

# The 34th Annual Meeting of the Japanese Society for Neuroendovascular Therapy

Venue: Sendai International Center

Date: 2018. 11. 22 (Thu) - 24 (Sat)

 Simultaneous interpretation

## November 22<sup>nd</sup> (Thursday)

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### Plenary Symposium 1[PS1]

#### Thrombectomy - Regional situation and measures -

08:20~09:50

Chairman: Dr. Teiji Tominaga (Department of Neurosurgery, Tohoku University Graduate School of Medicine)

Dr. Susumu Miyamoto (Department of Neurosurgery, Kyoto University Graduate School of Medicine)

Dr. Nobuyuki Sakai (Department of Neurosurgery, Kobe City Medical Center General Hospital)

#### PS1-1 Current status and problems of acute thrombectomy

Shinichi Yoshimura (Department of Neurosurgery, Hyogo College of Medicine)

#### PS1-2 Regional project for the purpose of training interventionists of thrombectomy and making homogeneous performance

Shigeru Miyachi (Neuroendovascular Therapy Center, Aichi Medical University)

#### PS1-3 Geographical disparity of mechanical thrombectomy. Close the Gap-Stroke, J-ASPECT Study

Koji Iihara (Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University)

#### PS1-4 Reduction of EMS prenotification to puncture time using telephone stroke hotline

Hirotohi Imamura (Department of Neurosurgery, Kobe City Medical Center General Hospital)

#### PS1-5 The current condition and future perspective of acute mechanical thrombectomy in the metropolitan area

Takahiro Ota (Department of Neurosurgery, Tokyo Metropolitan Tama Medical Center)

#### PS1-6 Reperfusion therapy with Hub and Spoke model

Hideyuki Ishihara (Department of Neurosurgery, Yamaguchi University School of Medicine)

### Symposium 1 [S1]

#### Ruptured Cerebral Aneurysm

10:00~12:00

Chairman: Dr. Takahiro Ota (Department of Neurosurgery, Tokyo Metropolitan Tama Medical Center)

Dr. Norihito Shimamura (Department of Neurosurgery, Hirosaki University Graduate School of Medicine)

Dr. Osamu Masuo (Citizens Hospital Department of Neuroendovascular Surgery, Yokohama Municipal Citizens Hospital)

- S1-1 Analysis of factors that relate to the re-treatment of ruptured cerebral aneurysm and treatment strategy  
Norihito Shimamura(Department of Neurosurgery, Hirosaki University Graduate School of Medicine)
- S1-2 The timing of coil embolization for aneurysmal subarachnoid hemorrhage  
Takao Koiso(Departments of Neurosurgery, National Cerebral and Cardiovascular Center)
- S1-3 Effect of the choice of treatment modality on the incidence of secondary hydrocephalus after aneurysmal SAH  
Masaomi Koyanagi(Department of Neurosurgery, Hyogo Prefectural Amagasaki General Medical Center)
- S1-4 Surgical and endovascular treatment of poor-grade aneurysmal subarachnoid hemorrhage  
Takahiro Ota(Department of Neurosurgery, Tokyo Metropolitan Tama Medical Center)
- S1-5 How did the increase in the number of endovascular treatment affect the clinical outcome of ruptured cerebral aneurysm?  
Masataka Yoshimura(Department of Neurosurgery, Tsuchiura Kyodo General Hospital)
- S1-6 The clinical efficacy of vessel wall imaging for endovascular treatment of ruptured intracranial aneurysms  
Masahiro Hosogai(Hiroshima City Asa Citizens Hospital)
- S1-7 Clinical results of endovascular treatment for ruptured blister carotid artery aneurysm  
Osamu Masuo(Department of Neuroendovascular Surgery, Yokohama Municipal Citizens Hospital)
- S1-8 Effectiveness of overlapping stents for ruptured IC blood blister aneurysms  
Yasushi Ito(Department of Neurosurgery, Shinrakuen Hospital)
- S1-9 Stent placement for ruptured intracranial dissecting aneurysms: A possible treatment option for inevitable condition  
Toshio Higashi(Department of Neurosurgery, Fukuoka University)
- S1-10 Coil Embolization of A-com Aneurysms: Degree of Difficulty and Importance of Counterpart  
Shingo Toyota(Department of Neurosurgery, Kansai Rosai Hospital)
- S1-11 Long-term outcomes of coil embolization of ruptured saccular aneurysm  
Shota Kakizaki(Department of Neurosurgery, University of Jikei)

#### Symposium 4 [S4]

##### dural arteriovenous fistula : dAVF 2 (Onyx)

13:20~15:20

Chairman: Dr. Naoya Kuwayama (Department of Neurosurgery, University of Toyama)

Dr. Wataro Tsuruta (Department of Endovascular Neurosurgery, Toranomon Hospital)

Dr. Naoki Toma (Department of Neurosurgery, Mie University Graduate School of Medicine)

##### S4-1 Embolization with Onyx for dural arteriovenous fistula

Shigeru Miyachi(Neuroendovascular Therapy Center, Aichi Medical University)

**S4-2 Transvenous embolization of dural arteriovenous fistula with Onyx**

Naoki Kaneko(Department of Radiological Sciences, David Geffen School of Medicine at UCLA, Los Angeles, USA)

**S4-3 TAE of dural AVF / Analysis of factors associated with complete obliteration and long-term outcome**

Wataro Tsuruta(Department of Endovascular Neurosurgery, Toranomon Hospital)

**S4-4 Trans arterial embolization of cranial dural arteriovenous fistulas in the ONYX embolic era: A Kobe experience**

Yoshihiro Omura(Department of Neurosurgery, Kobe City Medical Center General Hospital)

**S4-5 Endovascular treatment of intracranial DAVFs with aggressive feature using ONYX**

Ichiro Nakahara(Department of Comprehensive Strokeology, Fujita Health University)

