The 18th Annual Meeting of the Japan Society of Brain Tumor Pathology

Program

May 11 (Thu) Room A (7F Main Hall)

Clinico-pathological Conference

15:40–16:30 Clinico-pathological Conference 1
Chairman: Toru Iwaki (Dept. of Pathology, Kyushu University, Japan)
Commentator: Kazuo Nagashima (Lab. of Molecular & Cellular Pathology, Hokkaido University, Japan)
Masayuki Shintaku (Dept. of Pathology, Osaka Red Cross Hospital, Japan)

1 Juvenile malignant spindle cell tumor in the cerebellopontine angle
Masaomi Koyanagi Depts. of Neurosurgery and Pathology, Kyoto University Graduate School of Medicine, Japan

2 Spinal atypical teratoid/rhabdoid tumor
Tomoyasu Abe Dept. of Neurosurgery, Okayama University, Japan

16:30–17:40 Clinico-pathological Conference 2
Chairman: Saburo Yagishita (Div. of Pathology, Kanagawa Rehabilitation Center, Japan)
Commentator: John J. Kepes (Dept. of Pathology & Laboratory, University of Kansas, USA)
Hitoshi Takahashi (Dept. of Pathology, Niigata University, Japan)

3 A case of primary leptomeningeal ganglioglioma
Atsushi Saito Dept. of Neurosurgery, Faculty of Medicine, University of the Ryukyus, Japan

4 Adult cerebral tumor composed of abnormal glioneuronal cells: A case report
Tsuyoshi Hara Dept. of Neurosurgery, Kumanoto University School of Medicine, Japan

5 Intraventricular glioneuronal tumor: A case report
Masaharu Amagasa Dept. of Neurosurgery and Pathology, Yamagata City Hospital Saiseikan, Japan

17:40–18:30 Clinico-pathological Conference 3
Chairman: Yoichi Nakazato (First Dept. of Pathology, Gunma University, Japan)
Commentator: Asao Hirano (Div. of Neuropathology, Montefiore Medical Center, USA)
Nobuyuki Kawano (Isobe Clinic, Japan)

6 A case of glioma?
Mina Shimizu Dept. of Neurosurgery, Minami Wakayama National Hospital, Japan

7 A case of frontal lobe tumor recurred 15 years after the initial operation
Hidetaka Arishima Dept. of Neurosurgery, Fukui Medical University, Japan
The 2nd International Symposium of Brain Tumor Pathology

Program

**Oral presentation**

**May 12 (Fri) Room A (7F Main Hall)**

**09:00–11:00 Symposium 1: Malignant meningeal tumors**

**Chairmen:** Mitchell S. Berger (Dept. of Neurological Surgery, University of California SF, USA)
Hitoshi Takahashi (Dept. of Pathology, Niigata University, Japan)

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**Key Note Lecture**

**“Atypia and malignancy in meningiomas: The search for definitions”**

Bernd W. Scheithauer Dept. of laboratory Medicine & Pathology, Mayo Clinic, USA

**1 Primary meningeal sarcomas with leiomyoblastic differentiation: A proposal for a new subtype of primary meningeal sarcomas**

Mizuhiko Terasaki Dept. of Neurosurgery, Kurume University School of Medicine, Japan

**2 Atypical and malignant meningioma: Clinical features and prognosis**

Hee-Won Jung Dept. of Neurosurgery, Seoul National University College of Medicine, Korea

**3 Clinicopathological study of anaplastic meningioma**

Hidetoshi Ikeda Dept. of Neurosurgery, Tohoku University School of Medicine, Japan

**4 Quantitative analysis of the shape of meningiomas: Prediction of biological aggressiveness**

Kataju Shima Dept. of Neurosurgery, National Defense Medical College, Japan

**5 Evaluation of proliferative potential with 201Tl-SPECT and 18F-FDG-PET in meningioma**

Ryusuke Kabeya Dept. of Neurosurgery, Nagoya 1st. Red Cross Hospital, Japan

**6 Progestone, p53, and c-myc expression during malignant transformation of meningiomas**

Goro Nagashima Dept. of Neurosurgery, Showa University, Fujigaoka Hospital, Japan

**7 Overexpression of wild-type p53 protein accompanies overexpression of BCL-2 protein in malignant meningioma**

Ryo Nishikawa Dept. of Neurosurgery, Saitama Medical School, Japan

**11:00–11:30 Special Lecture 1**

**Chairman:** Naoki Kageyama (Kishiwa City Hospital, Japan)
Prof. Asao Hirano (Div. of Neuropathology, Mountsorrel Medical Center, USA)

