

PROGRAM

PROGRAM

September 17, 2015

Oral 1

8:00 - 9:10

Monitoring / diagnosis of Vasospasm / DCI

Chairpersons: Yoshiaki Shiokawa Department of Neurosurgery, Kyorin University

Gang Chen The First Affiliated Hospital of Soochow University

- 01-1** **Decreased flow velocity with transcranial Doppler correlates with delayed cerebral ischemia due to peripheral vasospasm of the middle cerebral artery**
 Hirokazu Sadahiro Ohtemati Hospital / Yamaguchi University School of Medicine
- 01-2** **Early diagnosis and therapeutic management of cerebral ischemia in cerebral vasospasm by oxygen-pulse near infrared optical topography**
 Yuichi Tanaka Department of Neurosurgery, Jichi Medical University Saitama Medical Center
- 01-3** **Cerebral blood flow monitoring using minimal-invasive near infrared spectroscopy: An experimental validation study**
 Martin Seule Department of Neurosurgery, University Hospital Heidelberg, Germany / Department of Neurosurgery, Kantonsspital St. Gallen, Switzerland
- 01-4** **SERIAL SPECT DURING THE PERIOD OF THE VASOSPASM AFTER SUBARACHNOID HEMORRHAGE**
 Hiroaki Shimizu Akita University
- 01-5** **Predicting prognosis by CT perfusion on arrival in aSAH patients with WFNS Grade V**
 Atsushi Sasahara Department of Neurosurgery, Tokyo Women's Medical University Medical Center East
- 01-6** **Call for Uniform Neuropsychological Assessment After Aneurysmal Subarachnoid Haemorrhage: Swiss Recommendations**
 Martin N. Stienen Department of Neurosurgery, University Hospital Geneva, Geneva, Switzerland

Symposium 1

9:10 - 10:25

Methods and results of Vasospasm / DCI-treatment in your hospital, past & present

Chairpersons: Nobuhito Saito Department of Neurosurgery, Graduate School of Medicine, The University of Tokyo

Michiyasu Suzuki Department of Neurosurgery, Yamaguchi University School of Medicine

- S1-1** **Management and clinical outcome of aneurysmal subarachnoid hemorrhage patients with surgery in Saitama Medical University International Medical Center**
 Yuichiro Kikkawa Saitama Medical University International Medical Center
- S1-2** **Multidisciplinary therapy of cerebral vasospasm after aneurysmal subarachnoid hemorrhage in our institution**
 Atsushi Saito Department of Neurosurgery, Aomori Prefectural Central Hospital
- S1-3** **Clinical management protocol influences the incidence of symptomatic vasospasm**
 Norihito Shimamura Department of Neurosurgery, Hirosaki University Graduate School of Medicine

S1-4 Preventive effect of continuous cisternal irrigation with Mg²⁺ solution against angiographical vasospasm associated with subarachnoid hemorrhage

Takuji Yamamoto Juntendo University Shizuoka Hospital

S1-5 Endovascular therapy of symptomatic vasospasm after aneurysmal subarachnoid hemorrhage: three year experience

Dae-Won Kim Department of Neurosurgery, Wonkwang University Hospital

Oral 2

10:25 - 11:55

Risk factors / prediction of Vasospasm / DCI

Chairpersons: Tatsuya Sasaki Aomori Prefectural Central Hospital

Seung Chyul Hong Department of Neurosurgery Samsung Medical Center, Sungkyunkwan University School of Medicine

02-1 Risk factor of delayed cerebral ischemia by multivariate analysis

Fusao Ikawa Department of Neurosurgery, Shimane Prefectural Central Hospital

02-2 Disturbance of CT perfusion on arrival is associated with WFNS grade and outcome but not development of DCI in patients with aneurysmal SAH

Yuichi Takahashi Tokyo Women's Medical University Medical Center East

02-3 Statistical analysis of factors affecting outcome of patients with aneurysmal subarachnoid hemorrhage

Takumi Nakamura Saitama Medical Center, Saitama Medical University

02-4 Risk factors of symptomatic cerebral vasospasm secondary to subarachnoid hemorrhage

Hirokazu Nakatogawa Seirei Hamamatsu General Hospital

02-5 DELAYED CEREBRAL ISCHEMIA AFTER ANEURYSMAL SUBARACHNOID HEMORRHAGE: CURENT STATUS IN SAMSUNG MEDICAL CENTER

Je Young Yeon Samsung Medical Center

02-6 MicroRNAs as Potential Biomarkers in Subarachnoid Hemorrhage

Marian Christoph Neidert University Hospital Zurich, Department of Neurosurgery and Neuro-Intensive Care Unit, Zurich, Switzerland

02-7 Higher Plasma MicroRNA (miR) -26a is Associated with Good 6-month Outcome Following Subarachnoid Hemorrhage

Sherry H Chou University of Pittsburgh School of Medicine / Brigham and Women's Hospital, Harvard Medical School / Massachusetts General Hospital, Harvard Medical School

02-8 Neurodegenerative CSF-markers predict neurological outcome after aneurysmal subarachnoid hemorrhage

