i.c.v. ; $GABA_A$ antagonist) or phaclofen (10 μg, i.c.v. ; $GABA_B$ antagonist). In convulsion tests, MFs strengthened convulsion induced by bicuculline (0.3, 1, 3 μg, i.c.v.) in induction and duration time. MFs decreased the concentration of GABA in the hippocampus. MFs and bicuculline (1μg, i.c.v.) decreased the concentration of GABA than bicuculline alone treatment in the cortex, hippocampus and cerebellum. The present study suggests that MFs participate in hyperalgesia or convulsion which is mediated by benzodiazepine or GABA receptor, respectively.

[PA1-12] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

PK-PD modeling of antiplatelet and cardiovascular effect of cilostazol in humans

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The rationale for PK-PD modeling is to link PK and PD in order to establish and evaluate dose-concentration-response relationships and subsequently describe and predict the effect-time courses resulting from a drug dose. Cilostazol, PDE III inhibitor, inhibit platelet aggregation and increase cardiovascular function such as heart rate, myocardial contractile force, coronary blood flow, and ventricular automaticity in a dose-related fashion. The relationships between plasma concentration of cilostazol and its inhibitory effect on platelet aggregation and cardiovascular effect after single oral administration 100mg of cilostazol in healthy humans were analyzed using a PK-PD model. Plasma levels of cilostazol were measured by HPLC. Pharmacokinetic and pharmacodynamic parameters were estimated using the ADAPT II programs by weighted least squared method. Pharmacokinetics of cilostazol was explained by two compartment model with first-order absorbtion for the oral bolus route. Direct and indirect response models were applied for antiplatelet and cardiovascular effect of cilostazol.

[PA1-13] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Effect of Chondroitin Sulfate and Phelinus Linteus mushroom on melanin and skin-whitening

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This study was conducted to develop a new biomaterial to be used for skin whitening.
The melanin elimination effect of chondroitin sulfate and phelinus linteus mushroom in rabbit back skin were evaluated. Rabbit dorsum was exposed to chronic UV irradiation(320nm) once daily for 30 days after initial melanin injection (100mg/kg). And then, chondroitin sulfate and phelinus linteus mushroom at dose of 0.7g for 30days were applied on the zone. The dorsal skin was histologically examined. Furthermore, we investigated free-radical extinction effect, antioxidation and tyrosinase activity inhibition effects.
The histological study indicated that chondroitin sulfate and phelinus linteus mushroom decreasd melanine pigment significantly. As a result, chondroitin sulfate and phelinus linteus mushroom have a remarkable effect on the skin whitening by melanin elimination.

[PA1-14] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Studies on the antioxidative effect of Polygoni Raidx