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, four associates, and two clinical staffs.

We applied to the staff reallocation program of the University of Tokyo for the promotion of telepathology cooperating with local community. One staff position will be supplied next year, and Dr. Takeshi Sasaki, Associate Professor of Yokohama Manicipal niversity Medical Center, will move to the chief, Division of Telepathology and Promotion of Cooperation.

Clinical activities (diagnostic pathology and autopsy)

The annual statistics of the pathologic practice in 2011 fiscal year consisted of 15,931 cases of histological examination (21,813 specimens), 19,244 cases of cytology, 695 of frozen histology, 553 of intra-operative cytology, 52 casees of autopsy (15.5% of the 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 for the cases of various tumors of organs; thoracic organs (Dr. Morikawa in charge), liver and pancreato-biliary tract (Drs. Shibahara and Tanaka), male genitourinary (Dr. Morikawa) and female genital tracts (Drs. Maeda and Takazawa), breast (Dr. Ikemura), and bone and soft tissues (Dr. Maeda). Biopsy conferences are also held in the cases of kidney (Dr. Shintani in charge), skin (Dr. Takazawa) and GI tract (Dr. 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 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 reposit 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 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. Bed-side learning (BSL) courses 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 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, 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 ten interns (total 25 months) in 2011 for their second year program of the internship.

Research activities

Cooperative study was carried out 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 the usefulness of post mortem CT images for hospital autopsy, using a CT apparatus in the autopsy-assisting CT room.

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 Department of Upper GI tract surgery, and Genome Science Division, Research Center for Advanced Science and Technology, the University of Tokyo (Dr. Matsusaka). 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. We also cooperate with projects developing PET and in vivo imaging of cancers (Dr. Matsusaka).

References

See the corresponding section of Department of Pathology and Diagnostic Pathology