**“Analysis of neuropathological images”**

**11:30–12:00 Special Lecture 2**

**Chairman:** Kazuo Tabuchi (Dept. of Neurosurgery, Saga Medical School, Japan)
Prof. James T. Rutka (Div. of Neurosurgery, University of Toronto, Canada)

**“Overview of the cell cycle and human gliomas”**

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**14:30–15:00 Special Lecture 3**

**Chairman:** Toru Iwaki (Dept. of Pathology, Kyushu University, Japan)
Prof. Webster K. Cavenee (Lab. of Tumor Biology, University of California SD, USA)

**“Tumor type-specific DNA methylation”**

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**15:00–18:10 Symposium 2: Molecular biology of gliomas**

**15:00–16:20 2-1. Astrocytic and oligodendrogliyal tumors**

**Chairman:** Webster K. Cavenee (Lab. of Tumor Biology, University of California SD, USA)
Toshiro Kumanobbi (Dept. of Pathology, Niigata University, Japan)

**8 Specific genetic predictors of chemotherapeutic response and survival in patients with anaplastic oligodendrogliomas**

Kensuke Ueki Dept. of Neurosurgery, The University of Tokyo Hospital, Japan

**9 Analysis of an amplified DNA fragment in a glioblastoma cell line by arbitrarily primed polymerase chain reaction**

Masako Saito Dept. of Neurosurgery, Yamagata University School of Medicine, Japan

**10 Microsatellite instability and the PTEN1 mutation in a subset of early onset gliomas carrying germline mutation or promotor methylation of the hMLH1 gene**

Masayuki Kanemori Dept. of Neurosurgery, Tohoku University School of Medicine, Japan

**11 p27Kip1 expression by contact inhibition as a prognostic index of human glioma**

Takashiya Furo Dept. of Neurosurgery, Tokai National Hospital, Japan

**12 MMAC1 tumor suppressor gene mutations in glioma cell lines: The inactivation of phosphorylated (activated) AKT/PKB by adenovirus-mediated wild-type MMAC1 gene transfer**

Sumio Endo Dept. of Molecular Neuropathology, Brain Research Institute, Niigata University, Japan

**13 Analysis of cyclins and DNA content for judging of malignancy in glioma**

Shuang Zuo Dept. of Neurosurgery, Kanazawa Medical University, Japan

**14 Pre-activated NF-xB in human glioblastoma cells and a new approach for treatment against glioblastoma to inhibit NF-xB with the mutant IxBz expressing replication defective HSV-1**

Shusuke Moriuchi Dept. of Neurosurgery, Osaka University Graduate School of Medicine, Japan

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**16:20–17:30 2-2. Invasion and angiogenesis**

**Chairman:** James T. Rutka (Div. of Neurosurgery, University of Toronto, Canada)

Yukiharu Uchida (Dept. of Neurosurgery, Kansai Medical University, Japan)

**15 Production profile and role of matrix metalloproteinases in human astrocytic tumors**

Mitsuoshi Nakada Dept. of Neurosurgery, Kansai University School of Medicine, Japan

**16 Quantitative analysis of glioma cell invasion by confocal laser scanning microscopy in a novel brain slice model**

Takanori Ohashi Dept. of Neurosurgery, Osaka University Graduate School of Medicine, Japan
17 Establishment of cytostatic dosage of estramusine phosphate against glioma cell line: In vitro study
Daiso Yoshida  Dept. of Neurosurgery, Nippon Medical School, Japan

18 GM3 ganglioside functions in glioma cell invasion in cooperation with integrins at the focal adhesion plaques
Hongwei Yu  Dept. of Neurosurgery, Sapporo Medical University School of Medicine, Japan

19 Vascular endothelial growth factor expression as a prognostic factor and angiogenic switch of low grade astrocytomas
Shingo Takano  Dept. of Neurosurgery, Institute of Clinical Medicine, University of Tsukuba, Japan

20 Possible pathophysiological role of VEGF & MMP in metastatic brain tumor-associated intracerebral hemorrhage
Shin Jung  Dept. of Neurosurgery, Chonnam National University Hospital, Korea

17:30–18:10  2-3.  Inflammatory and immunological reaction
Chairman: Masao Matsutani (Dept. of Neurosurgery, Saitama Medical School, Japan)