**S4-6 Endovascular embolization of dAVF using ONYX with sinus preservation by balloon**

Hiroo Yamaga(Department of Neurosurgery, Showa University Northern Yokohama Hospital)

**S4-7 Clinical results of Onyx embolization for intracranial dural arteriovenous fistulas**

Naoki Akioka(Department of Neurosurgery, Faculty of Medicine, University of Toyama)

**S4-8 Embolization for isolated sinus type dural arteriovenous fistulas**

Naoki Toma(Department of Neurosurgery, Mie University Graduate School of Medicine)

**S4-9 Liquid embolic materials for the embolization of cranial dural arteriovenous fistula**

Yoshikazu Yoshino(Department of Endovascular Surgery, Saitama Medical Center, Jichi Medical University)

**Special Session 2 [SP2]**

**Proper use of neck bridging stent**

**16:40~17:40**

Chairman: Dr. Yuichi Murayama (Department of Neurosurgery, The Jikei University School of Medicine)

Dr. Eiichi Kobayashi (Department of Neurological Surgery, Graduate School of Medicine, Chiba University)

**SP2-1 The role of a neck-bridging stent in the era of a flow-diverter**

Akira Ishii(Department of Neurosurgery, Kyoto University Graduate School of Medicine)

**SP2-2 Stent assisted coil embolization considering the characteristics of the stent**

Toshiyuki Fujinaka(Department of Neurosurgery, National Hospital Organization Osaka National Hospital)

**SP2-3 Stent-assisted intra-aneurysmal coil embolization: a single-center experience and case presentation**

Kenichi Sato (Department of Neuroendovascular Therapy, Kohnan Hospital)

## Symposium 2 [S2]

### Intracranial arterial stenosis : IAS

10:00~12:00

Chairman: Dr. Keisuke Imai (Department of Neurology and Stroke Treatment, Kyoto First Red Cross Hospital)

Dr. Shinichi Yoshimura (Department of Neurosurgery, Hyogo College of Medicine)

Dr. Yoshihiro Kiura (Department of Neurosurgery and Neuroendovascular therapy, Hiroshima Prefectural Hospital)

#### S2-1 Early detection for intracranial atherosclerosis in acute thrombectomy

Satoru Fujiwara(Department of Neurology, Kobe City Medical Center General Hospital)

#### S2-2 Features of stroke patients receiving balloon angioplasty/stenting for prevention in comparison to those for rescue-

Keisuke Imai(Department of Neurology and Stroke Treatment, Kyoto First Red Cross Hospital)

#### S2-3 Prediction of neurological deterioration in intracranial artery stenosis/occlusion with the use of DWI-ASL mismatch

Yoshifumi Miyauchi(Department of Neurology, Showa University Koto Toyosu Hospital)

#### S2-4 The safety endovascular treatment based on appropriate management for the symptomatic intradural arterial stenosis

Sangnyon Kim(Department of Neurosurgery, Obihiro Kosei General Hospital)

#### S2-5 Endovascular treatment for symptomatic intracranial artery stenosis after approval of Wingspan stent

Toshihiro Ueda(Stroke Center, St.Marianna University Toyoko Hospital)

#### S2-6 Efficacy of Wingspan stent placement for intracranial arterial stenosis

Keiko Irie(Department of Strokesurgery, Nagoya Kyoritsu Hospital)

#### S2-7 Relationship between 3-D rotational angiography and perforator stroke after PTA against MCA stenosis

Hidekazu Yamazaki(Department of Neurology and Cerebrovascular Treatment, Yokohama Shintoshu Neurosurgical Hospital)

#### S2-8 Current status and problems of treatment for ICAS

Shinichi Yoshimura(Department of Neurosurgery, Hyogo College of Medicine)

## Symposium 5 [S5]

### Thrombectomy - Efforts at each facility -

13:20~15:20

Chairman: Dr. Ryushi Kondo (Minimally Invasive Brain Center, Saitama-Sekishinkai Hospital)

Dr. Hirotohi Imamura (Department of Neurosurgery, Kobe City Medical Center General Hospital)

Dr. Ryo Itabashi (Department of Stroke Neurology, Kohnan Hospital)

#### S5-1 Development of a visual task management tool to improve the efficiency of acute stroke therapy, Task Calc. Stroke

Shoji Matsumoto(Department of Comprehensive Strokology, Fujita Health University School of Medicine)

- S5-2 New support style for acute stroke with wearable communication tool  
Yuki Kamiya(Department of Neurology, Showa University Koto Toyosu Hospital)
- S5-3 In-hospital thrombectomy management system linked public emergency transport system  
Ryushi Kondo(Minimally Invasive Brain Center, Saitama-Sekishinkai Hospital)
- S5-4 Shortening of door-to-recanalization time in endovascular treatment ~Stroke-hotline and multi-disciplinary meeting~  
Toshi Sai (Department of Neurology and Stroke Treatment, Kyoto First Red Cross Hospital)
- S5-5 High-speed MRI with an imaging time of 5 minutes and new hospital shorten the Door to Recanalization Time  
Yohei Takayama(Akiyama Neurosurgical Hospital)
- S5-6 CTP-derived 4DCTA can predict accurate response to mechanical thrombectomy  
Masunari Shibata(Department of Neuroendovascular Therapy, Stroke Center, Ise Red Cross Hospital)
- S5-7 Mechanical thrombectomy for late-window stroke using RAPID software  
Junji Uno(Department of Neurosurgery, Baba Memorial Hospital)
- S5-8 Endovascular Recanalization for stroke patients with low ASPECTS  
Tetsuya Ioku(Department of Neurology and Stroke Treatment, Acute Stroke Center of Kyoto First Red Cross Hospital)
- S5-9 The weekend and off-hour effect in patients received intravenous rt-PA or endovascular recanalization therapy  
Ryota Kurogi(Department of Neurosurgery, Fukuoka Tokushukai Medical Center)
- S5-10 Effectiveness of endovascular therapy in acute ischemic stroke patients with basilar artery occlusion  
Takeshi Yoshimoto(Department of Neurology, National Cerebral and Cardiovascular Center)

