

IMSUT Hospital

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病理診断科

Department of Pathology

病理部

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Our mission

1. We provide an accurate and high-quality pathological diagnosis to the patient in this research hospital, The Institute of Medical Science, The University Of Tokyo.
2. Make diagnosis by morphological approach using microscope to the laboratory materials.

Overview

We study about the hematological malignancy and transplantation pathology. We emphasize many clinical cases and write case reports about human diseases. We also perform pathological and cytological diagnosis of many specimens submitted by various departments.

1. HHV8 negative effusion-based lymphoma has been adopted for the new WHO classification.

Effusion-based lymphoma is found in pleura or ascites and usually lack of evidence for nodular lesion. Conventional findings about EBL are bad clinical course and many patients are infected by HIV. However, some of Japanese patients were not infected HIV and good clinical course. We reported some case reports about EBL in Japan and are going to promote multi-institutional joint research in Japan. We therefore conducted a retrospective study of 95 patients with EBL, regardless of HHV8 status, in Japan. Of 69 patients with EBL tested for HHV8, a total of 64 were negative. The median age of patients with primary HHV8-negative EBL at diagnosis was 77 years (range, 57-98 years); all 58 tested patients were negative for HIV. Primary HHV8-negative EBL was most

commonly diagnosed in pleural effusion (77%). Expression of at least 1 pan B-cell antigen (CD19, CD20, or CD79a) was observed in all cases. According to the Hans algorithm, 30 of the 38 evaluated patients had nongerminal center B-cell (non-GCB) tumors. Epstein-Barr virus-encoded small RNA was positive in 6 of 45 patients. In 56 of 64 HHV8-negative patients, systemic therapy was initiated within 3 months after diagnosis. Cyclophosphamide, doxorubicin, vincristine, and prednisolone (CHOP) or CHOP-like regimens with or without rituximab (n=48) were the most common primary treatments. The overall response and complete response rates were 95% and 73%, respectively. Three patients did not progress without systemic treatment for a median of 24 months. With a median 25-month follow-up, the 2-year overall survival and progression-free survival rates were 84.7% and 73.8%. Sixteen patients died; 12 were lym-

phoma-related deaths. Thus, most EBL cases in Japan are HHV8-negative and affect elderly patients. The non-GCB subtype is predominant. Overall, primary HHV8-negative EBL exhibits a favorable prognosis after anthracycline-based chemotherapy.

This disease concept has been adopted for the new WHO classification of hematolymphoid tumor.

2. Medical Activities

We have performed microscopic diagnosis of many pathological and cytological samples. We also provided immunohistochemical analysis and in situ hybridization in order to improve the diagnostic accuracy and decide the treatment.

Pathological diagnosis n = 1447

Endoscopic samples n = 860

Surgical resection n = 304

Fine-needle aspiration n = 179

Intraoperative diagnosis n = 21

Consultation n = 73

Other n = 10

Cytological diagnosis n = 552

Autopsy n = 3

3. Pathology Core Laboratory II

Pathology Core Laboratory II handles a large number of specimens, including mouse, cultured cells and human tissue samples collected at the IMSUT hospital. We have performed preparation of pathological specimen and pathological analysis (n = 95).

Publications

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2. Kiyoshi Yamaguchi, Chiaki Horie, Kiyoko Takane, Tsuneo Ikenoue, Saya Nakagawa, Yumiko Isobe, Yasunori Ota, Tetsuo Ushiku, Mariko Tanaka, Jun Fujishiro, Noriko Hoshino, Atsuhiko Arisue, Satoshi Nishizuka, Susumu Aikou, Dai Shida, Yoichi Furukawa. Identification of odontogenic ameloblast associated as a novel target gene of the Wnt/ β -catenin signaling pathway. *Cancer Sci.* doi: 10.1111/cas.15657. (2022)
3. Hajime Yasuda, Jun Ando, Sayako Yoshida, Yasunori Ota, Norio Komatsu, Miki Ando. Diffuse Large B-cell Lymphoma with Adrenal Involvement Presenting as Other Iatrogenic Immunodeficiency-associated Lymphoproliferative Disorders: Sustained Remission with Methotrexate Termination Alone in Two Cases. *Intern Med.* doi: 10.2169/internalmedicine.0130-22. (2022)
4. Tomoki Todo, Hirotaka Ito, Yasushi Ino, Hiroshi Ohtsu, Yasunori Ota, Junji Shibahara, Minoru Tanaka. Intratumoral oncolytic herpes virus G47 Δ for residual or recurrent glioblastoma: a phase 2 trial. *Nat Med.* 28(8):1630-1639. doi: 10.1038/s41591-022-01897-x. (2022)
5. Yasuo Matsubara, Yasunori Ota, Yukihisa Tanaka, Tamami Denda, Yasuki Hijikata, Narikazu Boku, Lay Ahyoung Lim, Yoshihiro Hirata, Giichiro Tsurita, Eisuke Adachi, Hiroshi Yotsuyanagi. Altered mucosal immunity in HIV-positive colon adenoma: decreased CD4 + T cell infiltration is correlated with nadir but not current CD4 + T cell blood counts. *Int J Clin Oncol.* 27(8):1321-1330. doi: 10.1007/s10147-022-02188-8. (2022)
6. Ayana Uchimura, Hajime Yasuda, Jun Ando, Yasunori Ota, Makoto Sasaki, Tomoiku Takaku, Yutaka Tsukune, Miyuki Tsutsui, Yoko Edahiro, Naoki Watanabe, Tomonori Ochiai, Norio Komatsu, Miki Ando. Hodgkin Lymphoma on Hemodialysis Successfully Treated with Extended Courses of Brentuximab Vedotin. *Case Rep Oncol.* 15(1):263-266. doi: 10.1159/000523823. (2022)
7. Yasutaka Hayashi, Kimihito C Kawabata, Yosuke Tanaka, Yasufumi Uehara, Yo Mabuchi, Koichi Murakami, Akira Nishiyama, Shigeru Kiryu, Yusuke Yoshioka, Yasunori Ota, Tatsuki Sugiyama, Keiko Mikami, Moe Tamura, Tsuyoshi Fukushima, Shuhei Asada, Reina Takeda, Yuya Kunisaki, Tomofusa Fukuyama, Kazuaki Yokoyama, Tomoyuki Uchida, Masao Hagihara, Nobuhiro Ohno, Kensuke Usuki, Arinobu Tojo, Yoshio Katayama, Susumu Goyama, Fumio Arai, Tomohiko Tamura, Takashi Nagasawa, Takahiro Ochiya, Daichi Inoue, Toshio Kitamura. MDS cells impair osteolineage differentiation of MSCs via extracellular vesicles to suppress normal hematopoiesis. *Cell Rep.* 39(6):110805. doi: 10.1016/j.celrep.2022.110805. (2022)