21 Immunotherapy for primary and metastatic micro-tumor in the brain: Subtleties of immune control
Lois A. Lampson  Dept. of Surgery (Neurosurgery), Brigham and Women’s Hospital and Harvard Medical School, USA

22 Induction of cytotoxic T lymphocytes by dendritic cells pulsed with tumor extract-liposome complex in mouse brain tumor
Kenta Okamoto  Dept. of Molecular Neurosurgery, Nagoya University, Postgraduate School of Medicine, Japan

23 Potentiating effect of TNF-α and inhibitory effect of dexamethasone on LPS-induced iNOS activity in C6 glioma cells
Jun Shinoda  Dept. of Neurosurgery, Gifu University School of Medicine, Japan

May 13 (Sat)  Room A (7F Main Hall)

■ Oral presentation

09:00–10:50 Symposium 3: Neuronal and mixed neuronal-glia tumors
Chairmen: John J. Kepes (Dept. of Pathology & Laboratory, University of Kansas, USA)
Takanori Hirose (Dept. of Pathology, Saitama Medical School, Japan)

Key Note Lecture
“The 2000 WHO classification of neuronal and glioneuronal neoplasms”
Bernd W. Scheithauer  Dept. of Laboratory Medicine & Pathology, Mayo Clinic, USA

24 Infantile glioneuronal neoplasms: Analysis of 48 cases
Vani Santosh  Dept. of Neuropathology, National Institute of Mental Health and Neurosciences (NIMHANS), India

25 Patients with desmoplastic infantile ganglioglioma have been relapse-free for a long time by surgery alone
Kazuhiko Sugiyama  Dept. of Neurosurgery, Hiroshima University School of Medicine, Japan

26 Histogenesis and proliferative activity in neurocytomas
Yoji Uematsu  Dept. of Neurological Surgery, Wakayama Medical College, Japan

27 bFGF regulates the astroglial differentiation of human central neurocytoma cells in vitro
Shogo Ishiuchi  Dept. of Neurosurgery, Gunma University School of Medicine, Japan

28 The analysis of neurotransmitters in central neurocytomas
Yasuo Sugita  Dept. of Pathology, Kurume University School of Medicine, Japan

29 Cloning and characterization of the novel metalloproteinase gene, nbla3145, which is highly expressed in unfavorable neuroblastoma
Takemasa Kawamoto  Dept. of Neurosurgery, Tokyo Women’s Medical University, Japan

11:00–11:40 Medulloblastoma
Chairman: Joseph M. Piepmeyer (Dept. of Neurosurgery, Yale University, USA)

Key Note Lecture
“Developmental signaling pathways in medulloblastoma”
James T. Rutka  Div. of Neurosurgery, University of Toronto, Canada

30 Immunohistochemical findings of medulloblastoma in two major hereditary diseases: Molecular pathway of medulloblastoma oncogenesis
Naoki Yokota  Dept. of Neurosurgery, Hamamatsu University School of Medicine, Japan

31 Investigation of JCV the genome and protein in human medulloblastomas
Yoshinari Ozaki  Lab. of Molecular & Cellular Pathology, Hokkaido University School of Medicine, Japan
11:40–12:20 Special Lecture 4
Chairman: Yoichi Nakazato (First Dept. of Pathology, Gunma University, Japan)
Prof. John J. Kepes (Dept. of Pathology & Laboratory, University of Kansas, USA)
“Pitfalls and problems in the histopathological evaluation of stereotactic needle biopsy specimens”

13:40–14:20 Special Lecture 5
Chairman: Jun Yoshida (Dept. of Neurosurgery, Nagoya University, Japan)
Prof. Dorell D. Bigner (Dept. of Pathology, Duke University, USA)
“EGFRIII targeted therapy of glioblastoma multiforme”

14:20–16:20 Strategies of molecular target therapy
Chairmen:
Dorell D. Bigner (Dept. of Pathology, Duke University, USA)
Hideyuki Saya (Dept. of Tumor Genetics and Biology, Kumamoto University, Japan)

32 Combined treatment with radiosurgery and gene therapy improves survival of malignant gliomas in murine models
Ajay NiranjanDept. of Neurological Surgery, University of Pittsburgh, PA, USA

33 Aberrant receptor signalling in human brain tumors: Mechanisms and therapeutic implications
Motou NaganeLudwig Institute for Cancer Research, University of California SD, USA