## Rare Diseases Symposium 1 [RS1]

### Cervical spinal AVFs

10:00~12:00

Chairman: Dr. Yuji Matsumaru (Division of Stroke Prevention and Treatment, Department of Neurosurgery, University of Tsukuba)  
Dr. Yasunari Niimi (Department of Neuroendovascular Therapy, St. Luke's International Hospital)  
Dr. Keisuke Takai (Department of Neurosurgery, Tokyo Metropolitan Neurological Hospital)

#### RS1-1 Characteristics for Vascular Anatomy of the Cervical Spinal Cord and Spine

Tomoya Ishiguro (Department of Neuro-intervention, Osaka City General Hospital)

#### RS1-2 Endovascular treatment for the cervical spinal AVFs

Yasunari Niimi (Department of Neuroendovascular Therapy, St. Luke's International Hospital)

RS1-3 Direct surgery for the cervical spinal AVFs

Toshiki Endo (Department of Neurosurgery, Kohnan Hospital)

RS1-4 Angioarchitecture of the cervical spinal AVFs: Results from the JSNET national surveillance

Shuichi Tanoue (Department of Radiology, Kurume University School of Medicine)

### Special Session 1 [SP1]

**Innovation: Change treatment, change way of work** ..... 13:20~15:20

Chairman: Dr. Atsuhiro Nakagawa (Department of Neurosurgery, Tohoku University Hospital)

Dr. Nobuyuki Sakai (Department of Neurosurgery, Kobe City Medical Center General Hospital)

SP1-1 How medtech innovation happen in Silicon Valley?

Fumiaki Ikeno (Japan Biodesign, Stanford Biodesign, Cardiovascular Medicine, Stanford University / US-Japan MedTech Frontier, Stanford, CA, USA)

SP1-2 Career advancement, excitement and occasional financial gain through medical device innovation

Takao Ohki (Department of Surgery, Jikei University School of Medicine)

SP1-3

Takashi Kato (Fracta, Inc., San Francisco, USA)

SP1-4 Neurovascular Device Design and Innovation: An Industry Perspective

Beverly T. Tang (Advanced Technology and Innovation, Stryker Neurovascular/Guest Instructor Stanford University, Palo Alto, CA, USA)

### Symposium 3 [S3]

**dural arteriovenous fistula : dAVF 1** ..... 10:00~12:00

Chairman: Dr. Takashi Izumi (Department of Neurosurgery, Nagoya University)

Dr. Michiya Kubo (Department of Neurosurgery, Stroke Center, Saiseikai Toyama Hospital)

Dr. Motohiro Morioka (Department of Neurosurgery, Kurume University School of Medicine)

S3-1 Risk factors of complication in the embolization of dural arteriovenous fistula in analysis of JR-NET3

Masafumi Hiramatsu (Department of Neurological Surgery, Okayama University Graduate School of Medicine)

S3-2 Multicenter prospective registry of DAVF without cortical venous reflux-Analysis of 110 registry cases-

Hiroyuki Ikeda (Department of Neurosurgery, Fukui Red Cross Hospital)

S3-3 Multicenter prospective registry of dural arteriovenous fistulas -The follow-up results of the Borden type 1 cases-

Hidehisa Nishi (Department of Neurosurgery, Kyoto University)

S3-4 The analysis of transvenous embolization for cavernous sinus dural arteriovenous fistula

Takashi Izumi (Department of Neurosurgery, Nagoya University)

S3-5 Cavernous sinus dural AVF treatment with Super-selective shunt occlusion

Koichi Satoh (Department of Neuro-Endovascular Surgery, Tokushima Red Cross Hospital)

S3-6 Is complete occlusion of shunts between sigmoid and jugular bulb in embolization of TS dural AVF mandatory?

Takenori Akiyama(Department of Neurosurgery, Keio University)

S3-7 Angioarchitecture of transverse-sigmoid dural arteriovenous fistulae

Taichi Ishiguro(Department of Neurosurgery, National Cerebral and Cardiovascular Center)

S3-8 Microangiographical analysis of parallel sinus in cases with dural arteriovenous fistulas

Michiya Kubo(Department of Neurosurgery, Stroke Center, Saiseikai Toyama Hospital)

## Symposium 6 [S6]

### Flow Diverter

13:20~15:20

Chairman: Dr. Yasushi Ito (Department of Neurosurgery, Shinrakuen Hospital)

Dr. Toshiyuki Fujinaka (Department of Neurosurgery, National Hospital Organization Osaka National Hospital)

Dr. Hidenori Oishi (Department of Neuroendovascular Therapy, Juntendo University School of Medicine)

S6-1 Perioperative management, device selection and measures to cope with complications

Naci Kocer(Radiology Department, Division of Neuroradiology, Cerrahpasa Medical School, Istanbul University, Istanbul, Turkey)

S6-2 Treatment for intracranial aneurysms with Pipeline embolization device in 3 associated centers

Tomoji Takigawa(Department of Neurosurgery, Dokkyo Medical University Saitama Medical Center)

S6-3 Endovascular treatment with flow diverter stents for large intracranial aneurysms

Toshiyuki Fujinaka(Department of Neurosurgery, National Hospital Organization Osaka National Hospital)

S6-4 Resolution of cranial neuropathies following treatment of intracranial aneurysms with Flow Diverter

Yukihiro Yamao(Department of Neurosurgery, Kyoto University)

