
June 17

Breakfast Seminar 3-1

7:30~8:30

Room A (Conference Room 1003)

Surgical Strategies of Parasellar Meningiomas: Gaining the Knowledge**Moderators:** Ali K. Ali (*Egypt*)Kensuke Murakawa (*Japan*)Ryojo Akagami (*Canada*)

- BS3-1-1** **Supra-orbital keyhole approach for resection of anterior cranial base meningiomas —a 15 year's experience**
Weiguo Zhao
Department of Neurosurgery, Shanghai Jiaotong University School of Medicine, China
- BS3-1-2** **Frontolateral in treatment of anterior cranial fossa and suprasellar lesions**
Ali K. Ali
Department of Neurosurgery, Ain Shams University, Egypt
- BS3-1-3** **Craniotomy for parasellar meningioma, simple (for endoscopic) vs complex anatomy**
Ryojo Akagami
Division of Neurosurgery, University of British Columbia, Canada
- BS3-1-4** **Five fractions radiosurgery for skull base meningioma involving optic pathways**
Marcello Marchetti
Department of Neurosurgery, Radiotherapy Unit, Fondazione IRCCS Istituto Neurologico C. Besta, Italy
- BS3-1-5** **Surgical management of medial sphenoid ridge meningioma**
Ahmed Farhoud
Department of Neurosurgery, Alexandria University

Concurrent Session 3-1

8:50~10:20

Room A (Conference Room 1003)

Safer Approaches for Clinoidal/Parasellar Meningiomas**Moderators:** Ricardo Ramina (*Brazil*)Oleksandr Voznyak (*Ukraine*)Francesco Tomasello (*Italy*)

- CS3-1-1** **Involvement of optic apparatus and vessels by supra-sellar meningiomas**
Keynote Ricardo Ramina
Neurological Institute of Curitiba, Brazil
- CS3-1-2** **Surgical approach for tuberculum sellae meningioma**
Shin Jung
Department of Neurosurgery, Chonnam National University Hwasun Hospital, Korea
- CS3-1-3** **Tuberculum sella meningiomas: Approach choice according to tumor syntopy**
Oleksandr Voznyak
Centre of Neurosurgery, Hospital "Feofaniya", Ukraine
- CS3-1-4** **Craniotomy for tuberculum sellae meningiomas: Is it safer than endoscopy?**
Gerardo Guinto
Centro Medico Nacional Siglo XXI / Centro Medico ABC, Mexico
- CS3-1-5** **Tuberculum sella meningiomas**
Rajneesh Kachhara
Institute of Neurosciences, Medanta Superspecialty hospital, India
- CS3-1-6** **Transbasal approach vs. endoscopic endonasal approach for olfactory groove meningiomas: Single surgeon's experience and philosophy of approach selection**
James K. Liu
Department of Otolaryngology-Head and Neck Surgery, New Jersey Medical School, USA

Jun. 17

Day 3

Room A

CS3-1-7 Microsurgical strategy of giant clinoidal meningioma

Han Kyu Kim

*Department of Neurosurgery, Bundang Jesaeng General Hospital, Korea***CS3-1-8 Visual function preservation in microsurgical management of parasellar meningiomas**

Francesco Tomasello

*Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Italy***Plenary Session 3-1**

11:00~12:00

Room A (Conference Room 1003)

Masters of Meningioma Surgery**Moderators:** Necmetin Pamir (*Turkey*)Takeshi Kawase (*Japan*)**PS3-1-1 Meningiomas of craniocervical junction**

Luis A. B. Borba

*Department of Neurosurgery, Federal University of Parana, Brazil***PS3-1-2 Struggles in the anatomical jewel box: Cavernous sinus meningiomas**

Anil Nanda

*Department of Neurosurgery, LSU Health Shreveport, USA***PS3-1-3 Posterior Fossa Meningiomas**

Vladimír Beneš

*Department Neurosurgery Charles Univ, Czech Republic***PS3-1-4 Decompressive surgery for cavernous meningioma**

William Couldwell

*Department of Neurosurgery, University of Utah, USA***Concurrent Session 3-7**

13:30~15:00

Room A (Conference Room 1003)

Meningioma Surgery in Relation to Vessels: Overcoming the Difficulties**Moderators:** Basant K. Misra (*India*)Shunsuke Terasaka (*Japan*)Samy Youssef (*USA*)**CS3-7-1 Surgical treatment of parasagittal and falx meningiomas****Keynote**

Necmetin Pamir

*Department of Neurosurgery, Acibadem University School of Medicine, Turkey***CS3-7-2 Surgical strategy for meningioma invading venous system. How to reconstruct the venous sinus?**

Katsumi Takizawa

*Department of Neurosurgery, Asahikawa Red Cross Hospital, Japan***CS3-7-3 Meningiomas invading the venous sinuses: Resection preserving the sinuses**

Benedicto O. Colli

*Division of Surgery, Department of Surgery, Hospital das Clinicas, Ribeirao Preto Medical School, University of Sao Paulo, Brazil***CS3-7-4 Removal of cavernous meningioma with high flow bypass**

Masahiko Wanibuchi

*Department of Neurosurgery, Sapporo Medical University School of Medicine, Japan***CS3-7-5 Cerebral revascularization for skull base tumors**

Shunsuke Terasaka

*Department of Neurosurgery, Hokkaido University, Japan***CS3-7-6 Surgery of the pineal region**

