

650, South Korea

Fresh fruit bodies of *Ganoderma lucidum*, used as a folk medicine and believed to be effective against various diseases, were extracted with 70% ethanol at room temperature. The extract (GL) showed significant anti-angiogenic activity, which was detected using the chick embryo chorioallantoic membrane assay. The in vitro antioxidant activities of GL were evaluated using two different bioassays. GL was able to markedly scavenge the stable free radical 1,1-diphenyl-2-picrylhydrazyl (DPPH), and inhibited lipid peroxidation in a concentration-dependent manner. However, it weakly inhibited xanthine oxidase activity. In addition, GL significantly inhibited LPS-induced NO production in RAW264.7 macrophages.

[PA1-39] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

#### The inhibitory effect of luteolin-7-O- $\beta$ -D-glucuronopyranoside on esophagitis and gastritis in rats

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This study was designed to determine anti-inflammatory effects of luteolin-7-O- $\beta$ -D-glucuronopyranoside (LGC), which were isolated from *Salix gilgiana* leaves. We investigated inhibitory action of LGC on reflux esophagitis and gastritis in rats. Esophagitis and gastritis was induced by surgical procedure and administration of indomethacin (50 mg/kg), respectively. Intraduodenal administration of LGC inhibited the development of reflux esophagitis and the gastric secretion in dose-dependent manner. Administration of LGC also reduced a significant increase in size of gastric lesions induced by exposure of the gastric mucosa to indomethacin. These results suggest that LGC has the inhibitory action in gastritis and esophagitis model of rats.

[PA1-40] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

#### Pharmacological Effects of *Cordyceps militaris*

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Dongchunghacho, one of folk medicines, is traditionally believed to be effective against various diseases. It includes many different genera such as *Cordyceps*, *Paecilomyces*, *Torrubiella* and *Podonectria*. *Cordyceps militaris* is one of well-known species. The 70% ethanolic extract was prepared from two different sources of *C. militaris*, fruiting bodies with host material (BD) and liquid medium-cultured cells (MI). Anti-angiogenic activity was determined by the chick embryo chorioallantoic membrane assay. Both BD and MI were found to contain strong anti-angiogenic activities. The extracts at the dose of 10 mg showed anti-angiogenic activity comparable to that of retinoic acid (dose, 1 mg), used as a control agent. Anti-angiogenic activities of BD and MI appeared to be dose-dependent. No significant differences were found between the effects of BD and MI. Cordycepin, an inhibitor of RNA synthesis identified in some *Dongchunghacho* species, showed anti-angiogenic activity. These results might suggest the plausible anti-tumor activity of *C. militaris*. Other pharmacological actions of *C. militaris* were examined. The extracts were found to inhibit writhing syndromes in mice induced by acetic acid. The extracts of *C. militaris* suppressed strongly 2.5% croton oil induced mouse ear edema. The acute toxicity (LD50) of the extracts has been also evaluated.

[PA1-41] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

#### Comparisons of antidiabetic activity between Sopungsungi-won (SP) water extract and 70% ethanol extract in streptozotocin-induced diabetic rats

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