

Department of Internal Medicine

Division of General Medicine

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Research Activities

Division of General Medicine, The Jikei University Hospital

Little is known about the relationship between anxiety and health-related quality of life (QOL) in the primary care setting. The objective of this study was to determine whether the degree of anxiety affects physical complaints and the QOL physical status scale. The State Trait Anxiety Inventory (STAI), the 36-item Short Form Health Survey (SF-36), and the Beck Depression Inventory II (BDI-II) were used to evaluate the degree of anxiety, health-related QOL scores, and degree of depressive symptoms, respectively. The subjects were 109 patients (64 men and 45 women) with a mean age of 41.8 ± 13.8 years. Of the 25 physical complaints, general fatigue, vertigo, dizziness were correlated with anxiety. The physical component summary of the SF-36 has not shown a statistically significant relation with anxiety, after we adjusted for sex, age, and BDI-II score.

Division of General Medicine, The Jikei University Aoto Hospital

The effect of *shinrin-yoku* (forest-air bathing and walking) in patients with hypertension were investigated. Beneficial effects of the antiplatelet agent sarpogrelate were examined in an experimental model of heart failure due to myocardial infarction.

Division of General Medicine, The Jikei University Daisan Hospital

1. Study of factors of infection in elderly hospitalized patients

To investigate the relation between infection and several factors in elderly inpatients, we studied how infection is related to the nutritional state, administered drugs, and biochemical markers. We found that a poor nutritional state and the use of gastric acid-suppressing drugs promote infection in elderly inpatients.

2. Study of fever of unknown origin

We attempted to clarify the cause of fever of unknown origin by measuring white blood cells, the erythrocyte sedimentation rate, and levels of C-reactive protein, adenosine deaminase, 2-5 oligoadenylate synthetase, soluble interleukin-2 receptor, and procalcitonin. We found that viral infection can be distinguished from bacterial infection on the basis of the results of these measurements. Procalcitonin is useful for the diagnosis of Gram-negative rod sepsis.

Division of General Medicine, The Jikei University Kashiwa Hospital

1. Investigation of the role of general medicine on environmental health achievement
We established a new regional nutritional education system for patients with diabetes mellitus or metabolic syndrome in the Kashiwa area. This work received an award from the Kao Research Council for the Study of Healthcare Science in 2008. As a member of the local governance committee, we also participated in the development of local health care systems, *tokuteikenshin* and *tokuteihokenshidou*, in the Kashiwa area.
2. Studies of lipid metabolism and atherosclerosis
 - 1) We started *in vitro* studies to clarify the mechanism by which diacylglycerol ingestion increases plasma serotonin and the relation of this phenomenon to the antiobesity effects of diacylglycerol, which was reported by us in the *Journal of Clinical Lipidology* last year.
 - 2) An incubation study using bacteriophage was started with lipoprotein fractions to examine the antiviral effects of high-density lipoprotein.
 - 3) Current issues of a low-density lipoprotein (LDL) homogenous assay were highlighted by lipoprotein analysis with our newly developed method of high-performance liquid chromatography.
 - 4) The clinical significance of malondialdehyde-modified LDL, a clinical detector of oxidized LDL, was assessed.
 - 5) The effects of statins on non—high-density lipoprotein cholesterol were examined in a multicenter randomized controlled trial, and these results were reported in *Atherosclerosis* in 2008.

Publications

Mamori S, Searashi Y, Matsushima M, Hashimoto K, Uetake S, Matsudaira H, Ito S, Nakajima H, Tajiri H. Serum type IV collagen level is predictive for esophageal varices in patients with severe alcoholic disease. *World J Gastroenterol* 2008; **14**: 2044-8.

Yutaka O, Katsunori I, Ikuro A, Shinichi S, Kenichi D, Kumie I, Hidekatsu Y, Norio T. Characteristic comparison of triglyceride-rich remnant lipoprotein measurement between a new homogeneous assay (RemL-C) and a conventional immunoseparation method (RLP-C). *Lipids Health Dis* 2008; **17**: 18.

Reviews and Books

Yanai H, Tomono Y, Ito K, Furutani N, Yoshida H, Tada N. The underlying mechanisms for development of hypertension in the metabolic syndrome. *Nutr J* 2008; **17**: 10.

Matsushima M. Introduction of the educational programs for the medical practitioners intended to clinical researches on the primary care settings; The Jikei University School of Medicine (in Japanese). *Rinsho Yakuri* 2008; **39**: 191-3.

Yoshida H. The cholesterol and functional foods (in Japanese). *Functional Food* 2008; **2**: 145-52.

Tada N. The shift to dyslipidemia from hyperlipidemia (in Japanese). *Rinsho Eiyo* 2008; **113**: 388-92.

Tada N. The diet for patients with dyslipidemia (in Japanese). *Lipid* 2008; **19**: 166-73.

Tada N. What are the factors related to postprandial hyperlipidemia? (in Japanese). *Q and A de Wakaru Himan to Tonyobyō* 2008; **7**: 887-90.

Tada N. The evidence of treatment for hypertriglyceridemia (in Japanese). *Gekkan Resident* 2009; **2**: 49-55.