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Rhus verniciflua Stokes (RVS) is a widely used herbal plant with various biological properties. Our previous study using in vitro platelet aggregation in whole blood showed that the fractions of RVS had strong anti-aggregatory activity. In this study, using in vitro platelet aggregation in PRP and coagulation parameters, to investigate the anti-platelet activity and anticagulant effects of RVS ethyl acetate layer, the layer was subsequently fractionated by ODS columm chromatograph (50% MeOH). As a result, the fraction 4 was most inhibited the aggregation of PRP in rat by collagen and ethyl acetate layer of RVS was detected strong anticoagulant effect. These results suggested that fractions of Rhus verniciflua Stokes have potent anti-platelet and anticoagulant activity.

[PD3-4] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Screening of Cytotoxicity of Hexane Extracts from Cornis fructus

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Cornis fructus were extracted by successive extraction and then fractionated with hexane extract to get active fractions. This study was performed to determine the cytotoxic effect of hexane extract from Cornis fructus on NIH 3T3 fibroblasts and cancer cell lines using MTT assay. Hexane extract showed cytotoxic effect against A549, B16 melanoma and MDA-MB-231. Futher fractionation with hexane extract were performed to obtain effective fraction, fraction 3 showed the cytotoxic effect against A549 and MDA-MB-231cell line.

[PD3-5] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Dopamine ß-Hydroxylase Inhibitory Activity of Chinese Herbal Drugs

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Dopamine ß-hydroxylase (DBH) synthesizes norepinephrine from dopamine under the presence of ascorbate as a coenzyme. Dopamine is transported into the vesicles of the varicosity, where the synthesis and the storage of norepinephrine take place. Some drugs such as DBH inhibitors, dopaminergic agonists, *etc.* are known to assist in treating Parkinson's disease. The MeOH extracts of forty Chinese herbal drugs were screened for the inhibitory activities against bovine adrenal DBH, utilizing tyramine as a substrate. Among them, *Biota orientalis*, *Adina pilulifera*, *Dioscorea cirrhosa* showed the strong inhibitory activities against DBH.

[PD3-6] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Hepatoprotective Effects of Chinese Traditional Prescription, Dalwoneum

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Dalwoneum is the one of Chinese traditional prescription used for the treatment of liver disease. This prescription consists of Arecae Semen (12 g), Magnoliae Cortex (9 g), Amomi tsao-ko Fructus (3 g), Anemarrhenae Rhizoma (12 g), Paeoniae Radix (9 g), Scutellariae Radix (12 g), and Glycyrrhizae Radix (3 g). Water extract of Dalwoneum showed the significant hepatoprotective effect on tacrine-induced cytotoxicity in Hep G2 cells. Hepatoprotective effect of the constituent crude drugs of this prescription was performed. Water extracts of three crude drugs including Arecae Semen, Scutellariae Radix, and Magnoliae Cortex exhibited the significant hepatoprotective effects in vitro. It is also suggested that three flavones, wogonin, oroxylin A and skulleapflavone I, take part in its biological activity.

[PD3-7] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

The Anti-inflammatory and Analgesic Activities of CML-Ex

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The CML-Ex is a traditional oriental medicine. The main constituents of CML-Ex are Rehmanniae Radix, Achyranthis Radix and Eucommiae Cortex. The objective of this study was to investigate the anti-inflammatory and analgesic activities of CML-Ex under various acute and chronic inflammatory and analgesic models. The drug was orally administered at 30, 100, 300 and 600 mg/kg body weight. The anti-inflammatory activities were evaluated by carrageenan-induced hind paw edema, carrageenan-induced granuloma, vascular permeability and adjuvant-induced arthritis tests, and the analgesic activities were evaluated by acetic acid-induced writhing syndromes, Randall-Selitto assay and hot-plate test. The vascular permeability was significantly inhibited by CML-Ex 30, 300, and 600 mg/kg. Granuloma formation induced by 2% carrageenan was significantly inhibited by CML-Ex 300 and 600 mg/kg. The swelling of rat hind paw induced by 1% carrageenan was significantly inhibited by CML-Ex 100, 300 and 600 mg/kg. Adjuvant-induced arthritis was significantly inhibited by CML-Ex 300 mg/kg. However, CML-Ex did not affect acetic acid-induced writhing syndrome, Randall-Selitto assay and hot-plate test. Our findings suggest that CML-Ex has a potent anti-inflammatory activity.

[PD3-8] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Sedative Effects of the Essential Oil from *Acorus gramineus* upon Inhalation

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The present study was designed to evaluate central inhibitory effects of an essential oil from Acori graminei Rhizoma (AGR), the dry rhizomes of Acorus gramineus Solander (Araceae) upon fragrance inhalation (aroma therapy). Preinhalation of an essential oil of AGR markedly delayed the appearance of pentylenetetrazole-induced convulsion. Furthermore, the inhalation of an