Samy Youssef

Departments of Neurosurgery and Otolaryngology / University of Colorado, USA

CS3-7-7 Extensive parasellar meningiomas: Operative strategies

Sanjay Behari

*Department of Neurosurgery, Sanjay Gandhi Postgraduate Institute of Medical Sciences, India***Concurrent Session 3-13**

15:10~16:40

Room A (Conference Room 1003)

Controversies Related to the Management of Petroclival Meningioma**Moderators:** Kazunari Yoshida (*Japan*)Ibrahim Sbeih (*Jordan*)William Couldwell (*USA*)**CS3-13-1 Petroclival meningioma - Multidisciplinary approach****Keynote**

Eiji Kohmura

*Department of Neurosurgery, Kobe University Graduate School of Medicine, Japan***CS3-13-2 Anterior petrosal approach and its modification for petroclival tumors**

Kazunari Yoshida

*Department of Neurosurgery, Keio University School of Medicine, Japan***CS3-13-3 Evolution of management strategy in petroclival meningiomas over 20 years**

Jun-Ting Zhang

*Beijing Tiantan Hospital, Capital Medical University, China***CS3-13-4 Petroclival meningiomas**

Ibrahim Sbeih

*Neurosurgical Department, Ibn Al-Haytham Hospital, Jordan***CS3-13-5 Treatment of petroclival meningiomas**

Lars Poulsen

*University Clinic of Neurosurgery, Denmark***CS3-13-6 For small petrous apex meningiomas causing refractory trigeminal neuropathy, can surgery play a role in the minimally invasive era ?**

Ahmed Hegazy

*Department of Neurosurgery, Cairo University, Egypt***CS3-13-7 Petroclival meningioma: Choosing the right approach**

Suresh Nair Narayanan Nair

*Department of Neurosurgery, Sree Chitra Tirunal Institute for Medical Sciences & Technology, India***Plenary Session 3-4**

16:40~17:30

Room A (Conference Room 1003)

Skull Base Masters**Moderators:** Kenji Ohata (*Japan*)Basant K. Misra (*India*)**PS3-4-1 Tuberculum sellae meningioma: A report on management on the basis of a surgical experience with 250 cases**

Atul Goel

*Department of Neurosurgery, King Edward VII Memorial Hospital and Seth G.S. Medical College, India***PS3-4-2 Tuberculum sellae meningiomas-is there any role for the endoscopic approach ?**

Fred Gentili

Division of Neurosurgery, University of Toronto, Canada

Jun. 17

Day 3

Room A

Breakfast Seminar 3-2

7:30~8:30

Room B (Conference Room 1009)

Surgery of Petroclival Lesions: Achieving the Best Outcome

Moderators: Hirofumi Nakatomi (*Japan*)
 Gerardo Guinto (*Mexico*)
 Suresh Nair Narayanan Nair (*India*)

- BS3-2-1 Retromastoid approach for petroclival tumors, advantages and disadvantages**
 Zainal Muttaqin
Department of Neurosurgery, Diponegoro University, Indonesia
- BS3-2-2 Combined extradural subtemporal and anterior transpetrosal approach to tumors located in the interpeduncular fossa and the upper clivus**
 Masaru Aoyagi
Department of Neurosurgery, Shioda Memorial Hospital / Department of Neurosurgery, Kameda Medical Center, Japan
- BS3-2-3 Improving functional preservation during cerebello-pontine angle meningioma surgery**
 Hirofumi Nakatomi
Department of Neurosurgery, University of Tokyo, Japan
- BS3-2-4 Trigeminal Schwannomas: Surgical treatment**
 Gerardo Guinto
Neurosurgery, Centro Medico Nacional Siglo XXI, Mexico
- BS3-2-5 Trigeminal schwannoma: Importance of dural reflection of middle fossa**
 Suresh Nair Narayanan Nair
Department of Neurosurgery, Sree Chitra Tirunal Institute for Medical Sciences & Technology, India
- BS3-2-6 Intracranial epidermoid cysts**
 Vadim N. Shimansky
WFNS, Russia

Concurrent Session 3-2

8:50~10:20

Room B (Conference Room 1009)

Non-Invasive Management of Meningioma: Radiation/Radiosurgery

Moderators: Teiji Tominaga (*Japan*)
 Alfredo Conti (*Italy*)
 Ali Ayyad (*Germany*)

- CS3-2-1 Current stereotactic microradiosurgery for cavernous sinus tumors**
 Motohiro Hayashi
Department of Neurosurgery, Tokyo Women's Medical University, Japan
- CS3-2-2 Gamma knife radiosurgery for skull base meningiomas – Long-term results of low-dose treatment**
 Yoshiyasu Iwai
Department of Neurosurgery, Osaka City General Hospital, Japan
- CS3-2-3 Boron neutron capture therapy for high-grade skull base meningioma**
 Koji Takeuchi
Department of Neurosurgery & Endovascular Neurosurgery, Osaka Medical College, Japan
- CS3-2-4 Robotic radiosurgery: Innovation and results in the treatment of parasellar tumors**
 Alfredo Conti
Department of Neurosurgery, University of Messina, Italy
- CS3-2-5 Clinical outcome of gamma knife radiosurgery for skull base meningiomas after surgery: Effect for residual tumors and preservation of cranial nerve function**
 Masahito Kobayashi
Department of Neurosurgery, Saitama Medical University Hospital / Mihara Memorial Hospital / Keio University, School of Medicine, Japan

