

hypertensive rats, BR-A-657 at 3 mg/kg p.o. and 0.3 mg/kg i.v. decreased mean arterial blood pressure (MAP) by 42.8% and 30%, respectively. In spontaneously hypertensive rats, BR-A-657 at 10 mg/kg p.o. induced maximal decrease in MAP by 27%. Any agent did not affect the heart rate significantly at any dose used. These results suggest that BR-A-657 may be potentially useful for treatment of hypertension.

[PA1-17] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

Effects of *Capsicum annuum* L. var. *angulosum* Mill on changing morphology, and apoptosis of Hepatoma and MCF-7 cell

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*Capsicum annuum* L. var. *angulosum* Mill. of edible plants relatively showed good anticancer effects. Morphological characterization, such as apoptic body, of MCF-7 and Hepatoma cell on plants was shown by electronic microscopy. The cells included in medium were investigated to be aggregated and destroyed by treatment with some edible plants. Especially, the case of *Capsicum annuum* L. var. *angulosum* Mill, it led sample-treated MCF-7 and Hepatoma cells to apoptosis faster than others. So now, We studied that the solvent, harvest time, and the part of *Capsicum annuum* L. var. *angulosum* Mill: Leaf, Fruit unripen, Fruit ripen, Seed ripen, Seed unripen, are how much has the anti-proliferating effect on MCF-7 and Hepatoma cells. Now We'll present the results.

The cells by treated *Capsicum annuum* L. var. *angulosum* Mill show the apoptic characterization. all part of *Capsicum annuum* L. var. *angulosum* Mill was changing faster the morphology of the cells. To continue our search for anticancer effects, we also observed changes through using a fluorescent microscope by PI staining. These results show that each sample exerted anticancer effects on MCF-7 and hepatoma cells. Especially *Capsicum annuum* L. var. *angulosum* Mill, Leaf exerted significant anticancer effects.

[PA1-18] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

Attenuation of iNOS induction by SNUP through inhibition of I- $\kappa$ B $\alpha$  phosphorylation and of p65 nuclear translocation

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SNUP is a compound isolated from *Beta vulgaris* L. var. *cycla* L. (Chenopodiaceae). The effect of SNUP on the nuclear factor- $\kappa$ B (NF- $\kappa$ B)-mediated inducible nitric oxide synthase (iNOS) gene expression was studied in Raw264.7 cells. Inhibitory effect on NF- $\kappa$ B activation was determined by gel mobility shift assay, immunocytochemistry and immunoblot analysis of I- $\kappa$ B $\alpha$ . Expression of the iNOS gene was assessed by RT-PCR. NO production was monitored using Griess reagents. SNUP (10  $\mu$ M) inhibited lipopolysaccharide (LPS)-inducible nuclear NF- $\kappa$ B activation and nuclear translocation of p65, which was accompanied by inhibition of I- $\kappa$ B $\alpha$  phosphorylation. LPS-inducible increase in the iNOS mRNA was suppressed by 10  $\mu$ M SNUP. Immunoblot analysis revealed that SNUP significantly inhibited the induction of iNOS. Production of nitrite and nitrate by LPS in culture medium was also comparably suppressed by SNUP. These results showed that SNUP inhibits LPS-inducible iNOS expression in murine macrophages through suppression of I- $\kappa$ B $\alpha$  phosphorylation and nuclear translocation of p65. Inhibition of LPS-inducible NO production in macrophages may constitute anti-inflammatory effect of *Beta vulgaris* L. var. *cycla* L.

[PA1-19] [ 04/18/2002 (Thr) 14:00 - 17:00 / Hall E ]

Anti-coagulant and/or Platelet Anti-aggregatory Activities of *Opuntia vulgaris* Mill.

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