S6-5 Effectiveness of flow diverter treatment with loose coil packing for large paraclinoid aneurysms

Yasushi Ito(Department of Neurosurgery, Shinrakuen Hospital)

S6-6 Treatment of internal carotid artery aneurysms using Pipeline Embolization Device; a single center experience

Tadashi Sunohara(Department of Neurosurgery, Kobe City Medical Center General Hospital)

S6-7 High Resolution Cone Beam CT for the Assessment of Stent Apposition after Flow Diverter Stent Treatment

Ichiro Yuki(Department of Neurosurgery, The Jikei University Hospital)

S6-8 Safety and efficacy of the Pipeline embolization device for treatment of internal carotid artery aneurysms: An interim analysis of a post-marketing surveillance in Japan

Kenji Ohata(Flow Diverter Database Management Committee, The Japan Neurosurgical Society)

## English Oral Session [EO]

13:20~14:20

Chairman: Dr. Naoto Kimura (Department of Neurosurgery, Iwate Prefectural Central Hospital)  
Dr. Hany A. Fikry Eldawoody (Neurosurgery Department, Mansoura University, Egypt,  
Neurosurgery Department, Prince Mohammed bin Abdulaziz Hospital, Riyadh,  
Saudi Arabia)

### EO-1 Carotid Cavernous Fistula, treatment options

Hany A. Fikry Eldawoody (Neurosurgery Department, Mansoura University, Egypt /  
Neurosurgery Department, Prince Mohammed bin Abdulaziz Hospital, Riyadh,  
Saudi Arabia)

### EO-2 Technical consideration and future solution of mechanical thrombectomy

Tomoyuki Tsumoto (Department of Endovascular Surgery, Kyushu Medical Center)

### EO-3 Onyx embolization of a large skull renal carcinoma metastasis

Herrera Edgar (The Department of Neurosurgery, Dokkyo Medical University Saitama  
Medical Center)

### EO-4 Do certain Proton pump inhibitors effect clopidogrel response?

Asuka Kropp (Department of Neurosurgery, University of Nagoya)

### EO-5 Pre-operative FD deployment experiment using a PVA-H model

Simon Tupin (Institute of Fluid Science, Tohoku University)

### EO-6 Hemodynamic and geometric analysis for recanalisation of Internal Carotid - Posterior Cerebral Artery (IC-PC) aneurysms after endovascular treatment

Ahmed Mansour (Department of Neuroendovascular Therapy, Kohnan Hospital)

### EO-7 Vein of Galen Aneurysms; Presentations and Endovascular Management

Tamer Hassan (Department of Neurosurgery, Alexandria University School of Medicine,  
Alexandria, Egypt)

## November 23<sup>rd</sup> (Friday)

### Symposium 7 [S7]

#### Thrombectomy - Technique -



08:10~10:10

Chairman: Dr. Hiroshi Yamagami (Division of Stroke Care Unit, National Cerebral and Cardiovascular  
Center)

Dr. Hiroyuki Matsumoto (Department of Neurological Surgery, Kishiwada Tokushukai  
Hospital)

Dr. Nobutaka Horie (Department of Neurosurgery, Nagasaki University)

### S7-1 The relationship between endovascular procedure time and outcome in acute ischemic stroke patients

Yukiko Enomoto (Department of Neurosurgery, Gifu University Graduate School of  
Medicine)



S7-2 Endovascular therapy with or without intravenous low dose alteplase in acute stroke patients with large vessel occlusion

Hiroshi Yamagami(Division of Stroke Care Unit, National Cerebral and Cardiovascular Center)

S7-3 Impact of mechanical thrombectomy device on thrombus histology in acute embolic stroke: in vivo/ex vivo analysis

Nobutaka Horie(Department of Neurosurgery, Nagasaki University)

S7-4 The factor of good revascularization by single retrieval procedure in the acute ischemic stroke

Tomohiko Ozaki(Department of Neurosurgery, Kawachi General Hospital)

S7-5 Safe and versatile tip shape of a microguidewire during endovascular clot retrieval: Modified Pigtail Shape

Tomotaka Ohshima(Neuroendovascular Center, Aichi Medical University)

S7-6 Selection of the stent diameter in mechanical thrombectomy due to ICA or M1 occlusions

Tatsufumi Nomura(Department of Neuroendovascular Therapy, Sapporo Shiroishi Memorial Hospital)

S7-7 Each stent retriever technique for recanalization with 1 pass

Masataka Takeuchi(Department of Neurosurgery, Seisho hospital)

S7-8 Clinical result and improvement of direct aspiration first pass technique for acute ischemic stroke

Hiroyuki Matsumoto(Department of Neurological Surgery, Kishiwada Tokushukai Hospital)

S7-9 Mechanical thrombectomy using 3D angiography for acute ischemic stroke with occlusion of the middle cerebral artery

Shuta Aketa(Department of Neurosurgery, Osaka Police Hospital)

S7-10 Acute Ischemic Stroke - Our Thrombectomy Technique

Donald Frei(Neurointerventional Surgery, Radiology Imaging Associates, Denver, Colorado, USA)

## Plenary Symposium 2 [PS2]



### Aneurysms treatment in the near future

13:15~14:45

Chairman: Dr. Yuji Matsumaru (Division of Stroke Prevention and Treatment, Department of Neurosurgery, University of Tsukuba)

Dr. Kenichi Sato (Department of Neuroendovascular Therapy, Kohnan Hospital)

Dr. Hiroyuki Kinouchi (Department of Neurosurgery, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi)

#### PS2-1 DEVICE SELECTION & ANATOMY

Satoshi Tateshima(Interventional Neuroradiology, David Geffen school of Medicine at UCLA, Los Angeles, USA)

