June 16

Breakfast Seminar 2-1
7:30~8:30 Room A (Conference Room 1003)
Management of Challenging Aneurysm
Moderators: Akio Morita (Japan)
Yoko Kato (Japan)
Saleem Abdulrauf (USA)

BS2-1-1 Management strategy and treatment outcomes of unruptured intracranial aneurysms – implications from the UCAS japan cohort
Akio Morita
Department of Neurosurgery, Nippon Medical School, Japan

BS2-1-2 Treatment of clinoid portion of aneurysm
Yoko Kato
Department of Neurosurgery, Fujita Health University Banbuntane Hotokukai Hospital, Japan

BS2-1-3 Role of skull base approaches for giant aneurysms
Eka J. Wahjoepramono
Department of Neurosurgery, Pelita Harapan University, Indonesia

BS2-1-4 Risk assessment of vertebral artery vulnerability in congenital atlantoaxial dislocation
Sanjay Behari
Department of Neurosurgery, Sanjay Gandhi Postgraduate Institute of Medical Sciences / Looknow, India

BS2-1-5 Surgical frow oliversion for complex posterior circulation
Ehab Shiban
Department of Neurosurgery, Technical University of Munich, Germany

BS2-1-6 Giant aneurysms: Technical advances
Saleem Abdulrauf
Department of Neurosurgery, Saint Louis University Center for Cerebrovascular and Skull Base Surgery, USA

Main Session 2-1
8:40~10:10 Room A (Conference Room 1003)
Endoscopic Skull Base Surgery: Current State of the Art, Indications & Limitations
Moderators: Fred Gentili (Canada)
Diego Mazzatenta (Italy)
Paul A. Gardner (USA)

MS2-1-1 Endoscopic skull base surgery: State of the art
Fred Gentili
Department of Neurosurgery, University of Toronto, Canada

MS2-1-2 Endoscopic skull base surgery
Diego Mazzatenta
Institute of Neurological Sciences of Bologna, Italy

MS2-1-3 Endoscopic endonasal approach for retrochiasmatic craniopharyngiomas: Technical pearls and limitations
James K. Liu
Department of Neurosurgery, Rutgers New Jersey Medical School, USA

MS2-1-4 Cavernous sinus endoscopic pituitary surgery for pituitary adenomas: is it still justified?
Emmanuel Jouanneau
Skull Base and Pituitary Center, Neurosurgical Department B / Hospices Civils de Lyon / University of Lyon, France

MS2-1-5 Meningiomas - chondrosarcomas - skull base techniques
Sebastien Froelich
Department of Neurosurgery, Lariboisière Hospital, France
MS2-1-6  Endoscopic endonasal chordoma resection: The new standard of care
Paul A. Gardner
Department of Neurosurgery, University of Pittsburgh Medical Center, USA

Plenary Session 2-1
10:40~12:00  Room A (Conference Room 1003)

Skull Base Masters of Neurosurgery
Moderators: Yong K. Tu (Taiwan)  Anil Nanda (USA)

PS2-1-1  The cavernous sinus – The avalanche in the skull base surgery since 1986: Past, present and future perspectives
Vinko V. Dolenc
Department of Neurosurgery, University Clinical Centre Ljubljana, Slovenia

PS2-1-2  Skull base high flow bypass 130 case
Takanori Fukushima
Department of Neurosurgery, Duke University Medical Center, USA

PS2-1-3  Chinese skull base surgery: History and current situation
Liwei Zhang
Department of Neurosurgery, Beijing Tian Tan Hospital, China

PS2-1-4  Skull base surgery: Graduation from art to science
Basant K. Misra
Department of Neurosurgery, PD Hinduja National Hospital and Medical Research Centre, India

PS2-1-5  Surgical decision making in petroclival meningiomas
Jacques Morcos
Department of Neurosurgery, University of Miami, USA

Luncheon Satellite 2-1
12:10~13:10  Room A (Conference Room 1003)

NSK Luncheon Satellite Session
Moderator: Isao Date (Japan)

LS2-1-1  Complex Cranial Surgery: Back to the Future
Samy Youssef
Departments of Neurosurgery and Otolaryngology / University of Colorado, USA

Main Session 2-5
13:50~15:20  Room A (Conference Room 1002)

Skull base anastomosis: Neurosurgeon vs. Reconstructive surgeon
Moderators: Yoko Kato (Japan)  Rokuya Tanikawa (Japan)  Satoshi Kuroda (Japan)

MS2-5-1  Supermicrosurgery for aesthetic craniofacial repairs
Isao Koshima
Plastic and Reconstructive Surgery Department, The University of Tokyo, Japan

MS2-5-2  Surgical treatment of moyamoya disease
Satoshi Kuroda
Department of Neurosurgery, University of Toyama, Japan