CS3-2-6 Cyberknife stereotactic radiosurgery for atypical and malignant meningiomas

Allen L. Ho

*Department of Neurosurgery, Stanford University, School of Medicine, USA***CS3-2-7 Radiation induced meningioma**

Ali Ayyad

*Department of Neurosurgery, Johannes Gutenberg University, Germany***Plenary Session 3-2**

11:00~12:00

Room B (Conference Room 1009)

Basic Science of Skull Base Pathologies**Moderators:** Ian F. Dunn (USA)

Yoko Takahashi (USA)

PS3-2-1 Current understanding of the meningioma genome

Ian F. Dunn

*Department of Neurosurgery, Brigham and Women's Hospital, USA***PS3-2-2 Prospective evaluation of molecular prognostication markers in clival chordomas**

Paul A. Gardner

*Department of Neurological Surgery, University of Pittsburgh Medical Center, USA***PS3-2-3 Molecular characterization of sinonasal undifferentiated carcinoma-Update**

Yoko Takahashi

*Department of Head and Neck Surgery, The University of Texas MD Anderson Cancer Center, USA***PS3-2-4 Intracranial pressure revisited: A novel intravascular receptor detected**

Martin Nue Moeller

*Department of Otorhinolaryngology, Head and Neck Surgery Rigshospitalet / University of Copenhagen, Denmark***Concurrent Session 3-8**

13:30~15:00

Room B (Conference Room 1009)

Meningioma: Utilization of Optimum Surgical Strategy for Better Outcome**Moderators:** Kazuhiko Nosaki (Japan)

Tiit Mathiesen (Sweden)

Yury A. Shulev (Russia)

CS3-8-1 Long-term recurrence data on radical and "maximal safe" removal of cranial base meningiomas**Keynote**

Tiit Mathiesen

*Department of Neurosurgery, Karolinska Hospital, Sweden***CS3-8-2 Surgical management of petroclival tumors: Discussion of outcome measurement**

Yury Shulev

*Department of Neurosurgery, City hospital # 2, Saint-Petersburg / North-West State Medical University, Russia***CS3-8-3 Variation on surgical approaches to central skull base meningiomas**

Imad N. Kanaan

*Department of Neurosurgery, King Faisal Specialist Hospital and Research Center, Saudi Arabia***CS3-8-4 Clinical analysis of meningiomas treated with anterior transpetrosal approach**

Yuichiro Tanaka

*Department of Neurosurgery, St.Marianna University School of Medicine, Japan***CS3-8-5 Intraventricular meningiomas -a clinopathologic study and review**

Harjinder S. Bhatoe

*Department of Neurosurgery, Max Super Specialty Hospital PPG, India***CS3-8-6 Feature of elderly meningioma in Japan - Surgical strategy and pitfalls**

Fusao Ikawa

Department of Neurosurgery, Graduate School of Biomedical and Health Sciences, Hiroshima University, Japan

CS3-8-7 Meningioma surgery in the elderly: Do skull base meningiomas pose a real risk for adverse outcome?

Christianto Lumenta

Department of Neurosurgery, Bogenhausen Academic Teaching Hospital, Technical University of Munich, Germany

Concurrent Session 3-14

15:10~16:40

Room B (Conference Room 1009)

Aggressive Meningiomas: How to Treat?

Moderators: Naoyuki Nakao (*Japan*)

Benedicto Oscar Colli (*Brazil*)

Keran Arrautovic (*USA*)

CS3-14-1 Grades II and III meningiomas: Experience in a public hospital in São Paulo States, Brazil

Keynote

Benedicto O. Colli

Hospital das Clínicas, Department of Surgery, Ribeirao Preto Medical School, University of São Paulo, Brazil

CS3-14-2 Surgical approach for aggressive skull base meningiomas

Naoyuki Nakao

Wakayama Medical University, Japan

CS3-14-3 Surgical challenging for atypical and anaplastic meningiomas and its outcomes

Seiichiro Eguchi

Department of Neurosurgery, National Cerebral and Cardiovascular Center, Japan

CS3-14-4 Malignant meningioma of WHO Grade III at Shanghai Huashan Hospital from 2003 to 2008

Qing Xie

Huashan Hospital of Fudan University / Fudan University, China

CS3-14-5 Meningioma en plaque (WHO Grade I) with extensive osseous metaplasia

Ralf Buhl

Department of Neurosurgery, Klinikum Solingen, Germany

CS3-14-6 Lateral approach for management of ventrally located upper cervical meningioma

Ali Ayyad

Department of Neurosurgery, Johaunes Gutenberg University, Germany

CS3-14-7 Intradural extramedullary spinal meningioma: Personal series

Kenan Arnautovic

Department of Neurosurgery, University of Tennessee Health Science Center, USA

Breakfast Seminar 3-3

7:30~8:10

Room C (Conference Room 1008)

The Admirable Harmony between Endoscope and Microsurgery

Moderators: Jose A. Landeiro (*Brazil*)
 Jens Lehmborg (*Germany*)
 Naoyuki Nakao (*Japan*)

