

论著

雷公藤甲素抑制PBMC分泌IL-1 β 蛋白量与IL-1 β 基因多态性有关(英文)

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摘要

目的: 探讨雷公藤甲素对外周血单个核细胞(PBMC)分泌白细胞介素-1 β (IL-1 β)的抑制作用与IL-1 β 基因多态性的关系。方法: 采用PCR-RFLP法对31名健康志愿者IL-1 β 基因启动子区-511位点C-T多态性进行基因型检测, 同时进行PBMC培养, 用脂多糖(LPS)刺激培养细胞, 并予以雷公藤甲素处理PBMC, 收集培养上清液, ELISA法检测上清液中IL-1 β 的含量。结果: 携带IL-1 β -511T/T纯合子基因型PBMC经LPS刺激后IL-1 β 的分泌量明显较非T/T纯合子为高(P<0.05); 雷公藤甲素能显著抑制LPS诱导的C/C和C/T基因型PBMC分泌IL-1 β (P<0.05), 但对T/T基因型的抑制作用不明显(P>0.05)。结论: IL-1 β 基因-511C-T多态性与IL-1 β 的分泌量相关, 雷公藤甲素对不同基因型的IL-1 β 抑制作用有差异, 这可能是导致雷公藤药理作用出现个体差异的原因之一。

关键词 [白细胞介素1](#) [基因](#) [多态现象\(遗传学\)](#) [雷公藤属](#) [关节炎](#) [类风湿](#)

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Inhibitory effect of triptolide on production of IL-1 β from PBMC is associated with IL-1 β gene polymorphism

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Abstract

AIM: To explore whether the inhibitory effect of triptolide on IL-1 β production by PBMC is associated with IL-1 β gene polymorphisms. **METHODS:** IL-1 β gene polymorphism was analyzed in 31 healthy volunteers. From genomic DNA, the C-T polymorphism at IL-1 β -511 was typed by PCR-RFLP. Meanwhile the IL-1 β was also measured in the supernatants of the cultured and stimulated peripheral blood mononuclear cells (PBMC) by ELISA. **RESULTS:** After LPS stimulation in PBMC cultures of healthy subjects, the secretion levels of IL-1 β in 9 volunteers who carried IL-1 β -511 T/T genotype were higher than in volunteers who are not T/T genotype (P<0.05). Triptolide suppressed the production of IL-1 β significantly in LPS-treated human PBMC carried C/C and C/T genotype (P<0.05), but this significant inhibitory effect of triptolide was not seen in T/T genotype (P>0.05). **CONCLUSION:** The gene polymorphism at IL-1 β -511 was related to the production of IL-1 β and the inhibitory effect of triptolide on the production of IL-1 β was different in C/C, C/T, T/T genotype of IL-1 β -511, which may be one of the reasons for the phenomenon that people respond differently to triptolide.

Key words [Interleukin-1](#) [Genes](#) [Polymorphism\(Genetics\)](#) [Tripterygium](#) [Arthritis](#) [rheumatoid](#)

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