Triterpenoids from the Leaves of Gentiana sutchuenensis

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Gentiana sutchuenens has been used for the sore throat, hepatitis, dysentry, appendicites, hematuria, and loss of appetite as medicinal plants in China. In this study, ether extracts were subsquently chromatographed on silica gel using the gradient elution of n-hexane-ethylacetate (=20:1→2:1) to give five fractions. Compound I was identified as 3β-hydroxy-12-ursen-28-ol (formula $C_{30}H_{50}O_2$, mp. 232℃), compound II was identified as 3β-hydroxy-olean-12-en-28-oic acid(formula $C_{30}H_{48}O_3$, mp. 310℃), and compound III was identified as 3β-hydroxy-urs-12-en-28-oic acid, which is a ursane triterpenoid (formula $C_{30}H_{48}O_3$, mp. 286-287℃).

[PD3-7] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Phellinus linteus as Ethano-medicinal preparation

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Phellinus linteus (polyporaceae) has been used as anti-cancer agent in Korea.
We were studied to evaluate the anti-tumor and immunopotentiation effect of *Phellinus lintenus* (PL) single and mixing administration with three anti-tumor agent in folk medicines(*Ulmus davidiana* var. *japonica*, *Cudrania tricuspiata*, and(*Bupleurun palcatum*).
Oral administraion to tumor bearing mice significantly prolonged suvival rate compared to control group with the prolongation ratio of 2% to 9%.
Nitrite production of Raw 264.7 cell was increase dose-dependently.

[PD3-8] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Inhibitory effect of immediated-type allergic reaction by Prunella vulgaris

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We studied the effect of aqueous extract of Prunella vulgaris(PVAE) on immediated-type allergic reactions. PVAE(0.005 to 1 g/kg) dose-dependently inhibited systemic anaphylactic shock by compound 48/80 in rats. When PVAE was given as pretreatment at concentrations ranging from 0.001 to 1 g/kg, the serum histamine levels induced by compound 48/80 were reduced in a dose-dependent manner. PVAE inhibited the passive cutaneous anaphylaxis activated by anti-dinitrophenyl(DNP) IgE. PVAE also inhibited the histamine release induced by compound 48/80 or anti-DNP IgE from the rat peritoneal mast cells(RPMC). The level of cyclic AMP in RPMC, when PVAE was added, significantly increased compared with that of normal control. Moreover, PVAE (0.001 to 0.1 mg/ml) had a significant inhibitory effect on anti-DNP IgE-induced tumor necrosis

factor-a production from RPMC. These results indicate that PVAE inhibits immediated-type allergic reactions in rats.

[PD3-9] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Inulin synergistically stimulates interferon-gamma-induced nitric oxide synthesis through NF-kappa B activation in RAW 264.7 cells

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ABSTRACT

Nitric oxide (NO) mediates a number of the host-defense functions of activated macrophages, including antimicrobial and tumoricidal activity. We examined the effect of inulin on NO release in the cultured murine macrophage RAW 264.7 cells. Inulin alone had no effect, whereas inulin with recombinant interferon-? (rIFN-gamma) synergistically increased NO release from and iNOS expression in RAW 264.7 cells. Inulin-mediated NO release were inhibited by the tyrosine kinase inhibitor, genistein. Also, protein kinase C (PKC)-delta were involved in the inulin-induced NO production. Since iNOS gene transcriptions have been recently shown to be under the control of nuclear factor kappa-B (NF-kappa B)/Rel family of transcription factors, we assessed the effect of inulin on NF-kappa B/Rel using an electrophoretic mobility shift assay. Inulin strongly induced of NF-kappa B/Rel binding, whereas AP-1 binding was slightly induced in RAW 264.7 cells. Inulin also stimulated phosphorylation and degradation of Ikappa B-alpha. Taken together, these results indicate that inulin stimulates IFN-gamma-induced NO synthesis through NF-kappa B activation in RAW 264.7 cells.

[PD3-10] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Isolation and anti-thrombotic activity of phenolic components from Magnolia obovata

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Magnolia obovata (Magnoliaceae) has long been used for the treatment of the thrombotic stroke, typhus fever, headache, gastrointestinal disorders, asthma and urinary problems. In the course of continuous work for the discovery of anti-thrombotic constituents from plants, several phenolic compounds were isolated from the methanol extract of bark, leaves and fruit of Magnolia obovata.The compounds were identified as methyl caffeate, syringin, magnolol, honokiol, and obovatol with the spectroscopic data. And the effects of them on platelet aggregation induced by sodium archidonate (in the presence of threshold concentration of collagen) were evaluated.

[PD3-11] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Regulation of proinflammatory cytokines gene expression by oleanolic acid in mouse peritoneal Macrophages

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