- BS3-3-1 Transbasal approach for anterior skull base tumors invading optic canal with acute visual impairment**
 Koji Fujita
Department of Neurological Surgery, Wakayama Medical University, Japan
- BS3-3-2 Anterior skull base tumors : The role of the endoscopic approaches**
 Jose A. Landeiro
Department of Neurosurgery, Universidade Federal Fluminense, Rio de Janeiro / Hospital Universitário Antônio Pedro, Brazil
- BS3-3-3 Endoscopic resection of clival chordoma**
 Rungsak Siwanuwatn
Division of Neurosurgery, Department of Surgery, Chulalongkorn University, Thailand
- BS3-3-4 360° Around the posterior fossa - Pros and cons of multiple surgical approaches**
 Jens Lehmborg
Department of Neurosurgery, Technical University Munich, Germany

Sponsored Satellite Session 2

8:10~8:30

Room C (Conference Room 1008)

MURANAKA MEDICAL INSTRUMENTS Morning Satelife Session

Moderators: Naoyuki Nakao (*Japan*)

- SSS3-1-1 Endoscopic endonasal skull base surgery**
 Masahiro Toda
Department of Neurosurgery, Keio University School of Medicine, Japan
- SSS3-1-2 "Microsurgical" technique during the endoscopic endonasal surgery**
 Masaaki Taniguchi
Department of Neurosurgery, Kobe University Graduate School of Medicine, Japan

Sponsored by: MURANAKA MEDICAL INSTRUMENTS CO. LTD.

Concurrent Session 3-3

8:50~10:20

Room C (Conference Room 1008)

Jugular Foramen/Foramen Magnum : What Are the Current Managements?

Moderators: Hiroyuki Nakase (*Japan*)
 Dwarakanath Srinivas (*India*)
 Michael McDermott (*USA*)

- CS3-3-1 Surgery on mass lesions at cranio-cervical junction**
Keynote
 Christianto Lumenta
Department of Neurosurgery, Bogenhausen Academic Teaching Hospital, Technical University of Munich, Germany
- CS3-3-2 Hypoglossal Neurilemmoma: Surgical approach and results**
 Keki Turel
Neurosurgery Clinic, Bombay Hospital and Medical Research Centre, India
- CS3-3-3 Microsurgical management of ventral foramen magnum meningiomas**
 Mingguang Zhang
Department of Neurosurgery, Huashan Hospital, Fudan University, China
- CS3-3-4 Condylar preservation in modified far lateral approaches to foramen magnum**
 Dwarakanath Srinivas
Department of Neurosurgery, National Institute of Mental Health and Neurosciences (NIMHANS), India

CS3-3-5 Comprehensive surgical management of the cranio-vertebral junction (CVJ) tumors

Hiroyuki Nakase
Department of Neurosurgery, Nara Medical University, Japan

CS3-3-6 Petro-occipital trans-sigmoid approach for jugular foramen schwannomas

Jun Yang
Department of Otolaryngology, Head and Neck Surgery, Shanghai Jiaotong University School of Medicine / Ear Institute, Shanghai Jiaotong University School of Medicine / Shanghai Key Laboratory of Translational Medicine on Ear and Nose diseases, China

CS3-3-7 Evolving concepts of Chiari malformation

Atul Goel
Department of Neurosurgery, King Edward VII Memorial Hospital and G.S. Medical College Seth G.S. Medical College and K.E.M Hospital, India

Plenary Session 3-3

11:00~12:00

Room C (Conference Room 1008)

Otorhinolaryngological and Reconstructive Aspects of Skull Base Surgery

Moderators: Michael Gleeson (UK)
 Arturo Solares (USA)

PS3-3-1 Understanding the intricacies of endoscopic endonasal carotid dissection

Arturo Solares
Department of Otolaryngology, Center for Cranical Base Surgery, Georgia Regents University, USA

PS3-3-2 Recognition and management of late complications of anterior skull base surgery

Stacey Gray
Department of Otolaryngology, Massachusetts Eye and Ear, Harvard Medical School, USA

PS3-3-3 Extent of surgical resection in the management of sinonasal and skull base malignancies: Is there a role for structure preservation ?

Derric T. Lin
Department of Otolaryngology, Massachusetts Eye and Ear, Harvard Medical School, USA

PS3-3-4 Lateral skull base reconstruction- when fat is not the answer

Rupert Obholzer
Department of ENT, King's College, UK

Luncheon Satellite 3-1

12:20~13:20

Room C (Conference Room 1008)

Medtronic Luncheon Satellite Session**Moderator:** Mitsuhiro Hasegawa (Japan)**LS3-1-1 Endoscopic transnasal approaches for skull base lesions: Reach for the deeper and the farther areas, but how much sacrifice of innocent nasal anatomy?**

Masahiro Shin
Department of Neurosurgery, The University of Tokyo Hospital, Japan

LS3-1-2 A quest for better outcome - Can skull base surgeons add more technical and strategical nuances beyond the extent of resection?

Soichi Oya
Saitama Medical Center, Saitama Medical University, Japan

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Concurrent Session 3-9

13:30~15:00

Room C (Conference Room 1008)

Surgery of Clinoidal/Tuberculum Sellae : Management of Choice

Moderators: Steven A. Newman (USA)
 Vladimír Beneš (Czech Republic)
 Michael McDermott (USA)

