

substance, The antimicrobial activity of fraction 6 of the methanol extract from the sample had strong growth inhibition activity gram-positive bacteria and gram-negative bacteria such as *S. aureus*, *B. subtilis* and *P. aeruginosa* (MIC, 6.25 µg/ml).

[PA1-20] [04/21/2000 (Fri) 10:30 – 11:30 / [1st Fl, Bldg 3]]

Pharmacological studies on the efficacy and safety for the therapeutic drugs of liver diseases. – Effect on the Lipocyte activation

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These studies were conducted to evaluate in vitro the efficacy of the Yinchenho– Tang, herbal medicine used to treat liver diseases. When it comes to the chronic liver diseases, it usually progress to cirrhosis through fibrosis. Hepatic lipocytes are the primary extracellular matrix-producing cells in liver fibrosis. During the development of liver injury, they undergo activation, which is a process characterized by cell proliferation, morphological transformation into myofibroblast-like cells and synthesis of excessive extracellular matrix components. We established a cell culture model of lipocyte activation, which can be mimicked by cells grown on uncoated plastic plate. In this study, cell proliferation was assessed by brdU incorporation into DNA and transformation was done by expression of smooth muscle-specific α -actin(α -SMA). Yinchenho-tang significantly inhibited lipocyte proliferation in dose-dependent manner, and markedly reduced α -SMA expression. Gardeniae fructus remarkably suppressed proliferation in dose-dependent manner, but it increased α -SMA expression. Artemisiae capillaris herba significantly inhibited proliferation under the conc. of 500µg/ml, but enhanced it in 2000µg/ml. Rhei rhizoma didn't have any effect on proliferation. In summary, we have clarified effects of yinchenho-tang on liver fibrosis and suggest that this effect is related with inhibition of lipocyte activation.

[PA1-21] [04/21/2000 (Fri) 10:30 – 11:30 / [1st Fl, Bldg 3]]

Anti-angiogenic activity of Korean Mistletoe(*Viscum album* var. *coloratum*)

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Extracts of white berry European mistletoe (*Viscum album* L.) are widely applied the treatment of various human cancers as a supplement therapeutic agent. It was reported that mistletoe extract induces apoptotic killing of cultured tumor cells and lymphocytes, stimulates the immune system, and protects DNA from the side effects caused by chemotherapy and radiation. Korean mistletoe lectin(KML) from this plant was isolated by affinity chromatography using asialofetuin immobilized Sepharose 4B. The molecular weight determined by SDS-PAGE was 60 kDa which consisted of a 31.5 kDa of A-chain and a 34.5 kDa of B-chain. We investigated the anti-angiogenic effect of water extract of Korean mistletoe(WKM) and Korean mistletoe lectin(KML) by chorioallantoic membrane(CAM) of growing chick embryos. WKM and KML showed anti-angiogenic activity at 0.25ug/ul and 0.025ug/ul, respectively. In addition, anticancer activities of WKM and KML on the proliferation, motility and invasion of human cancer cells were observed.

[PA1-22] [04/21/2000 (Fri) 10:30 – 11:30 / [1st Fl, Bldg 3]]