

# 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, five associates, and two clinical staffs.

We set up Telepathology & Remote Diagnosis Promotion Section (TRD-PS), and Dr. Sasaki (Associate Professor, Yokohama Municipal University) took up a position, chief of Telepathology & Remote Diagnosis Promotion Section (TRD-PS)

( see [www.h.u-tokyo.ac.jp/vcms\\_lf/dayori79.pdf](http://www.h.u-tokyo.ac.jp/vcms_lf/dayori79.pdf) ) .

We also started Outpatient Clinic of Pathology, and Dr. Sasaki explained the detail of cancer pathology to the patients with breast cancer.

## Clinical activities (diagnostic pathology and autopsy)

The annual statistics of the pathologic practice in 2013 fiscal year consisted of 16,811 cases of histological examination (23,272 specimens), 19,896 cases of cytology, 790 of frozen histology, 486 of intra-operative cytology, 53 cases of autopsy (16.1% of the autopsy rate), and 1 autopsy case 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. Shinozaki-Ushiku in charge), liver and pancreato-biliary tract (Drs. Shibahara and Tanaka), male genitourinary (Dr. Morikawa) and female genital tracts (Dr. Maeda), 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. Maeda) 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.

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 2<sup>nd</sup> grade-students. Bed-side learning (BSL) courses of autopsy and surgical pathology are for the 4<sup>th</sup> grade students. Four students of 3<sup>rd</sup> grade took the 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 (Dr. Shintani), and also started e-learning program for interns to solve the problems in CPC by themselves, thereby facilitating their understanding (Dr. T Ikemura). All of residents were obligated to take the course for their training this year.

The Division of Diagnostic Pathology received eight junior residents (total 26 months) in 2011 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. 26 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 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. 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, Matsusaka, 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

See the corresponding section of Department of Pathology and Diagnostic Pathology