Neurology and Neurological Science

1. Staffs and Students (April, 2012)

Professor, Chairman: Hidehiro Mizusawa
Professor: Takanori Yokota
Junior Associate Professor: Kinya Ishikawa, Nobuo Sanjo
Assistant Professor: Satoru Ishibashi, Takuya Ohkubo, Shoichiro Ishihara
Hospital Staff: Takumi Hori, Takahiro Nagao, Shunsuke Kudo, Keiko Ichinose, Eri Iwasawa
Senior Resident: Yuriko Okabe, Fumiko Furukawa
Post-doctorial Fellow: Kazutaka Nishina, Nozomu Sato
Taro Ishiguro
Graduate Students (Doctoral course): Akira Machida, Kazuyuki Saito, Tomoko Nishina, Teruhiko Sekiguchi, Kokoro Ozaki, Piao Wenying

2. Education

Neurology is a medical specialty concerned with the diagnosis and treatment of disorders of the nervous system including the brain, spinal cord, peripheral nerves, autonomic nerves and skeletal muscles. Since the nervous system extends to the whole body and regulate all the organs, neurologists have to examine and understand many symptoms of the whole brain and body.

Department of Neurology and Neurological Science at Tokyo Medical and Dental University offers an unique “clinical neurological training for specialist” in a four-year residency program. This program is designed to provide the highest quality clinical training in the clinical practice of neurology, either in an academic or a practice career. To accomplish this, the program integrates extensive practical exposure to all aspects of current clinical neurology with a firm grounding in underlying scientific principles and methods of clinical investigations such as electrophysiology, neuromuscular pathology, neuroimaging, or neurogenetics and so on. The faculty and staff are committed to facilitate resident education and training.

After completion of their training for four years, senior residents are equipped with a lot of clinical experience as attending doctors or teaching assistants in the university hospital and affiliated hospitals. They are eligible for the board certification by the Japanese Society of Neurology.

3. Research Subjects

1) Gene identification and investigation of its pathomechanism for hereditary diseases such as spinocerebellar ataxias, especially for SCA6 and SCA31
2) Development of gene therapies using RNAi and other techniques
3) Establishment of ALS animal model
4) Basic and clinical researches for neurodegenerative diseases such as spinocerebellar ataxia, amyotrophic lateral sclerosis, and Alzheimer disease
5) Development of neuroregenerative therapy using stem cells for cerebrovascular and neurodegenerative disorders
6) Basic and clinical researches of neurological autoimmune diseases
7) Electrophysiological studies using electric and magnetic stimulation
8) Basic and clinical studies of neuromuscular diseases by studying the biopsied peripheral nerves and muscles

4. Clinical Services

We see about 100 out-patients and 40 in-patients daily, and offer in and out-patient consultation services through the weekday and on weekends. We diagnose and treat stroke patients, as well as patients with epilepsy, headache, multiple sclerosis, Parkinson’s disease, spinocerebellar ataxia, and hundreds of other neurological issues, some of which are acute,
others may be chronic. We also have an out-patient clinic specialized to patients with dementia corresponding to needs of the rapidly aging society. Our patients will be reliably evaluated and diagnosed with some skillful techniques, such as the electrophysiological, neuroradiological, and neuropsychological tests and pathological diagnosis of biopsied nerves and muscles.

5. Publications

Original Article