Martin N. Stienen Department of Neurosurgery, Cantonal Hospital St.Gallen, St.Gallen, Switzerland / Department of Neurosurgery, Geneva University Hospital, Geneva, Switzerland

Luncheon Seminar 1

12:05 - 13:05

Chairperson: Takashi Watanabe Department of Neurosurgery, Tottori University

LS1 **Reviews of the treatment for the cerebral vasospasm following aneurysmal subarachnoid hemorrhage**

Hiroyuki Kinouchi Department of Neurosurgery, University of Yamanashi School of Medicine, Chuo, Yamanashi, Japan

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Poster 1

13:15 - 13:55

Clinical Study - Treatment 1

Chairperson: Yoko Kato Department of Neurosurgery, Fujita Health University Banbuntane Houtokukai Hospital

P1-1 **Cerebral vasospasm following aneurysmal subarachnoid hemorrhage: a single center study comparing clips and coils**

Shunya Tanaka Department of Neurosurgery, Stroke and Neurological Institute, Shin-Koga Hospital

P1-2 **Rapid radical clot removal can prevent vasospasm and improve functional outcome in patients with subarachnoid hemorrhage**

Satoru Takeuchi Department of Neurosurgery, National Defense Medical College, Tokorozawa, Saitama, Japan

P1-3 **Symptomatic vasospasms with recurrent dci in sah successfully treated with intravenous and intraventricular nitric oxide donors**

Angelika Ehlert Neurosurgery, AK St. Georg, Germany

P1-4 **The role of Simvastatin in Aneurysmal Subarachnoid Hemorrhage: A Meta-analysis of Randomized Controlled Trials**

Sheng Chen Second Affiliated Hospital, School of Medicine, Zhejiang University

P1-5 **Results of hyperdynamic therapy with a clipping-first policy**

Shinya Kobayashi Department of Surgical Neurology, Research Institute for Brain and Blood Vessels-AKITA

P1-6 **CLINICAL FEATURES OF SYMPTOMATIC CEREBRAL VASOSPASM AFTER SUBARACHNOID HEMORRHAGE FOR 11 YEARS IN OUR HOSPITAL**

Masaaki Mikamoto Department of Neurosurgery, Nakamura Memorial Hospital

Poster 2

13:15 - 13:45

Diagnosis

Chairperson: Akira Satoh Kurosawa Hospital / Tokyo Kyosai Hospital

P2-1 **Prediction, early detection, diagnostic confirmation and treatment allocation for DCI after SAH**

Gregory Kapinos Hofstra North Shore LIJ School of Medicine

P2-2 **Temporal and Spatial Changes in Cerebral Blood Flow during the Management against Delayed Cerebral Ischemia after Aneurysmal Subarachnoid Hemorrhage**

Kenichi Sato Department of Neurosurgery, Tohoku University Graduate School of Medicine, Sendai, Japan / Department of Neuroendovascular therapy, Kohnan Hospital, Sendai, Japan

P2-3 **The diagnosis of vasospasm after subarachnoid hemorrhage using transcranial color flow image**

Misaki Kohama Kohnan Hospital

P2-4 Quantification of subarachnoid hemorrhage by three-dimensional computed tomography: prediction of symptomatic vasospasm

Taku Sato Fukushima Medical University

P2-5 CT perfusion in the prediction of territorial development of delayed cerebral ischemia

Atsushi Sasahara Tokyo Women's Medical University Medical Center East

Poster 3

13:15 - 13:55

Pathophysiology - inflammation

Chairperson: Hiroki Kurita Saitama Medical University International Medical Center

P3-1 Effect of anti-high mobility group box-1 monoclonal antibody on delayed cerebral vasospasm following subarachnoid hemorrhage in rats

Jun Haruma Department of Neurological Surgery, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

P3-2 Glycyrrhizic acid confers neuroprotection after subarachnoid hemorrhage via inhibition of high mobility group box-1 protein

Chunhua Hang Department of Neurosurgery, Jinling Hospital, Nanjing University

P3-3 The role of IL-6, ET-1 in the pathophysiology of vasospasm, delayed cerebral injury after Subarachnoid Hemorrhage

Carl Muroi NEURO Lab, Research Group for Experimental Neurosurgery and Neurocritical Care, Department of Intensive Care Medicine, University Hospital and University of Bern, Bern, Switzerland / Department of Neurosurgery, Kantonsspital Aarau, Aarau, Switzerland

P3-4 Changes in the Cerebrospinal Fluid Lipid Profile after Subarachnoid Hemorrhage and Intrathecal Interleukin-6 Application in the Rabbit

Edin Nevzati NEURO Lab, Research Group for Experimental Neurosurgery and Neurocritical Care, Department of Intensive Care Medicine, University Hospital and University of Bern, Bern, Switzerland / Department of Neurosurgery, Kantonsspital Aarau, Aarau, Switzerland

P3-5 Analysis of expression of microRNAs regulating MMP9 mRNA expression in a rat SAH model

