# Department of Internal Medicine Division of General Medicine

Tatsuo Hosoya, Professor Norio Tada, Professor Masami Nemoto, Associate Professor Nobuyuki Furutani, Associate Professor Mie Kawai, Assistant Professor Takanori Ebisawa, Assistant Professor Nobuakira Takeda, Professor Akihiro Nishiyama, Associate Professor Hiroshi Yoshida, Associate Professor Jun Hiramoto, Associate Professor Chihiro Shikata, Assistant Professor

## **Research Activities**

# Division of General Medicine, The Jikei University Hospital

We are attempting to compile a database of our medical examinations and treatments during primary care in outpatient units. The data and information of every outpatient are gathered from forms of our own design filled out by the physicians. The data and information include reason for visiting, physical symptoms and complaints, whether the patient had consulted other physicians, the primary diagnosis, examinations, and care. The data we compile, especially from initial visits, are expected to be useful for analyzing trends in primary care at large general hospitals.

#### Division of General Medicine, The Jikei University Aoto Hospital

Biochemical and molecular biological examinations were performed of rats with an experimental model of heart failure in collaboration with a Canadian research group. Myocardial subcellular changes were investigated. Histochemical examination of heart failure was also performed in collaboration with a German research group. The effects of sarpogrelate, a 5-hydroxytryptamine (2A) receptor antagonist, were examined following the project of last year.

## Division of General Medicine, The Jikei University Daisan Hospital

1. Study of factors of infection in elderly hospitalized patients

We studied the relations of infection to nutritional status, administered drugs, and biochemical markers. We found that the poor nutritional status and the use of gastric acidsuppressing drugs promote infection in elderly hospitalized patients.

2. Study of tube feeding

We attempted to determine the best method of tube feeding of elderly patients.

3. Study of the relations of severe infection to electrolyte abnormality and hormonal abnormality

- We studied the relations of severe infection to hypophosphatemia and hypothyroidism.
- 4. Early diagnosis of severe sepsis

Severe sepsis has a high mortality rate. We studied several variables in severe sepsis. Procalcitonin is useful for diagnosing severe sepsis due to Gram-negative rods.

#### Division of General Medicine, The Jikei University Kashiwa Hospital

Our research at Kashiwa Hospital has 3 goals. The first is to investigate the role of general medicine on environmental health achievement in the areas, especially in Kashiwa. We also participated again this year in the development of the local health care system in Kashiwa as a member of the local governance committee. The second goal is to evaluate abnormalities of lipids and lipoproteins which contribute to premature atherosclerosis and to develop treatments for atherosclerotic disorders. The effects of co-feeding with carbohydrates and lipids on postprandial hyperlipidemia were investigated by measuring serum levels of apolipoprotein B48 level; our results were reported at the XVI<sup>th</sup> International Symposium on Atherosclerosis held in Sydney, Australia. The third goal is to develop educational tasks for teaching medical students and junior physicians.

#### **Publications**

Hosoya T, Matsushima M, Nukariya K, Utsunomiya K. The relationship between the severity of depressive symptoms and diabetes-related emotional distress in patients with type 2 diabetes. Intern Med. 2012; **51:** 263-9.

#### **Reviews and Books**

Tada N, Maruyama C, Koba S, Tanaka H, Birou S, Teramoto T, Sasaki J. Japanese dietary lifestyle and cardiovascular disease. J Atheroscler Thromb. 2011; 18: 723-34.

Koba S, Tanaka H, Maruyama C, Tada N, Birou S, Teramoto T, Sasaki J. Physical activity in the Japan population: association with blood lipid levels and effects in reducing cardiovascular and all-cause mortality. J Atheroscler Thromb. 2011; **18:** 833-45.

Hosoya T, Matsushima M. Evidence Update 2012, therapeutic agents of diabetes, Metformin (in Japanese). Yakkyoku. 2012; **63**: 52-6.