

most frequently encountered in oligosaccharides. The results demonstrate that ELLA is a very useful tool for rapid estimation of the types and relative amounts of specific carbohydrate structures within intact glycoproteins. The microheterogeneity of some oligosaccharides was also studied by using lectins that bind to their terminal residues. These results are compared with the results from direct structural analysis of oligosaccharide using a liquid chromatography system.

[PE3-3] [04/19/2002 (Fri) 10:00 ~ 13:00 / Hall E]

Characterization and cytotoxicity of lectin from *Maackia fauriei*

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A lectin has been purified from the bark of the legume plant *Maackia fauriei*. *M. fauriei* agglutinin (MFA) demonstrated high homogeneity with the lectin from *M. amurensis* in its N-terminal amino acid sequence and amino acid composition, however, the carbohydrate-binding specificity was different. The hemagglutination activity of MFA with human erythrocytes was specifically inhibited by N-acetylneuraminic acid as well as by Neu5Aca2-3Galb1-4GlcNAc. The hemagglutination activity of MFA is stable at pH values from 4.04 to 7.34, and at temperatures below 45°C. MFA exerts cytotoxic effects on human breast cancer MCF-7 cells, human melanoma G-361 cells, and human liver cancer SNU-449 cells.

Poster Presentations - Field F1. Clinical Pharmacy

[PF1-1] [04/19/2002 (Fri) 10:00 ~ 13:00 / Hall E]

Urinary profiles of fatty acids and androgens in female patients with thyroid cancer

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In female thyroid cancer, the relationship and potential effect of 11 endogenous androgens and 8 polyunsaturated fatty acids (PUFAs) were quantitatively determined in the urine of patients with thyroid cancer and normal subjects using the gas chromatography-mass spectrometry with selected ion-monitoring (SIM) mode. The values of urinary PUFAs as the long chain fatty acid, the precursor of cholesterol, was not different between normal controls and patients with thyroid cancer. But, in female thyroid cancer, the level of docosahexaenoic acid (DHA) was increased significantly higher than those of normal subjects. The concentrations of adrenal androgens derived from the parent cholesterol were not different significantly in the two groups. However, urinary values of dihydrotestosterone (DHT, $P < 0.2$), androsterone (An, $P < 0.05$), and etiocholanolone (Et, $P < 0.05$) are different to the values of the other androgens. Especially, concentrations of An and Et were increased in patients with thyroid cancer than those of normal controls. These data indicate that fatty acids can be related to the 5 α -reductase, which is one of the enzyme in androgen metabolism.

[PF1-2] [04/19/2002 (Fri) 10:00 ~ 13:00 / Hall E]

Determination of Practical Dosing of Warfarin in Korean Outpatients with Mechanical Heart Valves

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