Ryota Kurogi Kyushu University

P3-6 Brain irradiation leads to an alteration of the blood brain barrier (BBB), facilitating monocyte migration upon subarachnoid hemorrhage (SAH)

Ulf C. Schneider Charite - Universitaetsmedizin Berlin

Poster 4

13:15 - 13:55

Experimental study - treatment / aneurysm

Chairperson: Carl Muroi Department of Neurosurgery, Kantonsspital Aarau, Switzerland

P4-1 Role of neurexin-1&beta and neuroligin-1 in cognitive dysfunction after subarachnoid hemorrhage in rats

Haitao Shen Department of Neurosurgery & Brain and Nerve Research Laboratory, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu Province, China

P4-2 Intracerebroventricular administration of sodium nitroprusside does not improve brain perfusion in the early vasospasm after subarachnoid hemorrhage

Martin Kolar Dept. of Anesthesiology and Critical Care medicine

- P4-3 Evaluation of cytotoxic effects of indocyanine green and irradiation with near infrared light on cultured human astrocytes**
Christopher Mark Sikorski Neurocritical Care Unit, Department of Neurosurgery, University Hospital Zurich, Switzerland
- P4-4 Natural cerebral aneurysm and spontaneous subarachnoid hemorrhage of animals other than man: Is there a place for a comparative approach?**
Carl Muroi Department of Neurosurgery, Kantonsspital Aarau, Switzerland
- P4-5 Paradigm Shift - From Lumen to Wall oriented Therapy of Intracranial Aneurysms**
Serge Marbacher Neurosurgery Research Group, Biomedicum Helsinki and Department of Neurosurgery, Helsinki University Central Hospital, Helsinki, Finland / Department of Neurosurgery, Kantonsspital Aarau, Aarau, Switzerland
- P4-6 Biodegradable Embolization for the Treatment of Experimental Saccular Aneurysms Using Magnesium Based Metal Stents - A Feasibility Study**
Serge Marbacher Department of Neurosurgery, Kantonsspital Aarau, Switzerland / Neuro Lab, Research Group for Experimental Neurosurgery and Neurocritical Care, Department of Intensive Care Medicine, University Hospital and University of Bern, 3010 Bern, Switzerland

Special Lecture 1

14:05 - 14:15

Chairperson: Michiyasu Suzuki Department of Neurosurgery, Yamaguchi University School of Medicine

- SL1 Possible therapeutic application of an artificial heart-kidney machine to DCI**
Tomio Ohta Osaka Neurological Institute

Symposium 2

14:15 - 15:30

Pathophysiology of Vasospasm / DCI

Chairpersons: Isao Date Department of Neurological Surgery, Okayama University
John Zhang Loma Linda University

- S2-1 VENOUS ROLE IN BRAIN INJURY AFTER SAH**
John Zhang Loma Linda University
- S2-2 Spontaneous calcium signaling events in astrocyte endfeet underlie SAH-induced inversion of neurovascular coupling**
Anthony C. Pappas University of Vermont
- S2-3 Global and local dysregulation of cerebral blood flow in a mouse model of subarachnoid hemorrhage**
Masayo Koide University of Vermont
- S2-4 Complement activation in delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage: an autopsy study**
Mervyn D.I. Vergouwen University Medical Center Utrecht
- S2-5 Spreading depolarization threshold is reduced and spreading ischemia is prolonged in spontaneously hypertensive stroke-prone rats under japanese diet**
Jens P. Dreier Center for Stroke Research Berlin, Charite University Medicine Berlin / Department of Experimental Neurology, Charite University Medicine Berlin / Department of Neurology, Charite University Medicine Berlin

Oral 3

15:30 - 16:40

Pathophysiology of Vasospasm / DCI - EBI**Chairpersons: Masakazu Takayasu** Department of Neurosurgery, Aichi Medical University**Jose I Suarez** Baylor College of Medicine

- 03-1 The paradigm shift from delayed cerebral vasospasm to early brain injury after subarachnoid hemorrhage reflected in preclinical research**
Serge Marbacher Department of Neurosurgery, Kantonsspital Aarau, Switzerland / Neuro Lab, Research Group for Experimental Neurosurgery and Neurocritical Care, Department of Intensive Care Medicine, University Hospital and University of Bern, 3010 Bern, Switzerland
- 03-2 Relationship between elevation of intracranial pressure and early brain injury after experimental subarachnoid hemorrhage**
Liang Wang Department of Neurosurgery, Hirosaki University Graduate School of Medicine / Department of Vascular Biology, Hirosaki University Graduate School of Medicine
- 03-3 Assessment of membrane depolarization on brain cortex during acute phase of subarachnoid hemorrhage in rats**
Yuji Takasugi Department of Neurological Surgery, Okayama University Graduate School of Medicine
- 03-4 Continuity of the blood-brain barrier after subarachnoid hemorrhage in mice**
Ulf C. Schneider Charite - Universitaetsmedizin Berlin
- 03-5 Neurovascular coupling after subarachnoid hemorrhage in vivo**
Matilde Balbi Institute for Stroke and Dementia Research (ISD), University of Munich Medical Center, Munich, Germany / Graduate School of Systemic Neurosciences (GSN), Ludwig-Maximilians University (LMU), Munich, Germany
- 03-6 Subarachnoid Hemorrhage Acutely Induces Spreading Depolarizations and Cortical Infarction**
Jed A. Hartings Mayfield Clinic and Department of Neurosurgery, University of Cincinnati, Cincinnati, Ohio, USA

