

CII antibody titer, human leukocyte elastase level, TNF- α activity and histopathological changes in DBA/1J mice, and showed high safety on acute toxicity test in rats.

[PD2-48] [04/19/2002 (Fri) 10:00 – 13:00 / Hall E]

Ginsenoside Rb1 : Antigastritic and anti-ulcerative constituent from *Panax ginseng* head

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Head of *Panax ginseng* C. A. Meyer indicates its growth number of years and it has been widely used for supplying energy to weaklings or used as vomit nowadays. However the underlying mechanisms are not sufficiently reported. Thus, we inclined to study with the active constituents from head of *Panax ginseng* in gastritis and gastric ulcer.

We previously reported the antigastritic and anti-ulcerative effect of the head of *Panax ginseng* butanol fraction on several gastritis and ulcer models in rats. The fraction was systematically isolated with silica-gel open column. The activity-guided isolation from the head of *Panax ginseng* butanol fraction was performed with HCl-ethanol-induced gastritis and the most active constituent was identified to ginsenoside Rb1. In addition, ginsenoside Rb1 also showed significant effectiveness on indomethacin-induced, Shay ulcer but did not show any significance gastric secretion.

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Hepatoprotective effects 18b-glycyrrhetic acid on carbon tetrachloride-induced liver injury

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The protective effects of 18b-glycyrrhetic acid (GA) on carbon tetrachloride (CCl₄)-induced hepatotoxicity were investigated in mice. Pretreatment with GA prior to the administration of CCl₄ significantly prevented an increase in serum aminotransferase activities and hepatic lipid peroxidation in a dose-dependent manner. In addition, pretreatment with GA also significantly prevented the depletion of glutathione content in the livers of CCl₄-intoxicated mice. The effects of GA on the cytochrome P450 (P450) 2E1, the major isozyme involved in CCl₄ bioactivation, were also investigated. Treatment of mice with GA resulted in a significant decrease of the P450 2E1-dependent hydroxylation of p-nitrophenol and aniline. Consistent with these observations, the P450 2E1 expressions were also decreased. GA also showed anti-oxidant effects upon FeCl₂-ascorbate induced lipid peroxidation in mice liver homogenate and upon superoxide radical scavenging activity. These results show that protective effects of GA against the CCl₄-induced hepatotoxicity may be due to its ability to block the bioactivation of CCl₄, primarily by inhibiting the expression and activity of P450 2E1, and its free radical scavenging effects.

[PD2-50] [04/19/2002 (Fri) 10:00 – 13:00 / Hall E]

Effect of bioconverted ginseng on cisplatin-induced nephrotoxicity and adenine-induced renal failure in rats

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To elucidate the effect of bioconverted ginseng on the nephrotoxicity of cisplatin and adenine-induced renal failure, cisplatin was given i.p. to the rats and bioconverted ginseng was given orally to the rats for