#### PS2-2

Demetrius K. Lopes(Department of Neurosurgery, Rush Medical College, Chicago, IL, USA)

**PS2-3 How we enhanced our indications of flowdiverter mentality in cerebral aneurysms**

Naci Kocer(Radiology Department, Division of Neuroradiology, Cerrahpasa Medical School, Istanbul University, Istanbul, Turkey)

**Special Session 3 [SP3]**

**Can you diagnose from image findings?**

**Part I : Arterial dissection “Can you diagnose as (internal cervical) artery dissection?”**

17:00~19:00

Chairman: Dr. Hidenori Endo (Department of Neurosurgery, Tohoku University Graduate School of Medicine)

Dr. Yong-sam Shin (Department of Neurosurgery, Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea)

Dr. Toru Mizutani (Department of Neurosurgery, Showa University)

Commentator: Dr. Kazunori Toyoda (Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center)

**SP3-1-1 The confusion in nomenclature of internal carotid aneurysm**

Yukiko Enomoto (Department of Neurosurgery, Gifu University Graduate School of Medicine)

**SP3-1-2 Histopathological characteristics of intracranial arterial dissection**

Ayako Ro (Department of Legal Medicine, St. Marianna University School of Medicine)

**SP3-1-3 Variation of treatment for blister-like aneurysm**

Yong-sam Shin (Department of Neurosurgery, Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea)

**Special Session 3 [SP3]**

**Can you diagnose from image findings?**

**Part II : Carotid Cave AN “Can you diagnose as Carotid Cave AN?”**

17:00~19:00

Chairman: Dr. Yukiko Enomoto (Department of Neurosurgery, Gifu University Graduate School of Medicine)

Dr. Yuichiro Tanaka (Department of Neurosurgery, St. Marianna University School of Medicine)

Dr. Kuniyasu Niizuma (Department of Neurosurgical Engineering and Translational Neuroscience, Tohoku University Graduate School of Biomedical Engineering)

Commentator: Dr. Shigeaki Kobayashi (Aizawa Hospital)

**SP3-2-1 Concept and Anatomy of Carotid cave Aneurysm**

Yuichiro Tanaka (Department of Neurosurgery, St. Marianna University School of Medicine)

SP3-2-2 Imaging diagnosis and discrimination of carotid cave aneurysms fed back from operative findings  
Toru Mizutani (Department of Neurosurgery, Showa University)

SP3-2-3

Yukiko Enomoto (Department of Neurosurgery, Gifu University Graduate School of Medicine)

SP3-2-4

Kuniyasu Niizuma (Department of Neurosurgical Engineering and Translational Neuroscience, Tohoku University Graduate School of Biomedical Engineering)

**Joint Session with Division of Bioengineering of the Japan Society of Mechanical Engineers [JP]  
Cerebrovascular disease and Computational Fluid Dynamics 08:10~10:10**

Chairman: Dr. Yi Qian (The Faculty of Medicine and Health Sciences Macquarie University, North Ryde, NSW, Australia)

Dr. Kazuto Takashima (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology)

Dr. Shin-ichiro Sugiyama (Department of Neuroanesthesia, Kohnan Hospital)

JP-K1 What CFD can provide to medical-engineering collaborative research: What do CFD will help clinicians?  
Makoto Ohta (Institute of Fluid Science, Tohoku University)

JP-K2 Haemodynamic simulation for the cerebrovascular diseases, Where we are and where to go  
Yi Qian (The Faculty of Medicine and Health Sciences Macquarie University, North Ryde, NSW, Australia)

JP-1 Computational simulation for evaluating mechanical behavior of endovascular treatment devices  
Tomohiro Otani (Graduate School of Engineering Science, Osaka University)

JP-2 CFD analysis following recurrence of cerebral aneurysm after coil embolization using Silent-MRA  
Tomoaki Suzuki (Department of Neurosurgery, Tachikawa General Hospital)

JP-3 Recurrence factor after coil embolization using computational fluid dynamics  
Takehiro Uno (Neurosurgery, University of Kanazawa)

JP-4 Preoperative prediction of aneurysm recurrence after coiling using CFD analysis  
Kouichi Misaki (Department of Neurosurgery, Kanazawa University)

JP-5 Proinflammatory gene expression in cerebral aneurysms: fill the gap between CFD and biology  
Naoki Kaneko (Department of Radiological Sciences, David Geffen School of Medicine at UCLA, Los Angeles, USA)

JP-6 Coherent Flow Structures and Energy Decay in Cerebral Aneurysm: A CFD Study  
Khalid M. Saqr (Research Center for Computational Neurovascular biomechanics, Somoha University Hospital, Alexandria University, Alexandria, Egypt)

JP-7 Proposed Parent Vessel Geometry Based Classification of Anterior Communicating Artery-Located Aneurysm  
Tamer Hassan (Department of Neurosurgery, Alexandria University School of Medicine, Alexandria, Egypt)

JP-8 Development of Estimating cerebral aneurysm rupture using AI, CFD and Medical Information  
Hiroyuki Takao (Department of Neurosurgery, Jikei University School of Medicine)

