

explained that ALDH activity is enhanced better than ADH activity. The samples are Inositol, RICEO, RI-AX, Gurume-P, Lotus seed and lakanka F. Third part's ones make both ethanol and acetaldehyde concentration in blood ineffective which is explained ADH and ALDH activity are enhanced a little. The samples are Phytic acid and chlorophyll.

[PA1-41] [04/17/2003 (Thr) 14:00 - 17:00 / Hall P]

Neuroprotective effect of Hexane fraction of A0054 on Delayed Neuronal Death after Transient global Ischemia in Gerbil Hippocampus

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Several lines of recent evidences have shown that several pro-inflammatory genes or mediators, such as inducible nitric oxide synthase (iNOS), cyclooxygenase-2 and cytokines (e.g., tumor necrosis factor α and interleukin-1 β), are strongly expressed in the ischemic brain. Inflammation is now recognized as a significant contributing mechanism in cerebral ischemia because anti-inflammatory compounds or inhibitors of iNOS and cyclooxygenase-2 have been proven to reduce ischemic brain damage.

In vitro assay, The Hexane fraction of A0054 inhibited NO (iNOS; IC₅₀, 8.0 μ g/ml) and PGE₂ (COX-2; IC₅₀, 20 μ g/ml) respectively. In vivo study was carried out to evaluate neuroprotective effect of Hexane fraction of A0054 after transient global ischemia using Mongolian gerbil ischemia model. The hexane fraction of A0054 was administered for 15 days in oral, and then the gerbils were exposed to forebrain ischemia by clamping the bilateral common carotid arteries at 36°C for 10 min. The morphological study was performed 7 days after ischemia or sham-operation. Histopathological evaluation of delayed neuronal death (DND) was performed by microtubule associated protein 2 (MAP2) as a marker protein in dendrites.

[PA1-42] [04/17/2003 (Thr) 14:00 - 17:00 / Hall P]

An Anti-angiogenic Principle from *Gardenia jasminoides*.

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Gardenia jasminoides Ellis has been used in traditional medicine for the treatment of inflammation, jaundice, headache, fever and hypertension. The 70% ethanolic extract of gardenia fruit showed strong anti-angiogenic activity in the chick embryo chorioallantoic membrane (CAM) assay. Among hexane, ethyl acetate, n-butanol and aqueous fractions prepared successively from the 70% ethanolic extract, the n-butanol fraction was found to be most effective in the CAM assay. It also showed analgesic and anti-inflammatory activities in writhing test and croton oil-induced ear edema assay, respectively. An anti-angiogenic principle was purified from the n-butanol fraction using chromatographic techniques, and identified to be geniposide. Geniposide and genipin, the aglycone of geniposide, showed strong anti-angiogenic activity in the dose-dependent manner. Genipin significantly inhibited LPS-induced NO production in RAW264.7 macrophages, but geniposide did not. It was also convinced by western blotting.