34 Brain tumor immunity and active immunization strategies
Hideko OkadaDiv. of Neurooncology, University of Pittsburgh, USA

35 Intracellular hyperthermia for brain tumor by means of magnetite cationic liposomes
Toshihiko WakahayashiDept. of Neurosurgery, Nagoya University, Postgraduate School of Medicine, Japan

36 Anti-tumor mechanism of IFN-γ gene therapy toward malignant glioma
Masaaki MizunoDept. of Molecular Neurosurgery, Nagoya University, Postgraduate School of Medicine, Japan

16:30–17:00 Special Lecture 6
Chairman: Ryuichi Tanaka (Dept. of Neurosurgery, Niigata University, Japan)
Prof. David J. Mikulis (Dept. of Neuroradiology, The Toronto Western Hospital, Canada)
“Functional imaging of brain tumors”

17:00–18:00 Symposium 4: Anatomical and functional imaging of brain tumors
Chairmen:
David J. Mikulis (Dept. of Neuroradiology, The Toronto Western Hospital, Canada)
Toshihiko Kubota (Dept. of Neuroradiology, Fuku Medical University, Japan)

37 PET with FDG as metabolic image in brain tumors
Katsuyoshi MineuraDept. of Neurosurgery, Kyoto Prefectural University of Medicine, Japan

38 Source localization and latency delay of auditory evoked magnetic fields in patients with temporal lobe tumors
Nobukazu NakazatoDept. of Neurosurgery, Tohoku University School of Medicine, Japan

39 Evaluation of cerebral gliomas: Prospective comparison among multivoxel 2D chemical shift imaging (CSI) proton MR spectroscopy, echo-planar perfusion and diffusion-weighted MR imaging
Toshinori HiraiDept. of Radiology and Neurosurgery, Kumamoto University School of Medicine, Japan

40 Brain tissue autofluorescence: A parameter for the intraoperative delineation of tumor resection margins
Eugenio BenecicettiNeurosurgery Division, Hospital of Parma, Italy

41 Neuropathological evaluation of stereotactic biopsies: Requirements to improve diagnostic yield
Vani SantoshDept. of Neuropathology, National Institute of Mental Health and Neurosciences (NIMHANS), India
Symposium 2-1

53 Expression of enzymes and oncogene induced after radiotherapy and/or chemotherapy in same patients with brain tumors  
Yoshitaka Yoshida  Dept. of Neurosurgery, Faculty of Medicine, University of the Ryukyus, Japan

54 The analysis of factors which influence the therapy of glioblastomas  
Yoshinobu Takahashi  Dept. of Neurosurgery, Kyoto Prefectural University of Medicine, Japan

55 Immunohistochemical staining of DNA topoisomerase IIα in human gliomas  
Yoshikiko Wakoaboshy  Dept. of Neurosurgery, Nagoya University, Postgraduate School of Medicine, Japan

56 Molecular analysis of genetic alterations in astrocytic tumors  
Kotaro Hori  Dept. of Neurosurgery, Meir University School of Medicine, Japan

57 MMAC1 tumor suppressor gene mutations in glioma cell lines: Analysis of phosphorylated AKT/PKB  
Xin Ding  Dept. of Molecular Neuropathology, Brain Research Institute, Niigata University, Japan

Takahiko Sadatomo  Dept. of Neurosurgery, Hiroshima Prefectural University, Japan

59 Alterations of p14ARF and p16CDKN2 in gliomas  
Tomohiko Kouchi  Dept. of Neurosurgery, Saga Medical School, Japan

60 The significant role of p25 as a histochromic marker of oligodendroglioma  
Kei Nakatani  Dept. of Neurosurgery, Gifu Prefectural Gifu Hospital, Japan

61 Frequent alterations of p14ARF-MDM2-p53 passway in glioma cell lines  
Yoshuyuki Tanaka  Dept. of Molecular Neuropathology, Brain Research Institute, Niigata University, Japan

62 Four cases of pilocytic astrocytoma or fibrillary astrocytomas that showed notable shrinkage after stereotactic or three-dimensional conformal radiotherapy  
Hidefumi Aoyama  Dept. of Radiology, Hokkaido University School of Medicine, Japan

63 Cytotoxic effect through Fas/APO-1 expression due to vitamin K in human glioma cells  
Lian-kun Sun  Dept. of Neurosurgery, Faculty of Medicine, University of the Ryukyus, Japan