### Symposium 8 [S8]

#### Arteriovenous malformation : AVM

08:10~10:10

- Chairman: Dr. Shigeru Miyachi (Neuroendovascular Therapy Center, Aichi Medical University)  
Dr. Hitoshi Hasegawa (Department of Neurosurgery, Brain Research Institute, Niigata University)  
Dr. Ichiro Nakahara (Department of Comprehensive Strokeology, Fujita Health University)
- S8-1 My vision in the endovascular treatment of brain AVMS  
Luis López-Ibor(Hospital Clinico San Carlos, Madrid, Spain)
- S8-2 Safety and efficacy of presurgical embolization for arteriovenous malformation  
Eika Hamano(National Cerebral and Cardiovascular Center)
- S8-3 Efficacy and safety of embolization for cerebral AVM after introduction of Onyx  
Masayuki Sato(Department of Neurosurgery, University of Tsukuba)
- S8-4 Clinical results of endovascular treatment with onyx embolization of a cranial arteriovenous malformation  
Satoshi Iihoshi(Department of Neurosurgery, Sapporo Medical University School of Medicine)
- S8-5 Treatment outcome of Onyx embolization for AVM performed by hybrid neurosurgeon  
Hitoshi Hasegawa(Department of Neurosurgery, Brain Research Institute, Niigata University)
- S8-6 Results of endovascular treatment of low grade cerebral AVM  
Akiyo Sadato(Department of Neurosurgery, Fujita Health University)
- S8-7 Study about embolization for AVM in the eloquent area  
Ataru Nishimura(Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University)
- S8-8 Utility of Scepter Balloon Catheter with AVM embolization  
Hirotaka Okumura(Department of Neurosurgery, Showa University)
- S8-9 Revolutionary breakthrough in understanding the nature of brain AVMs and new aspects of the endovascular treatment. The combined transarterial-transvenous approach: radical treatment with minimal intervention, leading to normalization of the vascular system  
Istvan Hudak(Endovascular Unit, Department of Neurosurgery, Hungarian Defence Forces Military Hospital, Budapest, Hungary)

## Special Session 4 [SP4]

Recommendation for the next generation!

Let's seriously consider your career as a cerebral endovascular physician!

“What should we do in order to grow as surgeon and make a team?” ..... 17:00~19:00

Chairman: Dr. Satoshi Tateshima (Interventional Neuroradiology, David Geffen school of Medicine at UCLA, Los Angeles, USA)

Dr. Masafumi Morimoto (Yokohama Shintoshu Neurosurgery Hospital)

SP4-K What do we do ? ~for being a good physician and a manager~

Masafumi Morimoto(Yokohama Shintoshu Neurosurgery Hospital)

SP4-1 How to get support from lots of people to make you grow as an operator and a team leader - What has been important for me -

Keisuke Imai(Department of Neurology and Stroke Treatment, Kyoto First Red Cross Hospital)

SP4-2 Thinking about carrier paths for physicians and neurologists

Masunari Shibata(Department of Neuroendovascular therapy, Stroke Center, Ise Red Cross Hospital)

SP4-3 Madness with one thing ~Neurosurgeon strategies not dependent on talent or luck.~

Masataka Takeuchi(Department of Neurosurgery, Seisho Hospital)

SP4-4 Construction of Established Operators and Harmonized Organization in Neuroendovascular Therapy

Tsuyoshi Ohta(Department of Neurosurgery, Kochi Health Sciences Center)

SP4-5 Preparation to be an operator and chief

Tomoyuki Tsumoto(Department of Endovascular Surgery, Kyushu Medical Center)

SP4-6 Bottom up and skill up for newly established endovascular team

Naoto Kimura(Department of Neurosurgery, Iwate Prefectural Central Hospital)

SP4-S1 A Trackless Path

Satoshi Tateshima(Interventional Neuroradiology, David Geffen school of Medicine at UCLA, Los Angeles, USA)

SP4-S2 Withdrawn

## November 24<sup>th</sup> (Saturday)

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### Symposium 9 [S9]

Carotid artery stenosis ..... 08:00~10:00

Chairman: Dr. Koji Iihara (Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University)

Dr. Kuniaki Ogasawara (Department of Neurosurgery, Iwate Medical University School of Medicine)

Dr. Katsutoshi Takayama (Department of Radiology and Interventional Neuroradiology, Ishinkai Yao General Hospital)

**S9-1 An novel and logical strategy for prevention of hyperperfusion syndrome; Intentional residual stenosis after CAS**

Takahisa Mori(Department of Stroke Treatment, Shonan Kamakura General Hospital Stroke Center)

**S9-2 The influence of heart disease on outcome of surgical treatment of carotid artery stenosis-J-ASPECT study**

Keisuke Ido(Kyushu University)

**S9-3 The examination of perioperative IMZ-SPECT and cognitive function for the ICA stenosis.**

Koji Hashimoto(Department of Neurosurgery, University of Yamanashi)

**S9-4 Quantitative evaluation of retinal microcirculation and ophthalmic artery before and after carotid artery stenting**

Morito Hayashi(Department of Neurosurgery, Toho University Ohashi Medical Center)

**S9-5 Increased OEF by Blood Sampling in Balloon-protected CAS is associated with a Risk of Postoperative Ischemic Lesions.**

Hidemichi Ito(St. Marianna University School of Medicine)

**S9-6 Carotid artery stenting using distal balloon occlusion with collecting blood autologous transfusion and stent in stent**

Koichi Satoh(Department of Neuro-Endovascular Surgery, Tokushima Red Cross Hospital)

**S9-7 Predictors of restenosis following carotid artery stenting**

Hidekazu Chikuie(Division of Neurosurgery, National Cerebral and Cardiovascular Center)

**S9-8 Treatment outcome of CAS at "Hybrid" institute and "CAS first" institute for carotid artery stenosis**

Yoshiro Ito(Department of Neurosurgery, Institute of Medicine, University of Tsukuba)

**S9-9 Clinical Outcome of Carotid Artery Stenting with Minimal Post Dilatation**

Mamoru Ishida(Department of Neurosurgery, University of Nagoya)

**S9-10 Internal Carotid Artery Stenting in Patients with Near Occlusion with full collapse: 30-Day and Long-Term Outcome**

Katsutoshi Takayama(Department of Radiology and Interventional Neuroradiology, Ishinkai Yao General Hospital)

**Special Session 5 [SP5]**



**The wise learn from history. Cerebral endovascular treatment learned from history 10:10~12:10**

Chairman: Dr. Michihiro Tanaka (Kameda Medical Center, Department of Neurosurgery)

