that the more has hydroxy group of benzene ring, the more has potent inhibitory activity of ROS generation.

[PB2-5] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Inhibitory Activity of Scopoletin and Scoparone in Carageenan-and Arachidonic Acid-Induced Edema

Kim Chang Jong, Seo Moo Hyun°, Lee Zoon Han, Zang Yong Un, Sim Sang Soo

Department of Pathophysiology, College of pharmacy, Chungang University

Coumarin derivatives are widely distributed in the vegetable kingdom. They have anti-tumor, anti-oxidant, anti-viral, anti-inflammatory. In this study, anti-inflammatory activity of scopoletin (7-hydroy-6-methoxy-2H-1-benzopyran-2-one), scopalone (6,7-dimethyl- coumarin) and coumarin were studied in the carageenan- and arachidonic acid - induced edema. Paw edema was determined by plethysmograph and ear edema was determined by microengineer's meter. Scopoletin and coumatin purchased from Sigma company and scopalone was purchased from Aldrich company. Coumarin derivatives have dose-dependently anti-inflammatory activity with the following order of potency : scopalone > scopoletin > coumarin. It shows that scopalone and scopoletin at a dose of 25 mg/kg have significant anti-inflammatory activity in the model of carageenan-induced paw edema and arachidonic acid-induced ear edema. These results indicated that the more has hydroxy group of benzene ring, the more has potency inhibitory activity of anti-inflammation, and methylation in 7-hydroxy group of benzene introduced lesser active.

[PB2-6] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Single and One Month-oral Toxicity of Combination of Gingko Biloba and Selegiline

Kim Chang Jong, Seo Moo Hyun°, Lee Seung June, Yoon Jeong Yi, Sim Sang Soo

Department of Pathophysiology, College of pharmacy, Chungang University

Selegiline(SE) is a anti-Parkinsonism agent and Gingko bilova extract (GBE) has active blood circulation. In this experiment, to develop the combination drug for osteoporosis at a ratio of 1 : 24 of SE and GBE, single and one month-oral toxicity of combination drug of SE and GBE were studied in rats. In the single oral toxicity at a combination dose of 3.13, 6.25, 12.5, 25, 50, 100, 200, 400, 800 mg/kg base on SE, respectively, LD50 was 180.95 mg/kg for SE and 4.34 g/kg for GBE. in male rat, and LD50 was 309.08 mg/kg for SE and 7.41 g/kg for GBE in female rat. No significant weight gain, food consumption and urine analysis were shown. In one month oral toxicity at a ration of combination dose of 3.3, 10, 33.3 mg/kg of SE and 79.2 240, 799.2 mg/kg of GBE. Only one female rat with combination administration of 33.3 of SE and 799.2 mg/kg of GBE died. Significant weight gain, food consumption and urine analysis are not found. and also significant clinical findings are not shown. Eye, urine, hematological and biochemical parameters were not significantly changed. Combination of SE and GBE at a dose of 33.3 and 799.2 mg/kg and that is more toxic in male than female rat.

[PB2-7] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Expression of Proteinase-Activated Receptor-2 on Intestinal Mast Cells in Ulcerative Colitis