64 Immunohistochemical and molecular biologic study of multidrug resistance gene expression in the consecutive treatment of a pediatric malignant glioma  
Motoharu Fujii  Dept. of Neurosurgery, Kochi Medical School, Japan

65 The DDRT analysis as a molecular tool to identify expression differences among glial tumors  
Rosanna Nano  Dipartimento di Biologia Animale, Università di Pavia, Italy

66 Comparison between intraventricular and intracranial ACNU in glioblastoma  
Mauro T. Ceroni  Dept. of Neuro-oncology, Neurological Institute IRCCS Mondino, Pavia, Italy

67 Intraarterial carboplatin and etoposide in the treatment of 25 cases of high grade gliomas  
Mauro T. Ceroni  Dept. of Neuro-oncology, Neurological Institute IRCCS Mondino, Pavia, Italy
68 Optic toxicity assessment after intra-arterial carboplatin and etoposide in patients with malignant gliomas
   Mauro T. Ceroni Dept. of Neuro-oncology, Neurological Institute IRCCS Mondino, Pavia, Italy

Symposium 2-2

69 The expression of VEGF in brain tumors and rat transplanted brain tumor
   Tatsumo Sawada Dept. of Pathology, Tokyo Women’s Medical University, Japan

70 Inhibition of angiogenesis by using the adenovirus vector Ad VEGF ExR which expresses the extracellular domain of Flt-1 had antitumor effect of glioma
   Takahiko Tsugawa Dept. of Neurosurgery, Nagoya University, Postgraduate School of Medicine, Japan

71 Modulation of angiogenesis in malignant gliomas by PD-ECGF (platelet derived endothelial cell growth factor)
   Kouzou Fukuyama Dept. of Neurosurgery, Saga Medical School, Japan

72 The role of Angiopoietin / Tie-2 system in the development of intratumoral vasogenic cysts
   Masato Sasaki Dept. of Neurosurgery, Kobe University School of Medicine, Japan

73 An ACTH-producing pituitary carcinoma developing Cushing’s disease
   Yoshikiyo Akasaka Dept. of Pathology, Toho University School of Medicine, Japan

Symposium 2-3

74 Glialoma cells are killed by human cytotoxic T lymphocytes recognizing a wild-type p53-derived peptide
   Hideo Tsurushima Dept. of Neurosurgery, Faculty of Medicine, University of the Ryukyus, Japan

75 Immunocytochemical detection of the Interleukin-2 receptors α and β on cell surface of normal and pathological cells
   Rosanna Nano Dept. of Animal Biology, University of Pavia and Center for study of Histochemistry, Pavia, Italy

76 Study in vitro of the effect of ACNU, carboplatin and etoposide of LAK cells
   Rosanna Nano Dept. of Animal Biology, University of Pavia and Center for study of Histochemistry, Pavia, Italy

77 Pattern and result of astrocytoma in Department of Neurosurgery Padjadjaran University Bandung-Indonesia
   Kahdar Wiradiasstra Dept. of Neurosurgery, School of Medicine Padjadjaran University, Indonesia

Symposium 3

78 Significance of extensive sampling in diagnosing ganglioglioma
   Seiji Ohira Dept. of Neurosurgery, Hamamatsu University School of Medicine, Japan

79 Clinicopathologic features of mixed neuronal glial tumors in adult
   Hiroaki Takeuchi Dept. of Neurosurgery, Fuku University Medical University, Japan

80 Nerve cell tumors of the cerebrum: Variable clinical and pathological manifestations
   Shunji Nishio Dept. of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Japan

81 Neuronal and glial characteristics of central neurocytoma: Immunohistological and tissue culture study
   Takahiro Tsuchida Dept. of Neurosurgery, Kansai Medical University, Japan

82 Cerebral ganglioneurocytoma in an adult: Case report
   Shingo Takano Dept. of Neurosurgery, Institute of Clinical Medicine, University of Tsukuba, Japan

83 A case report of dyplastic glia-neuronal lesion of the cerebellum
   Vishwa J. Amatya First Dept. of Pathology, Gunma University School of Medicine, Japan

84 Atypical teratoid/rhabdoid tumor: Case report
   Satoru Maruse Dept. of Neurosurgery, Gifu University School of Medicine, Japan

85 Medulloblastoma: Children who have survived more than 15 years after initial treatments
   Shunji Nishio Dept. of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Japan