- CS3-9-1 Meningiomas of the anterior visual pathway: Evolution of diagnosis and treatment**
Keynote Steven A. Newman
Department of Ophthalmology, University of Virginia Health System, USA
- CS3-9-2 Surgical management of anterior cranial fossa meningiomas involving optic nerves. surgical techniques and results**
 Khaled Mohamed El-Bahy
Department of Neurosurgery, Ain Shams University, Egypt
- CS3-9-3 Anterior clinoidal meningiomas: Clinicoradiological features and surgical outcome**
 Kyung-Sub Moon
Department of Neurosurgery, Chonnam National University Hwasun Hospital & Medical School, Korea
- CS3-9-4 Classification of tuberculum sellae meningiomas and outcomes based on scoring and surgical approach**
 Michael McDermott
Department of Neurological surgery, University of California, USA
- CS3-9-5 Surgical outcomes of clinoidal meningioma**
 Seung H. Lee
Department of Neurosurgery, Kyung Hee University, College of Medicine, Korea
- CS3-9-6 Avoidance of serious complications in surgery for paraclinoid meningiomas**
 Soichi Oya
Department of Neurosurgery, Saitama Medical Center/University, Japan
- CS3-9-7 Tuberculum sellae meningiomas**
 Florian I. Stefan
Department of Neurosurgery, Cluj County Emergency Hospital, Romania

Concurrent Session 3-15

15:10~16:40

Room C (Conference Room 1008)

Management of Veins and How to Overcome the Challenges

Moderators: Antonio Cerejo (Portugal)
 Toru Matsui (Japan)
 Shin Jung (Korea)

- CS3-15-1 New physiological vessel's quality - biomechanical study- brain veins**
 Jan Hemza
Faculty Hospital at Saint Ann, Masaryk University, Czech Republic
- CS3-15-2 Dural incision in the petrosal approach with preservation of the superior petrosal vein**
 Irwan Barlian Immadoel Haq
Department of Neurosurgery, Airlangga University, Indonesia
- CS3-15-3 Analysis of petrosal vein in surgery of petroclival meningiomas**
 Katsuhiro Mizutani
Department of Neurosurgery, Keio University School of Medicine, Japan
- CS3-15-4 Trigeminal neuralgia caused solely by vein: Diagnosis and management**
 Takuro Inoue
Department of Neurosurgery, Koto Memorial Hospital, Japan
- CS3-15-5 Ultrasound doppler for identification of venous sinuses**
 Steffen K. Rosahl
Department of Neurosurgery, HELIOS Klinikum Erfurt, Germany

CS3-15-6 Surgical treatment of tentorial and falcotentorial meningiomas

Necmetin Pamir

Department of Neurosurgery, Acibadem University, Turkey

CS3-15-7 Surgical strategy for intracranial meningioma involving major venous sinus

Woo Youl Jang

Department of Neurosurgery, Chonnam National University Hwasun Hospital, Korea

Jun. 17

Day 3

Room C

Breakfast Seminar 3-4

7:30~8:30

Room D (Conference Room 1001)

Skull Base Defect Closure: Inventive Techniques for a Promising Complication Free Outcome

Moderators: Bing Zhou (*China*)
 Hannah J. D. North (*UK*)
 Sin S. Jeun (*Korea*)

- BS3-4-1 Anterior skull base defect closures in malignancies: Our experience**
 Rajan V. Sundaresan
Department of ENT-1, Head & Neck Skull Base Unit, Christian Medical College, India
- BS3-4-2 Evolution of free-fat autograft in skull base defects reconstruction**
 Yury A. Shulev
Neurosurgical Department City Hospital # 2 / North-West State Medical University, Russia
- BS3-4-3 Transnasal endoscopic repair of skull base defects for CSF rhinorrhea**
 Bing Zhou
Department of Otolaryngology-Head and Neck Surgery, Beijing Tongren Hospital, Capital Medical University, China
- BS3-4-4 The surgical management of temporal bone and lateral skull base defects**
 Hannah JD North
Salford Royal Foundation Trust, UK
- BS3-4-5 Graded repair protocol for cerebrospinal fluid leaks in endoscopic endonasal transsphenoidal surgery**
 Sin Soo Jeun
Department of Neurosurgery, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea
- BS3-4-6 Skull base reconstruction with multilayer method in endonasal endoscopic surgery**
 Fumihiko Nishimura
Department of Neurosurgery, Nara Medical University, Japan

Concurrent Session 3-4

8:50~10:20

Room D (Conference Room 1001)

Vestibular Schwannoma: Impact of Radiosurgery and Morphological Approach

Moderators: Siviero Agazzi (*USA*)
 James Tysome (*UK*)
 Tomokatsu Hori (*Japan*)

- CS3-4-1 The direction of tumor growth as a predictor of facial nerve outcome and degree of resection in vestibular schwannoma surgery**
 Siviero Agazzi
Department of Neurosurgery, University of South Florida, USA
- CS3-4-2 Clinical characteristic and surgical outcomes of patients with vestibular schwannomas after failed previous fractionated stereotactic radiotherapy**
 Shunsuke Terasaka
Department of Neurosurgery, Hokkaido University, Japan
- CS3-4-3 Growth potential analysis of vestibular schwannoma before and after stereotactic radiosurgery**
 Yoshinori Higuchi
Department of Neurological Surgery, Chiba University Graduate School of Medicine, Japan
- CS3-4-4 Risk of separate malignancy after radiation of vestibular schwannoma**
 Matthew L. Carlson
Department of Otorhinolaryngology Mayo Clinic / Department of Neurologic Surgery Mayo Clinic, USA
- CS3-4-5 Semi-automated volumetric measurements of vestibular schwannomas: Is this feasible in clinical practice?**
 James Tysome
Department of Otolaryngology, Cambridge University, UK
- CS3-4-6 Stereotactic radiosurgery based on microanatomy in vestibular schwannomas**
 Motohiro Hayashi
Department of Neurosurgery, Tokyo Women's Medical University, Japan

Luncheon Satellite 3-2

12:20~13:20

Room D (Conference Room 1001)

MIZUHO/CHARMANT Luncheon Satellite Session

Moderator: Hirofumi Nakatomi (*Japan*)**LS3-2-1 Endoscopic skull base surgery Technical standards and advance in instruments**Tetsuya Nagatani
Japanese Red Cross Nagoya Daini Hospital, Japan

Sponsored by: MIZUHO Corporation/CHARMANT Inc.