Oral 4

16:40 - 17:50

Pathophysiology of Vasospasm / DCI - microcirculation / inflammation**Chairpersons: Toru Matsui** Department of Neurosurgery, Saitama Medical Center**Jed A. Hartings** Mayfield Clinic and Department of Neurosurgery, University of Cincinnati, Cincinnati, Ohio, USA

- 04-1 The Role of Platelet Activation and Inflammation in Acute Brain Injury following Subarachnoid Hemorrhage**
Jennifer A. Frontera Cleveland Clinic
- 04-2 The Relationship of Platelet-Leukocyte Aggregates and Acute Brain Injury after Subarachnoid Hemorrhage**
Jennifer A. Frontera Cleveland Clinic
- 04-3 Endothelin-1 potentiates Heparin-binding EGF-like growth factor-induced vasoconstriction in rat parenchymal arterioles**
Masaru Idei Department of Pharmacology, University of Vermont College of Medicine, Burlington, Vermont / Department of Neurosurgery, University of Occupational and Environmental Health, Fukuoka, Japan

04-4 Cerebral microcirculatory changes after subarachnoid hemorrhage

Hoyee Wan Physical Sciences, Sunnybrook Research Institute and Medical Biophysics, University of Toronto, Toronto, Canada / Department of Neurosurgery, St. Michael's Hospital, Toronto, Canada / Keenan Research Center, St. Michael's Hospital, Toronto, Canada

04-5 Inflammatory cell invasion into human brain tissue after subarachnoid hemorrhage (SAH) is a possible cause for secondary brain injury

Ulf C. Schneider Charite - Universitaetsmedizin Berlin

04-6 Serial changes of IL-6, MCP-1 and CXCL10 in CSF after subarachnoid hemorrhage

Aichi Niwa Aichi Medical University

Evening Seminar

18:00 - 19:00

Chairperson: Eiji Isotani Department of Emergency and Critical Care Medicine
Tokyo Women's Medical University Medical Center East

ES Temperature management in subarachnoid hemorrhage

Eiichi Suehiro Department of Neurosurgery, Yamaguchi University School of Medicine

Sponsored by Asahi Kasei ZOLL Medical Co., Ltd.

September 18, 2015

Morning Seminar 1

7:30 - 8:30

Chairperson: Hidenori Suzuki Department of Neurosurgery, Mie University Graduate School of Medicine

MS1 Clinical Importance of CT for Subarachnoid Hemorrhage and Cerebral Aneurysms

Motoharu Hayakawa Department of Neurosurgery, School of Medicine, Fujita Health University

Sponsored by Toshiba Medical Systems Corporation

Oral 5

8:40 - 9:50

Neurocritical care of SAH patients

Chairpersons: Izumi Nagata Department of Neurosurgery, Kokura Kinen Hospital

Phyo Kim Department of Neurosurgery, Dokkyo Medical University

05-1 Escalation of treatment for DCI after SAH based on a novel multimodal alarm level

Gregory Kapinos Hofstra North Shore LIJ School of Medicine

05-2 The role of catecholamines in the pathogenesis of neurogenic pulmonary edema associated with subarachnoid hemorrhage

Joji Inamasu Fujita Health University Hospital, Dept. of Neurosurgery

05-3 Forecasting Intracranial Hypertension Using Waveform and Time Series Features

Matthias Hueser Mobile Health Systems Lab, Department of Health Sciences and Technology, ETH Zurich, Switzerland

05-4 Human albumin use in subarachnoid hemorrhage

Jose I Suarez Baylor College of Medicine

05-5 CONTRAST-INDUCED NEPHROPATHY FOLLOWING COIL EMBOLIZATION OF RUPTURED INTRACRANIAL ANEURYSMS

Je Young Yeon Samsung Medical Center

05-6 Terson Syndrom in aneurysmal subarachnoid hemorrhage - its relation to ICP and admission factors

Martin N. Stienen Department of Neurosurgery, University Hospital Geneva, Geneva, Switzerland /
Department of Neurosurgery, Kantonsspital St. Gallen, St. Gallen, Switzerland

Symposium 3

9:50 - 11:05

Clinical trials of prevention and treatment of Vasospasm / DCI

Chairpersons: Teiji Tominaga Department of Neurosurgery, Tohoku University School of Medicine

Ulf C. Schneider Charite - Universitaetsmedizin Berlin

S3-1 Effect of eicosapentaenoic/docosahexaenoic acid for prevention of cerebral vasospasm following aneurysmal subarachnoid hemorrhage

Ichiro Nakagawa Department of Neurosurgery, Nara Medical University

S3-2 Cognitive Outcome in High-dose simvastatin for aneurysmal subarachnoid hemorrhage (HDS-SAH) : a propensity matched analysis

