induced diabetic and KKAy mice.

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Hypoglycemic and renal protection effects of Sigiwhan(SGW) was evaluated in STZ-induced diabetic mice and KKAy mice.
SGW was prepared as a powder mixture of seven crude drugs : Remanniae Radix Preparata, Dioscoreae Rhizoma, Corni Fructus, Schizandrae Fructus, Moutan Cortex Radicis, Hoelen, Alismatis Rhizoma. In KKAy mice, the animals were divided into four groups : group administered with distilled water, SGW(0.7 g/kg), SGW(3.5 g/kg) and Rosiglitazone(0.33 mg/kg), designated by C, S1, S2 and R, at 2:00 P.M with a zondae, respectively. In the STZ-induced mice, the hypoglycemic effects of each drug evaluated.
In the KKAy mice, serum glucose level, insulin and HbA1c were measured. Quantitations of Muscular GLUT-4, hepatic PEPCK and fat PPAR-γ mRNA levels were performed by northern blot, and quantitation of GLUT-4, PPAR-γ, HSP72 and GRP94 protein level were performed by western blot. In the STZ-induced mice, serum creatinine and BUN concentration were measured.
In the STZ-induced mice, blood glucose levels was decreased in Remanniae Radix Preparata, Moutan Cortex Radicis, Hoelen, Alismatis Rhizoma.
We may suggest that SGW showed significant antidiabetic activities and due to reducing insulin resistance through affecting gene expressions of hepatic PEPCK, muscular GLUT-4, fat PPAR-γ and improving renal functions.

[PA1-22] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Antiinflammatory activity of Polygala Radix extracts

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Polygalae radix (PA) is traditionally used as a stimulant of CNS activities and expectorant for Korean. It contains triterpenoidal saponins, xanthones, polygalitol and N-acetyl-D-glucosamine etc. In the present study, I explored to determine if methanol extract of PA posesses analgesic and anti-inflammatory activities and also characterized mechanisms of antiinflammatory effects. Methanol extract of PA had significant anagesic and antiinflammatory actions as evidenced by the rat paw edema test and acetic acid writhing assay. The PA extract inhibited bradykinin-induced rat ileum contraction. It also inhibited PGF2 alpha production induced by LPS in mouse macrophages. These results suggest that anti-inflammatory and anlgesic activities of PA extract are partially mediated by the inhibition of bradkinin actions and PGF2 alpha production.

[PA1-23] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Protective Effect of an Aged Garlic-bamboo salt Mixture on the Rat with the Alcohol-salicylate Induced Gastritis

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Garlic has been known to be effective against the gastrointestinal diseases where the oxygen-derived free radicals(OFRs) implicate the pathophysiology. This is due to the presence of sulfur-containing organic compounds in garlic, which are known to scavenge OFRs. Many reports stated that bamboo salt was effective on the treatment and prevention of various gastrointestinal