Division of Diagnostic Pathology

Professor (Director)
Masashi Fukayama, M.D., Ph.D.*

Associate Professor (Deputy Director)
Junji Shibahara, M.D., Ph.D.*
Takeshi Sasaki, M.D., Ph.D. (Chief, Telepathology & Remote Diagnosis Promotion Center)

Associate Professor
Tetsuo Ushiku, M.D., Ph.D.*

Lecturer
Teppei Morikawa, M.D., Ph.D.,

Lecturer (Hospital)
Masako Ikemura, M.D., Ph.D. Aya Shinozaki-Ushiku, M.D., Ph.D. *

Associate
Yukako Shintani, M.D., Ph.D. Hiroyuki Abe, M.D., Ph.D.,
Akimasa Hayashi, M.D., Ph.D.,
Shogo Tajima, M.D. * Mariko Tanaka, M.D., Ph.D. *

Clinical Fellow
Makiko Ogawa, M.D., Kei Oide, M.D., Ryohei Kuroda, M.D.

Homepage  http://pathol.umin.ac.jp/

Introduction and Organization

Department of Pathology and Diagnostic Pathology (*) and Division of Diagnostic Pathology of University Hospital have been organized to function as a unit.

The proper staffs in the Division of Diagnostic Pathology include a lecturer, five associates, and three clinical staffs. Dr. Shintani learned cardiovascular pathology in Massachusetts General Hospital from 11, Nov. to 12, Dec.

We set up Telepathology & Remote Diagnosis Promotion Center (TRDP Center), and also started Outpatient Clinic of Pathology, and Dr. Sasaki explained the detail of cancer pathology to the patients with breast cancer.

To promote the application of development of genomic medicine to clinical practice, we set up Center for Genome Pathology Standardization (Tailor-made Medical Treatment Program, funded by Ministry of Education, Culture, Sports, Science, and Technology) (http://genome-project.jp/). The mission of the Center is to investigate basic technologies for tissue banking, and to hold seminars for doctors and technicians. We held the first seminar on March 28-29, 2015.

Clinical activities (diagnostic pathology and autopsy)

The annual statistics of the pathologic practice in 2014 fiscal year consisted of 16,581 cases of histological
examination (22,951 specimens), 18,851 cases of cytology, 826 of frozen histology, 464 of intra-operative cytology, 61 cases of autopsy (17.9% of the autopsy rate), and 1 autopsy case from other hospitals.

The following surgical pathology conferences are regularly held with each clinical division for the cases of various tumors of organs; thoracic organs (Dr. Shinozaki-Ushiku in charge), liver and pancreato-biliary tract (Drs. Shibahara and Tanaka), male genitourinary (Dr. Morikawa) and female genital tracts (Dr. Sasaki), breast (Dr. Ikemura), and bone and soft tissues (Dr. Ushiku). Biopsy conferences are also held in the cases of kidney (Dr. Shintani in charge), skin (Dr. Shinozaki-Ushiku) and GI tract (Dr. Abe).

Our aim in the pathologic practices is to provide the correct diagnosis as soon as possible. We are addressing ‘one-day pathology’ using a rapid-histoprocessing machinery. We also perform double check for reviewing the reports and slides for all cases of histological examination to prevent a potential misdiagnosis.

Virtual slide scanners have been installed, which enabled us to deposit the biopsy specimens as digital information. We are setting out a future providing system of pathologic images for clinical divisions.

We hold autopsy case conferences on every Monday. Hospital clinico-pathological conferences (CPC) is also held every month as mentioned above, and two cases are discussed in each CPC. The contents are provided as CPC Digest by the hospital internet.

We continue to participate in the autopsy assessment for “The Model Project for Inspection and Analysis of the Deaths Related to Medical Treatment (DRMT)”.

Teaching activities

The lectures and exercise course of systemic pathology are for the 2nd grade–students. Clinical Clerkship (CC) courses of autopsy and surgical pathology are for the 4th grade students. Six students of 3rd grade took the elective clinical clerkship course.

We instructed all clinical residents (junior course) to submit a report of CPC case as an obligatory requirement of their medical training for each of them.

We have made out the digest version of CPC slides open in the hospital (Drs. Shintani and Hayashi), and also started e-learning program for interns to solve the problems in CPC by themselves, thereby facilitating their understanding (Dr. Ikemura).

The Division of Diagnostic Pathology received nine junior residents (total 32 months) in 2014 for their second year program of the internship.

Research activities

Dr. Sasaki is in charge of the research to evaluate feasibility of telepathology for daily practice of diagnostic pathology.

We continue the study to investigate the usefulness of post mortem CT images for hospital autopsy (Drs. Shintani and Abe). We obtain postmortem images with a CT apparatus in the autopsy-assisting CT room, and compare the results with those of autopsy in order to understand the patients’ pathophysiology (Ref.9, 24, 25 in Department of Pathology and Diagnostic Pathology).

We continue the pathological studies of neoplastic diseases on the basis of surgical pathology conferences (see the pages of Department of Pathology and Diagnostic Pathology). We are also developing diagnostic and therapeutic methods using cancer specific antibodies in collaboration with Departments of Radiology and Upper GI tract Surgery, and Genome Science Division, Research Center for Advanced Science and Technology, the University of Tokyo (Drs. Ikemura, Ushiku, and Abe). We also cooperate with projects developing PET and in vivo imaging of cancers with Departments of Upper GI tract Surgery and Hepato-biliary & Pancreas Surgery.

References (Case Reports Only)

See the corresponding section of Department of Pathology and Diagnostic Pathology

(2) Hangai S, Yoshimi A, Hosoi A, Matusaka K, Ichikawa M, Fukayama M, Kurokawa M. An