George Wong Prince of Wales Hospital, Chinese University of Hong Kong, Hong Kong

- S3-3 Proposal of a new therapeutic strategy -intravenous infusion of hydrogen-rich fluid combined with intra-cisternal infusion of magnesium sulfate**
Satoru Takeuchi Department of Neurosurgery, National Defense Medical College
- S3-4 Safety of PEGgylated Carboxyhemoglobin Bovine (Sanguinate) Infusion in Patients at Risk for Delayed Cerebral Ischemia after Subarachnoid Hemorrhage**
Rajat Dhar Washington University in St. Louis
- S3-5 ELECTRICAL STIMULATION OF THE CAROTID BIFURCATION AS A TREATMENT OF VASOSPASM IN ANEURYSMAL SUBARACHNOID HEMORRHAGE (SAH) PATIENTS**
Stefan Wolf Department of Neurosurgery, Campus Virchow Klinikum, Charite University, Berlin, Germany

Special Lecture 2 ~ Keiji Sano Lectureship

11:05 - 11:25

Chairperson: Hidetoshi Kasuya Department of Neurosurgery, Tokyo Women's Medical University Medical Center East

- SL2-1 A site-specific, sustained release drug delivery system for aneurysmal subarachnoid hemorrhage**
Daniel Hanggi Heinrich Heine University
- SL2-2 NEWTON - Nimodipine microparticles to Enhance recovery While reducing TOxicity after subarachnoid hemorrhage**
Daniel Hanggi Heinrich Heine University

Luncheon Seminar 2

12:00 - 13:00

Chairperson: Hiroki Ohkuma Department of Neurosurgery, Hirosaki University School of Medicine

- LS2 Revised recommendations of antithrombotic therapy for the secondary prevention of ischemic stroke in "Japanese Guidelines for the Management of Stroke 2015"**
Kortaro Tanaka Department of Neurology, Toyama University Hospital

Sponsored by Otsuka Pharmaceutical Co., Ltd.

Poster 5

13:10 - 13:50

Clinical Study - Treatment 2

Chairperson: Fusao Ikawa Department of Neurosurgery, Shimane Prefectural Central Hospital

- P5-1 Feasibility and safety of prophylactic normothermia with endovascular cooling device after initial therapeutic hypothermia in subarachnoid hemorrhage**
Hitoshi Kobata Osaka Mishima Emergency Critical Care Center
- P5-2 Strategies for prevention of cerebral ischemia due to vasospasm in the Chiba Hokuso Hospital**
Fumihiro Matano Nippon Medical School Chiba Hokuso Hospital
- P5-3 Treatment outcome of elderly patients with subarachnoid hemorrhage in Kyorin University hospital**
Kiyotaka Satou Department of Neurosurgery, Kyorin University
- P5-4 The effectiveness of intra-arterial infusion of fasudil hydrochloride for cerebral vasospasm due to SAH in the elderly**
Hitoshi Kimura Toho University Medical Center Ohashi Hospital

P5-5 Coil embolization for ruptured cerebral aneurysms in elderly patients over 80 years old
Yukei Shinji Department of Neurological Surgery, Okayama University Graduate School of Medicine

P5-6 Effect of early getting out of bed after subarachnoid hemorrhage on the incidence of symptomatic cerebral vasospasm
Rina Torisu Hachisuga hospital

Poster 6

13:10 - 13:50

Risk factor / Prediction / Outcome

Chairperson: Martin N. Stienen Department of Neurosurgery, University Hospital Geneva, Switzerland

P6-1 Domain-specific neuropsychological deficits following aneurysmal subarachnoid hemorrhage
Martin N. Stienen Department of Neurosurgery, University Hospital Geneva, Switzerland

P6-2 Delayed Cerebral Ischemia is the Strongest Predictor of Neurocognitive Impairment Following Aneurysmal Subarachnoid Hemorrhage
Martin N. Stienen Department of Neurosurgery, University Hospital Geneva, Geneva, Switzerland /
Department of Neurosurgery, Kantonsspital St. Gallen, St. Gallen, Switzerland

P6-3 Early diagnosis of DCI: Is there relevance for inflammatory biomarkers in routine clinical practice?
Anke Hoellig Department of Neurosurgery, RWTH Aachen University

P6-4 Spectrophotometric analysis of cerebrospinal fluid (CSF) after aneurysmal subarachnoid hemorrhage (aSAH)
Christopher Mark Sikorski Neurocritical Care Unit, Department of Neurosurgery, University Hospital Zurich, Switzerland

P6-5 Adrenomedullin in the cerebrospinal fluid is related to appetite loss and delayed ischemic neurological deficits after subarachnoid hemorrhage
Yoshitaka Kubo Iwate Medical University

P6-6 Cranial temperature as a marker for the diagnosis of hemorrhagic stroke and ischemic stroke
Liang Tan Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China