Concurrent Session 3-10

13:30~15:00

Room D (Conference Room 1001)

Petroclival Meningioma: Surgery & Embolization

Moderators: Alexey N. Shkarubo (*Russia*)Jie Tang (*China*)Kensuke Suzuki (*Japan*)**CS3-10-1 Strategy of petroclival meningioma: MEP monitoring and brainstem edema**Taku Sato
*Department of Neurosurgery, Fukushima Medical University, Japan***CS3-10-2 Surgical treatment and prognostic analysis of petroclival meningiomas**Xinru Xiao
*Department of Neurosurgery, Beijing Tiantan Hospital, Capital Medical University, China***CS3-10-3 Petrous meningiomas: The impact of tumor location on clinical presentations and surgical outcome**Kuntal K. Das
*Neurosurgery Department Sanjay Gandhi Postgraduate Institute of Medical Sciences, India***CS3-10-4 Surgical strategy for tentorial meningiomas**Andrii Lytvynenko
*Neurosurgery Department Clinical Hospital "Feofania" Clinical Hospital "Feofania", Ukraine***CS3-10-5 Microsurgical management of primary jugular foramen meningiomas**Jie Tang
*Department of Neurosurgery, Beijing Tiantan Hospital, China***CS3-10-6 Strategy of preoperative embolization for skull base meningioma, view point of skull base anastomosis**Kensuke Suzuki
*Department of Neurosurgery, Dokkyo Medical University Koshigaya Hospital, Japan***CS3-10-7 Safety and efficacy of preoperative embolization in patients with meningioma**Junya Tatezaki
Department of Neurosurgery, Yokohama City University Medical Center, Japan

Concurrent Session 3-16

15:10~16:40

Room D (Conference Room 1001)

Basic Research on Meningioma / Meningioma Surgery

Moderators: Soichi Oya (*Japan*)Wenya Linda Bi (*USA*)Kyri Hlaing (*Myanmar*)**CS3-16-1 Intraoperative assessment of the proliferative potential of meningioma cells**Soichi Oya
*Department of Neurosurgery, Saitama Medical Center/University, Japan***CS3-16-2 Landscape of genomic alterations in high-grade meningioma**Wenya L. Bi
Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School, USA

CS3-16-3 Genomic alterations in skull base meningiomas

Wenya L. Bi

Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School, USA

CS3-16-4 Microarray gene expression profiling of skull base invasive meningiomas

Mudathir S. Bakhit

Department of Neurosurgery, Fukushima Medical University, Japan

CS3-16-5 Anatomical distribution and postoperative ischemia of perforators in clinoid meningiomas

Kensuke Murakami

Department of Neurosurgery, National Hospital Organization, Sendai Medical Center, Japan

CS3-16-6 Surgery of clinoidal meningiomas

Tsutomu Masuda

Shin-komonji Hospital, Japan

CS3-16-7 Meningioma surgery (Myanmar experience)

Kyi Hlaing

University of Medicine(2), North Okkalapa / Department of Neurosurgery, Yangon General Hospital, Myanmar

Breakfast Seminar 3-5

7:30~8:30

Room E (Conference Room 1002)

Contemporary Management of Temporal Bone Malignancies**Moderators:** Akihiro Homma (*Japan*)Kiyoto Shiga (*Japan*)Romain Kania (*France*)

- BS3-5-1 Salvage operations for patients with persistent or recurrent cancer of the maxillary sinus after superselective intra-arterial infusion of cisplatin with concurrent radiotherapy**
Akihiro Homma
Department of Otolaryngology-Head and Neck Surgery, Hokkaido University Graduate School of Medicine, Japan
- BS3-5-2 Concomitant chemo-radiotherapy as a standard treatment for squamous cell carcinoma of the temporal bone**
Kiyoto Shiga
Department of Otolaryngology-Head and Neck Surgery, Iwate Medical University, Japan
- BS3-5-3 Temporal bone resection for malignancy**
Romain Kania
Department of Otolaryngology-Head and Neck Surgery, Paris Sorbonne University / APHP Lariboisiere University Hospital, France
- BS3-5-4 Tumor in the lateral skull base**
Atsunobu Tsunoda
Juntendo University School of Medicine, Japan
- BS3-5-5 Poor prognostic factors in squamous cell carcinoma of temporal bone**
Takashi Nakagawa
Graduate School of Medical Sciences, Kyushu University / Fukuoka University School of Medicine, Japan
- BS3-5-6 Surgical techniques in temporal bone resection for malignancy**
Hiroyuki Jimbo
Department of Neurosurgery, Tokyo Medical University Hachioji Medical Center, Japan

Concurrent Session 3-5

8:50~10:20

Room E (Conference Room 1002)

Clival Chordoma: Exploration for the Best Management**Moderators:** Kyu-Sung Lee (*Korea*)Savaş Ceylan (*Turkey*)Mohamed E. El-Fiki (*Egypt*)