Dr. Tomoaki Terada (Department of Neurosurgery, Showa University Fujigaoka Hospital)

Dr. Masayuki E dura (Department of Neurosurgery, NHO Sendai Medical Center)

**SP5-1 The history of Kohnan Hospital**

Satoru Fujiwara(Kohnan Hospital)

SP5-2 Dawn of Neuroendovascular therapy (1) - Initial phase of NET in Japan -

Akira Takahashi(Department of Neurosurgery, Nasu Neurosurgical institute)

SP5-3 The Dawning of NET at Kyoto University

Warou Taki(Department of Neurosurgery, Takeda Hospital)

SP5-4 History of Endovascular Therapy in Soviet Union

Istvan Hudak(Endovascular Unit, Department of Neurosurgery, Hungarian Defence Forces Military Hospital Budapest, Hungary)

SP5-5 My mentor Grant B. Hieshima

Tomoaki Terada(Department of Neurosurgery, Showa University Fujigaoka Hospital)

SP5-6 History and innovation of endovascular therapy of AVMs in Spain and France

Luis López-Ibor(Hospital Clinico San Carlos, Madrid, Spain)

SP5-7 Legacy of Japanese Anatomists

Michihiro Tanaka(Kameda Medical Center, Department of Neurosurgery)

### Plenary Symposium 3 [PS3]



#### Thrombectomy - Initiatives at each facility -

13:20~14:50

Chairman: Dr. Masaru Hirohata (Department of Neurosurgery, Kurume University School of Medicine)

Dr. Akira Ishii (Department of Neurosurgery, Kyoto University Graduate School of Medicine)

Dr. Toshio Higashi (Department of Neurosurgery, Fukuoka University Chikushi Hospital)

PS3-1 Acute Ischemic Stroke: Efforts at Each Facility

Donald Frei(Neurointerventional Surgery, Radiology Imaging Associates, Denver, Colorado, USA)

PS3-2 Time saving effect of direct angiography room transfer for acute revascularization therapy.

Masayuki Sato(Department of Neurosurgery, University of Tsukuba)

PS3-3 Our efforts to rapid recanalization in patients with acute cerebral artery occlusion in a hospital with much limitation

Satomi Mizuhashi(Department Endovascular Neurosurgery, Saitama Medical University International Medical Center)

PS3-4 Clinical prediction rules to classify types of stroke at pre-hospital stage: Japan Urgent Stroke Triage (JUST) score

Kazutaka Uchida(Department of Neurosurgery, Hyogo College of Medicine)

PS3-5 Reducing onset-to-reperfusion time in acute ischemic stroke

Nobuyuki Ohara(Department of Neurology, Kobe City Medical Center General Hospital)

PS3-6 Usefulness of a Novel Clinical Scale GAI<sub>2</sub>AA Developed to Detect Candidates for Acute Mechanical Thrombectomy

Tsuyoshi Ohta(Department of Neurosurgery, Kochi Health Sciences Center)

## Symposium 10 [S10]

### Thrombectomy - Current situation and countermeasures of the region -

08:00~10:00

Chairman: Dr. Tomoyuki Tsumoto (Department of Endovascular Surgery, Kyushu Medical Center)

Dr. Masahiko Kawanishi (Department of Neurological Surgery, Kagawa University Faculty of Medicine)

Dr. Hiroaki Shimizu (Department of Neurosurgery, Akita University Graduate School of Medicine)

S10-1

Kouichi Hosoda(Department of Public Health and Medical Services, Saitama Prefecture)

S10-2 Effectiveness of Stent Retriever vs Endovascular Contact aspiration for acute ischemic stroke:J-ASPECT Studys

Nice Ren(Graduate School of Medical Sciences, Kyushu University)

S10-3 Direct transfer vs interhospital transfer in acute stroke patients undergoing thrombectomy in Japanese clinical setting

Mikito Hayakawa(Division of Stroke Prevention and Treatment, Faculty of Medicine, University of Tsukuba)

S10-4 Effect on clinical outcome after mechanical thrombectomy due to differentiation of patient transportation

Tomoyuki Tsumoto(Department of Endovascular Surgery, Kyushu Medical Center)

S10-5 Doctor helicopter transportation is most effective for the treatment of acute cerebral infarction

Kentaro Hayashi (Department of Neurosurgery, Sasebo City General Hospital)

S10-6 The current status of the treatment of acute ischemic stroke in the largest medical district in Japan

Sangnyon Kim(Department of Neurosurgery, Obihiro Kosei General Hospital)

S10-7 The efforts of Kumamoto Eliminating Regional Thrombectomy disparity (K-EARTH) project

Seigo Shindo(Department of Neurology, Kumamoto Red Cross Hospital)

S10-8 Predictors for Intracranial Hemorrhage in Acute Ischemic Stroke After Endovascular Treatment.

Masaya Enomoto(Department of Neurosurgery, National Hospital Organization Disaster Medical Center)

S10-9 Mechanical thrombectomy and telestroke network in rural Japan

Masunari Shibata(Department of Neuroendovascular therapy, Stroke Center, Ise Red Cross Hospital)

S10-10 Efforts to spread of endovascular thrombectomy for acute cerebral infarction in Miyazaki prefecture

Hajime Ohta(Department of Neurosurgery, Division of Clinical Neuroscience, Faculty of Medicine, University of Miyazaki)

S10-11 The impact of "Stroke Scramble" on the number of thrombectomy cases

Noritaka Masahira(Department of Neurosurgery, Kochi Health Sciences Center)



## Symposium 11 [S11]

### Unruptured Cerebral Aneurysm

10:10~12:10

Chairman: Dr. Tetsu Satow (Department of Neurosurgery, National Cerebral and Cardiovascular Center)

