



Suppressive Effect of ChungsimYunjaTang–Gagam on Collagen Induced Arthritis in DBA1/J Mice

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To evaluate effect of ChungsimYunjaTang–Gagam (CYTG) on inhibiting the occurrence of arthritis, we performed the experiments including production of inflammatory cytokine and immunoglobulin in collagen arthritis model. The results were obtained as follows. CYTG extract shows any cytotoxicity effect on mouse spleen cell at dose of 400 $\mu\text{g}/\text{ml}$. CYTG group shows inhibitory effect on arthritis incidence than control group for four weeks. Arthritis index of CYTG group reduces from 2 weeks (31.7%) to 4 weeks (31.8%) compared with control group. In CYTG group, production of cytokines which shows suppressive effect on inflammation(IL-2, COX-2) was increased and which promotes inflammation(IL-10) was decreases in spleen. In CYTG group, production of immunoglobulin (IgG-RF) was reduced compared with control, and rate of CD3+CD69+ T cell is lower in lymph node and CD4+CD25+ T cell is higher in lymph node and spleen. And synovial infiltration in the knee were observed in the controls (PBS-treated mice), whereas CYTG-treated mice exhibited significantly reduced histologic evidence of destruction and inflammation. It was thought that our data express high effect via immune system specially through the controlling the inflammatory cytokines and immunoglobins. CYTG could be usefully applied for the prevention and treatment of RA. And also is expected to be clinically helpful on the treatment of RA through modification.

Key words : arthritis, ChungsimYunjaTang–Gagam(CYTG), inflammatory cytokines, immunoglobins