

인삼노두의 소염작용 및 DBA/1J 마우스에서의 콜라겐유발 관절염에 대한 효과

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The Anti-inflammatory Action and Effect on Collagen-induced Arthritis in
 DBA/1J Mice of Head of *Panax ginseng*

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Head of *Panax ginseng* indicates its growth number of years and it has been widely used for supplying energy to weak person. However, the underlying mechanisms are not sufficiently reported. Thus, we inclined to study head of *Panax ginseng* in rheumatoid arthritis and inflammation.

Rheumatoid arthritis (RA), an organ-specific inflammatory disease of human, is characterized by a chronic and destructive inflammatory reaction and possibly autoimmune in etiology. It is occurred when the synobial membranes of joints and many other tissues of the body is attacked which induces significant health problem in terms of numbers of sufferers (U.S. incidence 23.7/100,000), and the synobial inflammatory is dominated by activated macrophage.

Collagen-induced arthritis is recognized as an *in vivo* tool in researching the mechanisms of RA. Male DBA/1J mice, aged 5-6 weeks, were treated under the SPF condition. In order to induction of arthritis, DBA/1J mice were immunized intradermally with bovine type II collegn emulsified in Freund's complete adjuvant, and a booster injection was given under the same conditions on the 21th day.

In the present study, we reported hind paw edema and anti-CII antibody titer, human leukocyte elastase level, histological evaluation in DBA/1J mice, and vascular permeability, carrageenan-induced paw edema in normal animal.