Dr. Teruyasu Hirayama (Department of Neurological Surgery, Nihon University School of Medicine)

Dr. Srivatanakul Kittipong (Department of Neurosurgery, Tokai University School of Medicine)

**S11-1 What is the role of treatment of unruptured intracranial aneurysms in reducing the incidence of subarachnoid hemorrhage? Five important topics in the management of unruptured intracranial aneurysms**

Akio Morita(Department of Neurological Surgery, Nippon Medical School)

**S11-2 Growth of thrombosed large or giant aneurysms:mechanisms and treatment**

Teruyasu Hirayama(Department of Neurological Surgery, Nihon University School of Medicine)

**S11-3 Long term outcomes of coil embolization of large and giant unruptured aneurysms**

Issei Kan(The Jikei University school of Medicine)

**S11-4 Flow diversion effect for intractable posterior-circulation aneurysm**

Hitoshi Hasegawa(Department of Neurosurgery, Brain Research Institute, Niigata University)

**S11-5 Endovascular Treatment for Thrombosed Large or Giant Aneurysms using Hydrogel coil and Braided Stent**

Michiyuki Miyamoto(Department of Neurosurgery, Teikyo University Hospital)

**S11-6 Preliminary results of investigator-initiated clinical trial on microporous covered stents for intracranial aneurysms**

Tetsu Satow(Department of Neurosurgery, National Cerebral and Cardiovascular Center)

**S11-7 Effectiveness of Y-stent assisted coil embolization for basilar bifurcation aneurysm using low profile stent.**

Makoto Sakamoto(Division of Neurosurgery, Department of Brain and Neurosciences, Faculty of Medicine, Tottori University)

**S11-8 Benefit of endovascular treatment for unruptured cerebral aneurysms**

Noriyuki Kato(Department of Neurosurgery, Mito Medical Center, National Hospital Organization)

**S11-9 The treatment toward unruptured multiple intracranial aneurysm**

Tatsumaru Fukuda(Department of Neurosurgery, Kobe City Medical Center General Hospital)

## Rare Diseases Symposium 2 [RS2]

### Vertebral artery dissections

08:00-10:00

Chairman: Dr. Hiro Kiyosue (Department of Radiology, Oita University Faculty of Medicine)

Dr. Hidenori Endo (The Department of Neurosurgery, Tohoku University Graduate School of Medicine)

Dr. Shuichi Tanoue (Department of Radiology, Kurume University School of Medicine)

#### RS2-1 Functional anatomy of vertebral artery

Michihiro Tanaka (Department of Neurosurgery, Kameda Medical Center)

#### RS2-2 Review of the literature

Takahiro Morita (Department of Neurosurgery, Tohoku University)

#### RS2-3 Treatment of VB dissection: Has it changed with introduction of flow diverter?

Yong-Sam Shin (Department of Neurosurgery, Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea)

#### RS2-4 Endovascular Therapy for Vertebral Artery Dissection: Results from Nationwide, Retrospective, Multi-Center Registries in Japan (JR-NET3)

Hajime Nakamura (Department of Neurosurgery, Graduate School of Medicine, Osaka University)

#### RS2-5 Detectability and anatomical variations of perforating arteries from vertebral artery on 3D-DSA: evaluation in patients with normal vertebral arteries

Shuichi Tanoue (Department of Radiology, Kurume University School of Medicine)

#### RS2-6 Outcomes of internal trapping for the vertebral artery dissection: Association between angiographical variations of perforating arteries and ischemic complications

Hidenori Endo (Department of Neurosurgery, Tohoku University Graduate School of Medicine)

#### RS2-7 Comparison between deconstructive and reconstructive endovascular therapy of vertebral artery dissection

Masafumi Hiramatsu (Department of Neurological Surgery, Okayama University Graduate School of Medicine)

## Symposium 12 [S12]

### Head and Neck Tumor

10:10~12:10

Chairman: Dr. Yukihiro Sonoda (Department of Neurosurgery, Yamagata University Faculty of Medicine)

Dr. Akitake Mukasa (Department of Neurosurgery, Graduate School of Medical Sciences, Kumamoto University)

Dr. Kenji Sugiu (Okayama University Hospital IVR Center)

#### S12-K Evidence and current status of head and neck tumor Embolization

Masayuki Sato (Department of Neurosurgery, University of Tsukuba)

- S12-1 Outcomes of intracranial tumors embolization in Japan -Comparison study between JR-NET2 and JR-NET3-  
Tomohito Hishikawa(Department of Neurological Surgery, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences)
- S12-2 Usage of embosphere in embolization of brain tumor  
Takao Hashimoto(Department of Neurosurgery, Tokyo Medical University)
- S12-3 Presurgical embolization of intracranial tumours using NBCA  
Shushi Kominami(Department of Neurosurgery, Chiba-Hokuso Hospital, Nippon Medical School)
- S12-4 Transarterial embolization for Meningioma with dilute NBCA  
Hiroyuki Ohnishi(Department of Neurosurgery, Ohnishi Neurological Center)
- S12-5 Preoperative embolization in surgery of meningioma  
Buntou Ro(Department of Neurosurgery, Tokyo Women's Medical University)
- S12-6 The preoperative embolization for cerebellar hemangioblastomas using N-butyl cyanoacrylate with plug and push technique.  
Nobuyuki Shimizu(Department of Neurosurgery, Yokohama City University)
- S12-7 Perfusion MRI assessment of pre-operative embolization for intracranial meningiomas  
Katsunori Asai(Department of Neurosurgery, Osaka International Cancer Institute)
- S12-8 the therapeutic strategy and utility of presurgical embolization for carotid bifurcation tumor  
Masahiro Nishihori(Department of Neurosurgery, Nagoya University)