- CS3-5-1 Occipito-cervical fusion in huge cranio-cervical junction chordomas**
Keynote Kyu-Sung Lee
Gangnam Severance Hospital, Yonsei University Health System, Department of Neurosurgery, Korea
- CS3-5-2 Multimodal Management outcome of chondrosarcomas of the skull base**
Franco De Monte
Department of Neurosurgery, The University of Texas M.D. Anderson Cancer Center, USA
- CS3-5-3 Extended endoscopic approach for clival chordomas & chondrosarcomas**
Savaş Ceylan
University of Kocaeli, Turkey
- CS3-5-4 Extracranial surgery of the skull base and craniovertebral junction chordomas**
Alexey N. Shkarubo
Department of Neurooncology, The N.N. Burdenko Neurosurgical Institute, Russia
- CS3-5-5 Results of endoscopic navigation guided resection of clival chordoma**
Mohamed E. El-Fiki
University of Alexandria, Department of Neurosurgery, Egypt
- CS3-5-6 Clival chordoma - What is the actual state-of-art therapeutic regimen**
Jens Lehmborg
Department of Neurosurgery, Technical University Munich, Germany

CS3-5-7 Indications and problems in endoscopic endonasal surgery for skull base tumors

Koji Yoshimoto

*Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Japan***Concurrent Session 3-11**

13:30~15:00

Room E (Conference Room 1002)

How to Reconstruct & Manage**Moderators:** Yoichi Katayama (*Japan*)Manas Panigrahi (*India*)Jan Hemza (*Czech Republic*)**CS3-11-1 Clinical features of otic capsule sparing temporal bone fractures**

Beomcho Jun

*Department of Otolaryngology Head and Neck Surgery, Uijeongbu St. Mary Hospital, The College of Medicine Catholic University of Korea, Korea***CS3-11-2 Preventing CSF leak after retromastoid suboccipital excision of CP angle tumors: Are fibrin sealants essential?**

Manas Panigrahi

*Department of Neurosurgery, Krishna Institute of Medical Sciences, India***CS3-11-3 Cause analysis and treatment of infected cutaneous fistula after craniotomy**

Takuya Akai

*Department of Neurosurgery, Kanazawa Medical University, Japan***CS3-11-4 Own 23yr. experiences with skull base trauma - the controversies**

Jan Hemza

*Department of Neurosurgery, Faculty Hospital at Saint Ann, Masaryk University, Czech Republic***CS3-11-5 Penetrating traumatic brain injury in children**

Mazhar Z. Darwazeh

*Department of Neurosurgery, Minsk-Medical Institute, State of Palestine***CS3-11-6 Reconstruction of large skull defects after extensive removal of skull base tumors: Is bony reconstruction for skull base defects necessary to prevent brain herniation?**

Shinya Jinguji

*Department of Neurosurgery, Fukushima Medical University, Japan***Concurrent Session 3-17**

15:10~16:40

Room E (Conference Room 1002)

Management of Facial Nerve: How to Achieve the Goal ?**Moderators:** Vincent C. Cousins (*Australia*)Alok Thaker (*India*)Ken Matsuda (*Japan*)**CS3-17-1 Facial palsy in skull base trauma****Keynote**

Vincent C. Cousins

*The Alfred Hospital / Department of Surgery, Monash University, Australia***CS3-17-2 Should surgery be the standard of care for facial paralysis secondary to temporal bone fracture**

Alok Thakar

*Department of Neurosurgery, All India Institute of Medical Sciences, India***CS3-17-3 The pattern of temporal bone fracture in relation with imaging findings and peripheral facial nerve palsy**

Muhammad Kusdiansah

*Department of Neurosurgery, University of Padjajaran Hasan Sadikin Hospital, Indonesia***CS3-17-4 Facial reanimation- meeting the different requirements of skull base patients**

Rupert Obholzer

Department of ENT, King's College, UK

CS3-17-5 Dynamic/static reconstructions for various type of facial paralysis

Ken Matsuda

Division of Plastic and Reconstructive Surgery, Niigata University Graduate School of Medicine, Japan

Jun. 17

Day 3

Room E

Breakfast Seminar 3-6

7:30~8:30

Room F (Conference Room 801-2)

Complicated Vestibular Schwannoma: Overcoming the Hardship

Moderators: Xuhui Hui (*China*)
 Tetsuya Goto (*Japan*)
 Sergey Spektor (*Israel*)

- BS3-6-1 Surgical strategy in treating with giant vestibular schwannomas(GVS)**
 Xuhui Hui
Department of Neurosurgery, West China Hospital of Sichuan University, China
- BS3-6-2 Influence of cystic degeneration on management strategy in vestibular schwannoma**
 Zhihua Zhang
Department of Otolaryngology Head & Neck Surgery, Xinhua Hospital Shanghai Jiaotong University School of Medicine / Shanghai Key Laboratory of Translational Medicine on Ear and Nose diseases / Ear Institute Shanghai Jiaotong University, China
- BS3-6-3 Clinical characteristics and operative strategy of hypervascular vestibular schwannoma**
 Yu Teranishi
Department of Neurosurgery, Tokyo Metropolitan Police Hospital, Japan
- BS3-6-4 Relationship between warning sign of intraoperative facial motor evoked potential monitoring and postoperative facial function in a vestibular schwannoma surgery**
 Tetsuya Goto
Department of Neurosurgery, Shinshu University School of Medicine, Japan
- BS3-6-5 Posterior transtemporal approaches: Indications and modifications**
 Sergey Spektor
Department of Neurosurgery, Hadassah Hebrew University Medical Center, Israel
- BS3-6-6 Volumetric assessment of subdural air collections after vestibular schwannoma surgery in the semisitting position**
 Milan Stanojevic
Department of Neurosurgery, University of Tuebingen, Germany

