induced relaxation was clearly demonstrated and did not differ in carotid arteries from all treatment groups. Furthermore, acetylcholine-induced relaxation was completely inhibited by L-NAME but not by indomethacin. SK-1080 caused a slight hypotension 1 day before balloon injury (8.7%), which gradually returned to the baseline 6 and 13 days after balloon injury. These results suggest that SK-1080 might be a useful candidate for the treatment of restenosis after percutaneous transluminal coronary angioplasty.

[PA1-22] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## Neuroprotective and Neurotrophic Effect of a Novel Quinic Acids derivative Isolated from Aster Scaber.

Hur jinyoung<sup>o</sup> Lee Pyeongjae Lee Kang Ro Suk Kyungho Kim Ho Cheol Kim Sun Yeou

Graduate School of East-West Medical Science, Kyung Hee University, Seoul 130-701, Korea, College of Pharmacy, Sungkyunkwan University, Suwon 440-746, Korea.

Aster scaber T. (Asteraceae) has been used to treat bruises, snakebite, headache and dizziness in the traditional Chinese medicine. We examined the neuroprotective effects and NGF-potentiating activities of quinic acid derivatives (novel quinic acid, (-) 3,5-dicaffeoyl-muco-quinic acid )from Aster scaber. By examining thier effects on the neurite outgrowth from PC12 cells and the synthesis of neurotrophic factor (NGF) in C6 glial cells. Quinic acid derivatives from Aster scaber T. (Asteraceae) increased the proportion of neurite-bearing cells. In addition, after 6h incubation of C6 cells with this compound, NGF levels in the cultured medium increased 300-fold of the control. In RT-PCR analysis, the NGF gene expression was found to reach 2-fold of the control level. We also investigated the effect of this compound on the phosphorylation of MAP kinase (Erk1,2, p38) and Pl3 kinase activity, which play a crucial role in the survival and differentiation of neurons. Quinic acid derivatives from Aster scaber T. (Asteraceae) increased Pl3 kinase activity and MAP kinase phosphorylation in PC12 cells. These results suggest that a novel quinic acid, (-) 3,5-dicaffeoyl-muco-quinic acid derivatives from Aster scaber T (Asteraceae) might potentially used be as a neuroprotective agent.

[PA1-23] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## Anti-coagulant and/or platelet anti-aggregatory activities of MeOH extracts of Cacti

Kim Jeong Mi<sup>O</sup>, Lee Jo Hyung, Yun-Choi Hey Sook

Natural Products Research Institute, Seoul National University

The MeOH extracts obtained from 42 species of Cacti were tested on their anti-coagulant and/or platelet anti-aggregatory activities by aPTT assay and modified smearing method, respectively. *Obregonia denegrii Fric.* and *Chamaecereus silvestrii* showed potential inhibitory effects on adenosine 5'-diphosphate (ADP)-induced rat platelet aggregation, and *Opuntia vulgaris Mill, Euphorbia grandicornis, Crassula cv. himaturi, Euphorbia milii var. splendens, etc.* were suggested to be potential anti-coagulants.

[PA1-24] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## A newly developed antiarrhythmic drug CW-2101 is ideal in treating atrial fibrillation

Eun JaeSoon<sup>o</sup>, Kim DaeKeun, Chae SooWan, Kwak YongGeun

College of Pharmacy, Woosuk University, Dept of Pharmacology, Chonbuk National University Medical School