD模型,腹腔注射(ip)不同剂量的OMT、PBS、氢化可的松(HCT),在实验的第1 d、7 d、14 d、21 d、28 d小鼠尾静脉采血,应用抗-CD3、抗-CD4、抗-CD25单抗进行免疫荧光标记,流式细胞术检测各组CD4+CD25+T细胞数量。利用羧基荧光素乙酰乙酸(CFDA-SE)染色,流式细胞术检测OMT对小鼠淋巴结T细胞增殖的影响。结果: 500、125和31 mg/L OMT对小鼠淋巴结T细胞增殖呈剂量依赖性抑制,而16、8、4、2 mg/L OMT可促进小鼠淋巴结T细胞增殖,但剂量依赖关系不明显。腹腔注射OMT能明显提高小鼠外周血中CD4+CD25+T细胞数量,与HCT组、PBS组比较(P<0.01)。结论: OMT对小鼠淋巴结T细胞增殖呈双向作用;腹腔注射OMT能明显提高小鼠外周血中CD4+CD25+T细胞数量;提示:OMT是一种双向免疫调节剂。

**关键词** [苦参碱](#) [T淋巴细胞](#)

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## Effects of oxymatrine on lymphocyte proliferation and the quantity of regulatory T cells

WU Bin<sup>1</sup>, ZENG Yao-ying<sup>3</sup>, CAI Xiao-chang<sup>2</sup>, SHI Jun<sup>2</sup>, CONG Lin<sup>2</sup>, WANG Tong<sup>3</sup>, ZENG Xiang-feng<sup>3</sup>

1 Department of Dermatology, Xiangya Hospital, Central South University, Changsha 410008, China; 2 Department of Dermatology, The First Affiliated Hospital, 3 Laboratory of Tissue Transplantation and Immunology, Jinan University, Guangzhou 510632, China

### Abstract

<FONT face=Verdana>AIM: To analyze the effects of oxymatrine (OMT) on the quantity of murine regulatory T cells (Tr cells) in the peripheral blood and mouse lymphocyte proliferation stimulated by Con A, and to probe into the immunological mechanism that OMT treats allergic contact dermatitis (ACD). <BR>METHODS: An ACD mouse model stimulated by dinitrofluorobenzene (DNFB) was established. Different dosages of OMT, PBS and hydrocortisone (HCT) were intraperitoneally injected (IP) into the mice. Blood samples were collected at [JP+2] 1 d, 7 d, 14 d, 21 d and 28 d, then the T cells were isolated and marked with anti-CD3, anti-CD4, anti-CD25 three-colored immune fluorescence antibody to detect the quantity of CD4+CD25+ T cells with flow cytometry. The fluorescence intensity changes of lymphocytes which were isolated from mouse's lymph node and co-stimulated by polyclonal stimulator Con A and OMT were examined by carboxyfluorescein diacetate succinimidyl ester (CFDA-SE) staining and flow cytometry. <BR>RESULTS: OMT at concentrations of 500, 125 and 31 mg/L had the ability to restrain the proliferation of lymphocytes from lymph node in a dose dependent manner. However, OMT at concentrations of 16, 8, 4 and 2 mg/L promoted the proliferation of T lymphocytes from lymph node, but was not obviously dependent on its concentration. Intraperitoneal injection of OMT increased the numbers of CD4+CD25+T cell in peripheral blood obviously (P<0.01). <BR>CONCLUSION: The effects of OMT on the proliferation of T lymphocytes from mouse's lymph node cells are observed, OMT also increases the CD4+CD25+T cells in the peripheral blood, implying that OMT is a kind of immunoregulator with dual effects.</FONT>

**Key words** [Matrine](#) [T-lymphocytes](#)

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通讯作者 曾耀英