Poster 7

13:10 - 13:55

Pathophysiology - EBI

Chairperson: Jennifer A. Frontera Cleveland Clinic

P7-1 Filament Perforation Model for Mouse Subarachnoid Hemorrhage: Evaluation by 7.0T MRI
Carl Izumi Muroi Institute of Aging and Brain Sciences, Faculty of Pharmaceutical Sciences, Fukuoka University, Fukuoka, Japan / Department of Neurosurgery, Kantonsspital Aarau, Aarau, Switzerland

P7-2 Cyclophilin A/CD147 interactions participate in early brain injury after subarachnoid hemorrhage in rats
Baoqi Dang Department of Neurosurgery & Brain and Nerve Research Laboratory, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu Province, China / Department of Rehabilitation Medicine, Zhangjiagang Hospital of Traditional Chinese Medicine, Soochow University, Suzhou, Jiangsu Province, China

- P7-3 Hydrogen sulfide ameliorates early brain injury following subarachnoid hemorrhage in rats**
Yonghua Cui Department of Neurosurgery & Brain and Nerve Research Laboratory, The First Affiliated Hospital of Soochow University, Suzhou, Jiangsu Province, China
- P7-4 Role of tenascin-C in early brain injury: Evaluation using tenascin-C knockout mice**
Masashi Fujimoto Saiseikai Matsusaka General Hospital
- P7-5 Hemoglobin induced NO/cGMP suppression Deteriorate Microcirculation via Pericyte Phenotype Transformation after Subarachnoid Hemorrhage in Rats**
Qiang Li Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China
- P7-6 Combination therapy of intravenous hydrogen-rich fluid and intra-cisternal magnesium sulfate The therapeutic effects in the rodent SAH model**
Kazuya Fujii National Defense Medical Collage
- P7-7 Efficacy of edaravone, a free radical scavenger, on early brain injury after experimental subarachnoid hemorrhage**
Masato Naraoka Department of Neurosurgery, Hirosaki University Graduate School of Medicine

Poster 8

13:10 - 13:50

Experimental study - ICH / the others

Chairperson: Joji Inamasu Fujita Health University Hospital, Dept. of Neurosurgery

- P8-1 Urokinase versus Alteplase for Fibrinolytic Therapy of Intracerebral Hemorrhage**
Qiang Tan Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China
- P8-2 Intracerebral hematoma contributes to hydrocephalus after intraventricular hemorrhage--a preclinical study**
Qianwei Chen Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China
- P8-3 Curcumin reduces cerebral T lymphocytes infiltration after experimental intracerebral hemorrhage in mice**
Wei Liu Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China
- P8-4 P2X7 Receptor Suppression Preserves Blood-Brain Barrier through Inhibiting RhoA Activation after Experimental Intracerebral Hemorrhage in Rats**
Hengli Zhao Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China
- P8-5 Fractalkine/CX3CR1 Involved in Cannabinoid Receptor 2-induced Neurogenesis in Hippocampus in a Rat Model of Germinal Matrix Hemorrhage**
Jun Tang Department of Neurosurgery, Southwest Hospital, Third Military Medical University
- P8-6 BBB integrity and microglia polarization are strongly linked with the neuroprotection effects of cannabinoid receptor 2 stimulation in GMH rat model**
Yihao Tao Department of Neurosurgery, Southwest Hospital, Third Military Medical University, Chongqing, China

September 19, 2015

Morning Seminar 2

7:30 - 8:30

Chairperson: Yoko Kato Fujita Health University, Banbuntane Hotokukai Hospital, Neuro Vascular Stroke Center

**MS2 Therapeutic strategy for cerebral aneurysm
- Imaging diagnosis and preoperative simulation -**

Fusao Ikawa Department of Neurosurgery, Shimane Prefectural Central Hospital

Sponsored by Siemens Japan K.K.

Oral 6

8:40 - 9:50

Pathophysiology of Vasospasm / DCI - the others

Chairpersons: Aij Lie Kwan Prof of Department of Neurosurgery Kaohsiung Medical University

Juhana Frosen Dept of Neurosurgery, Kuopio University Hospital

06-1 Lipocalin-type prostaglandin D synthase scavenges heme breakdown products in the CSF of patients with aneurysmal subarachnoid hemorrhage

Mitsuhito Mase Department of Neurosurgery, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

06-2 Possible Maladaptive Response Of The Rostroventral Medial Medulla During The Delayed Phase Following Subarachnoid Hemorrhage

Justin Schultz Cetas Oregon Health & Science University

06-3 OUTCOME AFTER ANEURYSMAL SAH IS ASSOCIATED WITH POLYMORPHISMS OF HEME OXYGENASE-1 PROMOTER REGION

Juhana Frosen Dept of Neurosurgery, Kuopio University Hospital

06-4 TARGETING THE CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR IN CEREBROVASCULAR DYSFUNCTION ASSOCIATED WITH SUBARACHNOID HEMORRHAGE

Jessica Fares Department of Physiology, University of Toronto, Toronto, Canada

06-5 Effects of Hyperglycemia on Cerebral Vasospasm following Subarachnoid Hemorrhage in the Rodent Model

Yu Hua Huang Department of Neurosurgery, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Kaohsiung, Taiwan / Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

