acute leukemia/lymphoma receiving intrathecal chemotheraphy, 20 with acuye febrile illness including bactermia, 18 with other conditions. As a result, PAF-AH activity was 2-3 fold higher in the group with acute febrile illness and the group with menigitis than contro group who had no acute illness. Furthermore, we found that this enzyme hydrolyze PAF as well as oxidized phospholipid. Partial purified enzyme show its molecular weight about 34 KDa on 12.5% SDS-PAGE. This enzyme activity were increased in the presence of protease without detregent. Interestingly, the enzyme activity was increased about 3 fold in the presence of detergent. In addition, the enzyme was not inhibited by idoacetamide, but was inhibited by PMSF and p-BPB. Together with other biochemical properties, our present findings suggest PAF-AH activity in the CSF might be a new PAF-AH isozym.

Poster Presentations - Field C2. Microbiology

[PC2-1] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Inactivation of S-Adenosylhomocysteine Hydrolase by Fluoro-neplanocin A

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S-adenocylhomocysteine hydrolase(AdoHcy) catalyzes the reversible hydrolysis of AdoHcy to adenosine and homocysteine. Because of its important role in the regulation of biological methylation reactions, it has attracted attention as a target of antiviral agents. Neplanocin A is the most potent AdoHcy hydrolase inhibitor among the inhibitors known, but its inhibitory activity is reversible.The fluoro analogue of neplanocin A,tested against human placental S-adenocylhomocysteine hydrolase,showed a significant inhibition and the irreversible mode of inhibition.

[PC2-2] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Genetic Diversity of Mitochondrial DNA in Antlers of Cervidae and Related Species

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During a study of molecular identification of *Cervi Parvum Cornu* (deer antler used as animal drug), it was found that there is a hypervariable region, especially in the range of mitochondrial cytochrome b gene, confirmed by PCR-RFLP method. Based on this finding, the phylogenetic study of *Cervidae* (deer) and *Rangifer* (reindeer) species has been tried by comparison of their mitochondrial DNA sequences in the range of cytochrome b gene. Very high homology above 97% between deer species or reindeer species was found in 307bp of cytochrome b gene fragment sequenced. However, it was revealed there is a homology around 90% between deer and reindeer species. The phylogenetic tree made by average distance tree method showed the genetic distance of 0.065 between deer and reindeer species. But it was interesting that deer antler imported from Kazakhstan have a cytochrome b gene much closer to that of reindeer rather than deer species, as likely as european red deer.

[PC2-3] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Antiplatelet and antithrombotic activities of Sunghyangjunggi-san

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As part of our continuing search for biological active anti-stroke agents from the herbal medicinal resources. We examined the possibility of Sunghyangjunggi-san and its ingradients as a novel antithrombotic agents in vitro and ex vivo, and its antithrombotic effect in vivo.
Among ingredients of Sunghyangjunggi-san, Arisaematis Rhizoma, Cinnamomi Cortex and Zingiberis Rhizoma potently inhibited ADP- and collagen-induced platelet aggregation in a dose-dependent manner in vitro. Sunghyangjunggi-san and most of its ingredients did not affect coagulation parameters as APTT, PT and TT in human plasma. Sunghyangjunggi-san, Arisaematis Rhizoma, Atractylodis Rhizoma Alba and Pinelliae Rhizoma significantly inhibited ex vivo rat platelet aggregation. Sunghyangjunggi-san, Alpiniae Fructus and Zingiberis Rhizoma showed significantly protection from death due to pulmonary thrombosis in mice.

[PC2-4] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

Metabolism of ginsenoside Rc by human intestinal bacteria

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Ginseng is frequently used in Asian countries for replenishment of viatal energy, tranquilization, mood elevation and prevention of aging. Its major components are ginsenosides, such as ginsenoside Rb1, Rb2 and Rc. These ginsenosides have been reported to show various biological activities including an anti-inflammatory and anti-tumor activities. To explain these pharmacological actions, it is thought that ginseng saponins must be metabolized by human intestinal microflora after orally taken them. Therefore, we investigate the metabolism of ginsenoside Rc by human intestinal bacteria. Ginsenoside Rc was metabolized to compound K and 20(S)-protopanaxadiol. Bifidobacterium K-506 transformed to compound K via compound Mb→compound F2 and/or compound Mc. However, Bifidobacterium K-103 transformed to compound K via compound Rd→ compound F2. Mb was a new compound, 3-O-(β-D-glucosyl)-20S-O-(α-L-arabinofuranosyl-1,6-β-D-glucopyranosyl)--protopanaxadiol (MW. 940[+Na]).

[PC2-5] [10/19/2001 (Fri) 09:00 - 12:00 / Hall D]

In vitro antagonistic acticity of Acharan sulfate against Helicobacter pylori infection to KATO III cell line

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Helicobacter pylori is recognized as a major etiological agent of acute and chronic gastritis. Infection with HP is strongly associated with pathogenesis of peptic ulceration and the development of adenocarcinoma of the distal stomach. HP adherences to sulfated carbohydrates, GM3 ganglioside, phosphatidylethanolamine and sialylactose of the mucous epithelial cell surface and the mucous layer lining the gastric epithelium.
Therefore, we investigate the antagonistic activity of acharan sulfate, which is an acidic glycosaminoglycan from Achatica fulica, on HP infection to a gastric cell line. This acharan sulfate was a