

论著

蝉拟青霉多糖对大鼠免疫功能的调节作用

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摘要 目的: 探讨不同剂量蝉拟青霉多糖对大鼠免疫功能的调节作用。方法: 每天给大鼠称重, 并按所称大鼠体重, 以50、100、200 mg/kg的蝉拟青霉多糖(PCPS)剂量在大鼠后背部皮下注射给药半个月。处死大鼠后称脾和胸腺湿重, 并计算其湿重指数; 计数大鼠外周血白细胞(WBC)数; 以双试剂终点法测定酸性磷酸酶(ACP)、速率法测定乳酸脱氢酶(LDH)及测定精氨酸酶(arginase)等活力; 进行大鼠肺泡巨噬细胞(AM)中性红吞噬试验。结果: PCPS组大鼠脾脏、胸腺湿重指数及白细胞计数显著高于对照组; PCPS组大鼠肝、肾、脾、胸腺内ACP、LDH活力显著升高, AM吞噬功能显著增强, AM内ACP、LDH、arginase活力显著提高(P<0.01, P<0.05)。结论: 不同浓度蝉拟青霉多糖能提高大鼠外周血WBC数, 激活肺泡巨噬细胞, 并具有剂量依赖性。

关键词 [蝉拟青霉](#); [多糖类](#); [巨噬细胞](#); [免疫功能](#)

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Immunomodulation of paecilomyces cicadidae polysaccharides on immune function of rats

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Abstract

AIM: To explore the immunomodulatory effect of paecilomyces cicadidae polysaccharides (PCPS). METHODS: Subcutaneous injection with 50, 100, 200 mg/kg of PCPS were given in the back of the rats everyday for 15 days. The number of white blood cells (WBC) was counted. The activities of acid phosphatase (ACP) and lactase dehydrogenase (LDH) in liver, kidney, spleen and thymus were detected by automatic biochemistry analyzer. The ability of devouring neutral red and activity of ACP, LDH, arginase in alveolar macrophages were also detected. The body weight of the rat everyday during experiment and weight of the spleen and thymus after the rats were killed were measured and wet weight index was calculated. RESULTS: The wet weight index of spleen and thymus, the activity of ACP, LDH, arginase and ability of devouring neutral red in alveolar macrophages in the test group treated with PCPS were significantly higher than those in control group. CONCLUSION: PCPS shows a significant immunomodulatory effect with the increasing counts of WBC and activation of alveolar macrophages in a dose-dependent manner.

Key words [Paecilomyces cicadidae](#); [Polysaccharides](#); [Macrophages](#); [Immune function](#)

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