06-6 BEHAVIORAL CHARACTERIZATION OF THE ANTERIOR INJECTION MODEL OF SUBARACHNOID HEMORRHAGE

Susanne Boettinger Department of Neurology, Medical University Innsbruck, Austria

Special Lecture 3 ~ Keiji Sano Lectureship

9:50 - 10:05

Chairperson: Shigeru Nishizawa Department of Neurosurgery, University of Occupational and Environmental Health

SL3 Consequences and treatment of hyper acute cerebral vasospasm: International clinical study proposal

Ryszard Pluta Bethesda, USA

Symposium 4

10:05 - 11:20

Possible therapeutic measures of cerebral Vasospasm / DCI in future based on the basic research

Chairpersons: Takashi Watanabe Department of Neurosurgery, Tottori University

Jens P. Dreier Center for Stroke Research Berlin, Charite University Medicine Berlin / Department of Experimental Neurology, Charite University Medicine Berlin / Department of Neurology, Charite University Medicine Berlin

S4-1 Anti-VEGF treatment alleviates early brain injury by modulating tenascin-C expression after subarachnoid hemorrhage in mice

Lei Liu Department of Neurosurgery, Mie University Graduate School of Medicine, Tsu, Japan

S4-2 Effect of Adiponectin on Cerebral Arteries after SAH

Koji Osuka Aichi Medical University

S4-3 Minocycline Regulates Neuron Apoptosis following Subarachnoid Hemorrhage via Attenuating Microglia Activation

Shu Jyuan Chang Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

S4-4 Subarachnoid hemorrhage research in China: past, now, and future

Gang Chen The First Affiliated Hospital of Soochow University

S4-5 Purpurogallin, a natural phenol, attenuates high-mobility group box 1 in subarachnoid hemorrhage induced vasospasm in a rat model

Keng Liang Kuo Division of Neurosurgery, Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

Poster 9

11:30 - 12:00

Clinical Study - Treatment 3

Chairperson: Satoshi Iwabuchi Department of Neurosurgery, Toho University Ohashi Medical Center

P9-1 Treatment selection and outcomes of ruptured cerebral aneurysms patients admitted between Day 4 and Day 14

Taigen Nakamura Aomori Prefectural Central Hospital

P9-2 Factors affecting the occurrence of vasospasm after aneurysmal subarachnoid hemorrhage at single institution

Shogo Dofuku Tokyo University

P9-3 Current management for vasospasm following subarachnoid hemorrhage: envovascular option

Yoichi Morofuji Department of Neurosurgery, Nagasaki University

P9-4 The Impact of Timing of Endovascular Aneurysm Treatment on Clinical Outcome in Subarachnoid Hemorrhage

Sapna Rawal Toronto Western Hospital, University of Toronto

Poster 10

11:30 - 11:50

Pathophysiology - Clinical Study -

Chairperson: Koji Osuka Department of Neurological Surgery, Aichi Medical University

P10-1 Cerebrovascular resistance in polytraumatized patients with cerebral vasospasm

Alexey Trofimov Nizhniy Novgorod Medical State Academy / Regional Clinical Hospital named after N.A. Semashko

P10-2 Decrease of the pro-angiogenic factor ENA-78 in cerebral ischemia after subarachnoid hemorrhage

Susanne Boettinger Department of Neurology, Medical University Innsbruck, Austria

P10-3 Roles of angiographic vasospasm and microcirculatory dysfunction on delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage

Masato Naraoka Department of Neurosurgery, Hirosaki University Graduate School of Medicine

Poster 11

11:30 - 12:00

Clinical Study - ICH / the others

Chairperson: Gregory Kapinos Hofstra North Shore LIJ School of Medicine

P11-1 Decompressive Hemicraniectomy or Not for Supratentorial Intracerebral Hemorrhage: A single center, Prospective, Randomized, Controlled trials

Rong Hu Department of Neurosurgery and Key Laboratory of Neurotrauma, Southwest Hospital, Third Military Medical University, Chongqing, China

P11-2 Meta-Analysis of Intraventricular Recombinant Tissue Plasminogen Activator in Treatment of Aneurysmal Intraventricular Hemorrhage

Sheng Chen Second Affiliated Hospital, School of Medicine, Zhejiang University

P11-3 A case of reversible central auditory dysfunction caused by cerebral vasospasm following traumatic subarachnoid hemorrhage

Wataru Shimohigoshi Saitama Medical University International Medical Center

P11-4 A case of infarction of the total length of the corpus callosum due to vasospasm in subarachnoid hemorrhage

Satoru Takahashi Soka Municipal Hospital

P11-5 Symptomatic cerebral vasospasm after resection of a lobar oligodendroglioma : a case report

Koichiro Komatsubara Kyorin University

Poster 12

11:30 - 12:10

Pathophysiology - TLR4 / the others

Chairperson: Chih Zen Chang Department of Surgery, Faculty of Medicine, School of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

P12-1 Tenascin-C contracts rat cerebral artery via epidermal growth factor receptor

Fumi Nakano Department of Neurosurgery, Mie University Graduate School of Medicine, Tsu, Japan

P12-2 Effects of iodinated contrast media in a novel in vitro model of vasospasm due to hemorrhage

