

The increase of triglyceride in blood can be a signal of an increasing danger of arterial diseases when insulin resistance, diabetes, HDL-cholesterol decrease is accompanied. It is adjusted to triglyceride level in blood by a balance, which seems to be absorbed from VLDL metabolism in liver and by lipoprotein lipase activity. The hyper-triglyceride disease treatment proposal role should match with suppression does into liver or elimination of a triglyceride. In this study, 3T3-L1 adipocyte was incubated with 1 mg/ml of natural medicinal herb extracts for 30 minutes to 24 hours time. Lipoprotein lipase activity was determined from the culture medium. The lipase activity was gradually increased by incubation time dependent manner. From the result of this investigation, it was confirmed that lipoprotein lipase was strongly increased in cells by natural medicinal herb extracts treatment by showing a possibility of hyper-triglyceride disease cure.

[PD3-13] [10/18/2002 (Fri) 13:30 - 16:30 / Hall C]

Effect of P-020701 on gastric lesion and ulcer in rats

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Present study was performed for development of a new supplementary product with gastroprotective effect. Natural Products mentioned that have GI protective property on Donggeuibogam were evaluated anti-bacterial activity against *Helicobacter pylori*, then five herbs were selected. The material used for the test were water extract of *Alpinia oxyphylla* (AO), *Astragalus membranaceus* (AM), *Cinnamomum loureirii* (CL), *Citrus aurantium* (CA), *Amomum villosum* (AV). They were tested individually on HCl-ethanol-induced gastric lesion in rats, AV, CL, AO showed the most significant effectiveness, respectively. Then, two mixture different in their content ratio (P020701-1, -2) were made with the five water extract, and tested on HCl-ethanol model. P020701-1, -2 significantly inhibited HCl-ethanol-induced gastric lesion at 200, 500mg/kg, but at doses of 800, 1000mg/kg, P020701-2 showed stronger effectiveness. Tentative product (TP: aloe gel, water, pear juice etc. added to the mixture P020701-2) was made and tested on indomethacin-induced gastric lesion, aspirin-ligature, Shay ulcer and gastric secretion test with P020701-1 and -2. In indomethacin-induced gastric lesion, P020701-2 and TP were significantly inhibited the lesion and in aspirin-ligature ulcer, P020701-1 and TP showed significant effect on the ulceration. In Shay ulcer, only TP showed significant effect but any sample did not affect gastric secretion. In histological examination, P020701-1, 2 and TP showed reduced injury on mucosal tissue.

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Anxiolytic effect of Albizzia julibrissin using elevated plus-maze in rats

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Benzodiazepine is a widely used anxiolytic agent. However it has been reported that most anxiolytics have side effects such as hypotension, depression of respiration, dizziness, headaches, chronic sleep disorders, drug poisonings, and withdrawal symptoms. In this report, we want to evaluate the anxiolytic effect of Albizzia julibrissin (AJ). There are various reports that AJ has several biological activities such as sedative action, insomnia, irritability, anorexia, and diuretic action. The water extract of AJ was orally administered to adult male SD rats, 60min before the behavioral evaluation in the elevated plus maze (EPM) at 10, 50, 100, and 200 mg/kg, respectively. Control rats were treated with equal volume of saline and different group of rats was administered buspirone (1 mg/kg) as positive control. The water extract of AJ at the dosage 100 and 200 mg/kg significantly increased time-spent and arm entries into the open arms of the EPM and decreased time-spent and arm entries in the closed arms of the EPM by compared with the control group (P<0.001). Buspirone-treated group also showed significant increase in time-spent and arm entries into the open arms of the EPM (P<0.05). However there were no changes on the locomotor activities in any groups compared with control group. These results suggest that AJ may become a good anxiolytic agent with no adverse effects.

[PD3-15] [10/18/2002 (Fri) 13:30 - 16:30 / Hall C]