Division of Diagnostic Pathology

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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, a hospitall lecturer, two associates, and three clinical staffs. Dr. Shibahara was promoted to a Lecturer, Department of Pathology on December.

Clinical activities (diagnostic pathology and autopsy)

The annual statistics of the pathologic practice in 2011 fiscal year consisted of 14,716 cases of histological examination (19,770 specimens), 26,427 specimens of cytology, 701 of frozen histology, 596 of intra-operative cytology, 64 of autopsy cases (18% as autopsy rate), and 2 autopsy cases from other hospitals.

Clinico-pathological conferences (CPCs) for the two autopsy cases are held every month in the hospital. Furthermore, the following surgical pathology

conferences are regularly held with each clinical division; the cases of various tumors of organs (the doctor in charge of each), such as thoracic organs (Drs. Maeda), liver and pancreato-biliary tract (Drs. Shinozaki and Ushiku), male genitourinary (Dr. Shintani) and female genital tracts (Drs. Maeda and Takazawa), breast (Dr. Ikemura), and bone and soft tissues (Dr. Ushiku). Biopsy conferences are also held in the cases of kidney (Dr. Uozaki), skin (Dr. Takazawa) and GI tract (Drs. Ushiku and Matsusaka).

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 review of 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 save the biopsy specimens as digital information. We are setting out a future providing system of pathologic images for clinical divisions. Dr. Uozaki is mainly in charge of this project.

We continue to participate 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. Bed-side learning (BSL) course of autopsy and surgical pathology are for the 4th grade students. Four students of 3rd grade took the clinical clerkship course.

We instructed all interns to submit one report of CPC case as a requirement of their medical training. We have made digest version of CPC slides open in the hospital, and also started e-learning program for interns to solve the problems in CPC by themselves, therby facilitating their understanding (Drs. Takazawa and Ikemura).

The Division of Diagnostic Pathology received five interns (total 18 months) in 2011 for the second year program of their internship.

Research activities

Dr. Uozaki carried out a co-operative study with Fuji Xerox and National Institute of Advanced Industrial Science and Technology (AIST) to develop medical application of the input supporting system of free text, based on the ontology and natural language processing. The project was funded by A-STEP (Adaptable and Seamless Technology transfer Program through target-driven R & D), High-risk challenging type of Japan Science and Technology Agency

Dr. Takazawa is in charge of the project investigating usefulness of post mortem CT images for hospital autopsy, using a CT apparatus in the autopsy assisting CT room (ref. 7, 8).

We continue the pathological studies of neoplastic diseases on the basis of surgical pathology conferences. We are also developing a new antibody-based in vivo imaging and therapy in collaboration with Genome Science Division, Research Center for Advanced Science and Technology, the University of Tokyo. We are evaluating the feasibility of antibody panels for immunohistochemistry to detect the metastasis in the sentinel lymph nodes of the gastric cancer, by constructing the tissue array of primary and metastatic cancers (Drs. Ushiku and Matsusaka).

References

See the corresponding section of Department of Pathology and Diagnostic Pathology