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THE IMPACT OF HUANG QI GRANULES ON THE INTERLEUKINS, TUMOR NECROSIS FACTOR A AND CELLULAR IMMUNE FUNCTION IN PATIENTS DIAGNOSED WITH ACUTE KAWASAKI DISEASE

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Abstract

Background and Objective: *Cytokines are proteins that play an essential role in the process of inflammatory tissue damage and govern immunological responses, both of which have the potential to affect the progression of Kawasaki disease. The purpose of this analysis was to explore the effect that Huang Qi granules had on the expression of inflammatory cytokines in peripheral blood mononuclear cells, specifically interleukin-1 β, interleukin-6, tumor necrosis factor α, and interleukin-8.*

Material and Methods: *In patients with Kawasaki disease, the peripheral blood mononuclear cells were analyzed for their levels of production of tumor necrosis factorα, interleukin-1β, interleukin-6, and interleukin-8. Both an ELISA test RT-PCR were utilized in order to determine the production levels. The measurements were taken before and after the oral consumption of Huang Qi granules at doses of 20 and 50 g.*

Results: *The treatment with Huang Qi granules significantly reduces the generation of interleukin-1β, interleukin-6, tumor necrosis factor α, and interleukin-8 in peripheral blood mononuclear cells in a dose-dependent manner. Huang Qi granules reduced four cytokine mRNA expressions. The inhibitory effects of Huang Qi granules may vary with cytokines.*

Conclusion: *The intricate cytokine profile resulted in peripheral blood mononuclear cells after Huang Qi granule therapy showed a role in decreasing inflammation and modulating immune cell functions. Huang Qi granules reduced cytokine expression, suggesting this discovery could be important. If further research along these lines is conducted, it could help progress the development of novel treatment strategies for Kawasaki disease*

Keywords: *Kawasaki disease, cytokines, Huang Qi granules, interleukin, tumor necrosis factor*

Introduction

Acute systemic vasculitis symptom Kawasaki disease (KD) affects children under four [*Kawasaki T., 1967*]. The main problems associated with this condition encompass the development of intracoronary artery thrombosis and coronary artery aneurysms. Recent clinical investigations have indicated that macrophages and monocytes become activated during the acute phase of KD. Despite the fact that the etiology of KD is still unknown, this has been shown to be the case

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