

brain interstitial fluid may be changeable to transport activity. In the present study, we examined whether aging shows any effect on the brain uptake of [³H]taurine. The aging model animal, senescence-accelerated mouse (SAM) strains show senescence acceleration and age-associated pathological phenotypes similar to geriatric disorders seen in humans.

The blood-brain barrier (BBB) transport of [³H]taurine was compared with senescence accelerated prone mice (SAMP8), senescence resistant mice (SAMR1) and normal mice. To evaluate of BBB permeability, we used intravenous injection technique and common carotid artery perfusion method (CCAP).

In result of CCAP method, [³H]taurine PS product in SAMR1 reduced by 35.1% compared with that in normal mice. And [³H]taurine PS product in SAMP8 reduced by 74.8% compared with that in normal mice. In case of intravenous injection technique, the plasma clearance of [³H]taurine in SAMP8 was almost comparable with that of normal mice.

These results suggest that aging may have an effect on the brain transport activity of taurine in disease state model animal.

[PB4-1] [10/20/2000 (Fri) 15:30 - 16:30 / [Hall B]]

Inhibitors of Nitric Oxide in Raw 264.7 Macrophages treated with Linarin: The main compound of Chrysanthemum zawadskii

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Linarin is the name given to the main compound from Chrysanthemum zawadskii. The herb of Chrysanthemum zawadskii, which is called Gu-Jul-Cho, has been used in traditional medicine for pneumonia, bronchitis, cough, common cold, pharyngitis, bladder-related disorders, women's diseases, gastroenteric disorders, and hypertension. This study was set up to elucidate the ability of macrophage activation of Linarin. Nitric oxide(NO), derived from L-arginine, is produced by two types(constitutive and inducible) of nitric oxide synthase(NOS). The NO produced in large amounts by the inducible NOS is known to be responsible for the vasodilation and hypotension observed in septic shock. We have found Linarin, compound of Chrysanthemum zawadskii and its MeOH extract, which inhibited the production of NO in LPS-activated Raw 264.7 cells. The Linarin may be useful candidates for the development of new drug to treat endotoxemia and inflammation accompanied by the overproduction of NO. Linarin-treated total Lymphocyte showed cytotoxicity in dose dependent manner between 10 $\mu\text{g}/\text{ml}$ and 40 $\mu\text{g}/\text{ml}$.

[PB4-2] [10/20/2000 (Fri) 15:30 - 16:30 / [Hall B]]

Effects of Lectin-conjugated Ellagitannin on Antitumor Activity

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Recently, studies which selectively cure tumor cell, are proceeding sprightly. Generally, antitumor drugs are strong toxicity and result in damage in normal cells. We studied antitumor activity with lectin-conjugated ellagitannin(lectin: carbohydrate-binding protein: tumor cell specific binding protein, Wheat Germ Agglutinin: melanoma specific binding protein, ellagitannin: praecoxin A: excellent antitumor effect). In this study, we injected mouse melanoma cell, B16-F10, on right the femoral region of C57BL/6 mouse and after administration with drugs, observed the live period of mouse and tumor size.