Tatiana Nikitina Institute of Vegetative Physiology, Charite-Universitaetsmedizin Berlin, Berlin, Germany

- P12-3 SUBARACHNOID HEMORRHAGE RESULTS IN FUNCTIONAL DEFECTS IN NEURONAL AXONS OF WHITE MATTER**
Charles Kyung Min Lee Laboratory Medicine and Pathobiology, University of Toronto / Labatt Family Centre of Excellence in Brain Injury and Trauma Research, Keenan Research Centre for Biomedical Science
- P12-4 Effects of TLR4 signalling after subarachnoid hemorrhage**
Shakira Brathwaite Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, Canada / Department of Physiology, Faculty of Medicine, University of Toronto, Toronto, Canada
- P12-5 Toll-like receptor 4 contributes to vasospasm development after experimental subarachnoid hemorrhage in mice**
Fumihiro Kawakita Department of Neurosurgery, Mie University
- P12-6 Glycyrrhizin Attenuates Toll like Receptor-2, -4 and Experimental Vasospasm in Rat**
Chih Zen Chang Department of Surgery, Faculty of Medicine, School of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan / Division of Neurosurgery, Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan / Department of Surgery, Kaohsiung Municipal Ta Tung Hospital, Kaohsiung, Taiwan

Luncheon Seminar 3

12:20 - 13:20

Chairperson: Yoshikazu Okada Tokyo Women's Medical University

- LS3 What is "cerebral vasospasm" after SAH ?
 - From scientific and clinical viewpoints -**

Shigeru Nishizawa Department of Neurosurgery, University of Occupational and Environmental Health

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Special Lecture 4 ~ Keiji Sano Lectureship

13:30 - 13:50

Chairperson: Kenji Kanamaru Department of Neurosurgery, and Stroke Center, Suzuka Kaisei Hospital

- SL4 Mechanisms underlying increased vascular contractility after subarachnoid hemorrhage**

Yuichiro Kikkawa Saitama Medical University International Medical Center

Symposium 5

13:50 - 15:05

Clinical trial of Cilostazol

Chairpersons: Hiroyuki Kinouchi Department of Neurosurgery, University of Yamanashi

Dae-Won Kim Department of Neurosurgery, Wonkwang University Hospital

- S5-1 Effects of cilostazol on cerebral vasospasm after aneurysmal subarachnoid hemorrhage**
Kazuya Kanemaru Department of Neurosurgery, University of Yamanashi
- S5-2 Effect of Cilostazol, in prevention of cerebral vaospasm following aneurysmal subarachnoid hemorrhage: a randomized, double-blind, controlled trial**
Naoya Matsuda Hirosaki University Graduate School of Medicine, Department of Neurosurgery

- S5-3 Analysis of subarachnoid hemorrhage patients in Japan: An epidemiological study based on a national administrative database**

Makoto Sakamoto Tottori University

- S5-4 Cortical spreading depolarization and subarachnoid hemorrhage: effect of cilostazol on delayed cerebral ischemia**
Kazutaka Sugimoto Department of Neurosurgery, Yamaguchi University graduate school of medicine, Yamaguchi, Japan / Department of Neurosurgery, Kenwakai Otemachi hospital, Fukuoka, Japan
- S5-5 Cilostazol dose-up against tenascin-C induction and delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage: A pilot study**
Hidenori Suzuki Mie University

Oral 7

15:05 - 16:15

Methods and results of Vasospasm / DCI - treatment in your hospital

Chairpersons: Tatsuya Ishikawa Research Institute for Brain and Blood Vessels-Akita

Stefan Wolf Department of Neurosurgery, Campus Virchow Klinikum, Charite University, Berlin, Germany

- 07-1 Combination radical hematoma removal and multiple-drug therapy prevents cerebral vasospasm in aneurysmal subarachnoid hemorrhage**
Hisayasu Saito Department of Neurosurgery, Japanese Red Cross Asahikawa Hospital
- 07-2 Impacts of the meticulous clot irrigation and low-dose intravenous nicardipine on the symptomatic cerebral vasospasm in subarachnoid hemorrhage**
Hidetoshi Matsukawa Department of Neurosurgery, Teishinkai Hospital
- 07-3 How cisternal irrigation with Mg and ascorbic acid works in treatment for patients with SAH**
Akira Satoh Kurosawa Hospital / Tokyo Kyosai Hospital
- 07-4 Population-based study of surgical management for ruptured anterior communicating artery (ACoA) aneurysms**
Takeshi Hiu Department of Neurosurgery, National Nagasaki Medical Center
- 07-5 Prophylactic injection of vasodilator via major artery converts asymptomatic vasospasm to symptomatic vasospasm due to microcirculatory imbalance**
Norihito Shimamura Department of Neurosurgery, Hirosaki University Graduate School of Medicine
- 07-6 Cerebral circulation after intraarterial administration of fasudil chrolide for prevention of cerebral vasospasm after subarachnoid hemorrhage**
Atsushi Saito Department of Neurosurgery, Aomori Prefectural Central Hospital