Concurrent Session 3-6

8:50~10:20

Room F (Conference Room 801-2)

Brain Stem Surgery: In Search for the Definite Treatment

Moderators: Ismail H. Aydin (*Turkey*)
 Zhan Xue (*China*)
 Ganesh Krishnamurthy (*India*)

- CS3-6-1 Brainstem cavernous malformations: Reconsideration of the surgical strategies**
 Xuhui Hui
West China Hospital of Sichuan University, China
- CS3-6-2 Treatment strategies for brainstem lesions by neuroendoscope**
 Kazuhito Takeuchi
Nagoya University, Japan
- CS3-6-3 Surgical treatment of pediatric brain-stem gliomas**
 Zhan Xue
Beijing Tiantan Hospital, China
- CS3-6-4 Surgical management of medulla oblongata cavernoma**
 Ganesh Krishnamurthy
Department of Neurosurgery, Sri Ramachandra University, India
- CS3-6-5 Surgical intervention for brainstem hemorrhagic cavernous angiomas and long-term outcomes**
 Seiichiro Eguchi
Department of Neurosurgery, National Cerebral and Cardiovascular Center, Japan
- CS3-6-6 Yasargil highway in skull base**
 Ismail H. Aydin
Department of Neurosurgery, Istanbul Aydin University, Turkey

Concurrent Session 3-12

13:30~15:00

Room F (Conference Room 801-2)

Vestibular Schwannoma - Importance of Functional Preservation

Moderators: Alexander I. Evins (USA)
Zainal Muttagin (Indonesia)
Laxminarayan Tripathy (India)

- CS3-12-1 Selective schwannomectomy for small acoustic neuromas: Beyond preserving hearing**
Yojiro Seki
Department of Neurosurgery, Tokyo Kyosai Hospital, Japan
- CS3-12-2 The management of internal auditory canal in acoustic neuroma surgery**
Dong Zhong
Department of Neurosurgery, the First Affiliated Hospital of Chongqing Medical University, China
- CS3-12-3 A minimally invasive percutaneous transtubar middle fossa approach for acoustic neuromas**
Alexander I. Evins
Department of Neurological Surgery, Weill Cornell Medical College, USA
- CS3-12-4 Retro-labyrinthine or retro-sigmoid approaches for vestibular neurectomy**
Jun Yang
Department of Otolaryngology, Head and Neck Surgery, Shanghai Jiaotong University School of Medicine / Ear Institute, Shanghai Jiaotong University School of Medicine / Shanghai Key Laboratory of Translational Medicine on Ear and Nose diseases, China
- CS3-12-5 Retromastoid approach. How I do it?**
Zainal Muttagin
Department of Neurosurgery, Diponegoro University, Indonesia
- CS3-12-6 Misdiagnosis of isolated IAC mass and intra-operative decision-make**
Huan Jia
Department of Otolaryngology, Head and Neck Surgery, Shanghai Jiaotong University School of Medicine / Ear Institute, Shanghai Jiaotong University School of Medicine / Shanghai Key Laboratory of Translational Medicine on Ear and Nose diseases, China
- CS3-12-7 Bilateral supratentorial extradural haematoma following VP shunt insertion & posterior fossa tumour excision- Case report, literature review and lesson learnt**
Laxminarayan Tripathy
Department of Neurosurgery, Medica Superspecialty Hospital, India

Concurrent Session 3-18

15:10~16:40

Room F (Conference Room 801-2)

Vascular Disease: Surgical Treatment and Outcome

Joint Session: Indio-Japan Neurosurgical Conference

Moderators: Kiyoshi Saito (Japan)
Sanjay Behari (India)
Sampath Somanna (India)

- CS3-18-1 Risk of rupture of small sized aneurysm?**
Hanish Bansal
Department Of Neurosurgery, Dayanand Medical College and Hospital, India
- CS3-18-2 Factors affecting short and long term outcome in surgically managed multiple aneurysms**
Anant Mehrotra
Department of Neurosurgery, Sanjay Gandhi Post Graduate Institute of Medical Sciences, India
- CS3-18-3 A1- segment aneurysms: Management protocol based on a new classification**
Kamlesh S. Bhaisora
SGPGIMS Lucknow, India
- CS3-18-4 Surgical treatment and outcome for paraclinoid aneurysms**
Toshiyuki Tsuboi
Department of Neurosurgery, Sapporo Teishinkai Hospital, Japan

- CS3-18-5 Skull base technique for complete neck clipping of basilar top aneurysm; Frequency and usefulness**
Yu Kinoshita
Department of Neurosurgery, Sapporo Teishinkai Hospital, Japan
- CS3-18-6 Extended endonasal edndoscopic transclival clipping of basilar artery aneurysms**
Sampath Somanna
Department of Neurosurgery, National Institute of Mental Health and Neurosciences, India
- CS3-18-7 Development of a new high-resolution intraoperatiue imaging system to simultaneo usly visualize light and near- infrared fluorescence images of ICG**
Kiyoshi Saito
Department of Neurosurgery, Fukushima Medical University, Japan