MS2-5-3  Comprehension of surgical anatomy for high flow bypass
Rokuya Tanikawa
Department of Neurosurgery, Sapporo Teishinkai Hospital, Japan
MS2-5-4  Our techniques of microsurgery in free flap reconstruction for skull base
Yuzuru Kamei
Department of Plastic Surgery, Nagoya University Graduate School of Medicine, Japan

MS2-5-5  "Awake" highflow bypass for giant aneurysms
Saleem I. Abdulrauf
Department of Neurological Surgery, Saint Louis University Center for Cerebrovascular and Skull Base Surgery, USA

Concurrent Session 2-4
15:50~17:20 Room A (Conference Room 1009)

Vestibular Schwannoma: Quality of Life Based on Outcome Analysis
Moderators: Peter Siesjö (Sweden)
Atsunobu Tsunoda (Japan)
Marc S. Schwartz (USA)

CS2-4-1  Outcome after surgery of vestibular schwannomas- Morbidity, quality of life, complications or work capacity?
Peter Siesjö
Lund University, Department of Neurosurgery, Sweden

CS2-4-2  Management trends of vestibular schwannoma in the United States
Matthew L. Carlson
Department of Otorhinolaryngology Mayo Clinic, USA

CS2-4-3  Loss of QOL after the skull base surgery
Atsunobu Tsunoda
Juntendo University School of Medicine, Department of Otolaryngology, Japan

CS2-4-4  The natural history of tumor growth and hearing in + 1000 observed patients with a vestibular schwannoma – An update from the world largest database in Copenhagen
Per Caye-Thomasen
University of Copenhagen / Department of Otolaryngology – Head and Neck Surgery and Audiology, Copenhagen University Hospital Rigshospitalet, Denmark

CS2-4-5  Geographic distribution of vestibular schwannomas: A 15-year review
Georgios Kontorinis
Department of Otolaryngology, Queen Elizabeth University Hospital, UK

CS2-4-6  Postoperative tinnitus after vestibular schwannoma surgery: A neglected entity
Jayesh Sardhara
Department of Neurosurgery, Sanjay Gandhi Post Graduate Institute of Medical Science, India

CS2-4-7  Translabyrinthine resection of small acoustic neuromas
Marc S. Schwartz
Neurosurgery, House Clinic, USA

Main Session 2-8
17:20~18:30 Room A (Conference Room 1008)

Skull Base Concepts and Techniques: Lessons from the Experts
Moderators: Basant Misra (India)
Helmut Bertalanffy (Germany)

MS2-8-1  Anterior transpetrosal approach
Takeshi Kawase
Department of Neurosurgery, Keio University, Japan

MS2-8-2  Surgery of Jugular foramen tumors
Yong-Kwang Tu
Department of Neurosurgery, National Taiwan University, Taiwan

MS2-8-3  Skull base approaches to intrinsic brainstem lesions
Helmut Bertalanffy
Department of Neurosurgery, International Neuroscience Institute, Germany
MS2-8-4 Interdisciplinary treatment of skull base lesions
William Couldwell
Department of Neurosurgery, University of Utah, USA
Breakfast Seminar 2-2
7:30~8:30 Room B (Conference Room 1009)

Vestibular Schwannoma: How to Operate?

Moderators: Marcus Atlas (Australia)
Ki-Hong Chang (Korea)
Roy T. Daniel (Switzerland)

BS2-2-1 Four hand technique for surgery of vestibular schwannomas
Lars Poulsgaard
University Clinic of Neurosurgery, Denmark

BS2-2-2 Acoustic neuroma - evolving management
Marcus Atlas
Ear Sciences Centre, University of Western Australia, Australia

BS2-2-3 The transotic approach for vestibular schwannoma
Yin Xia
Department of Otorhinolaryngology, Beijing Tiantan Hospital, Capital Medical University, China

BS2-2-4 Value of endoscope in achieving total removal of vestibular schwannoma
Mohamed M.K. Badr-El-Dine
University of Alexandria, Egypt / Professor of Otolaryngology; Faculty of Medicine, / President of the Egyptian Society of Skull Base Surgery / Member of the International Working Group of Ear Endoscopy, Egypt

BS2-2-5 Clinical feasibilities of middle cranial fossa approach in the treatment of vestibular schwannoma in terms of surgical pitfalls or prognostic factors
Ki-Hong Chang
The Catholic University of Korea / St. Paul's Hospital / Department of Otolaryngology-HNS, Korea

BS2-2-6 Facial/cochlear nerve preservation in surgery for large vestibular schwannomas
Roy T. Daniel
Department of Neurosurgery, University of Lausanne, Switzerland

Main Session 2-2
8:40~10:10 Room B (Conference Room 1009)

Vestibular Schwannoma: Development of Treatment Based on Experiences

Moderators: Michael J. Link (USA)
Martin Sames (Czech Republic)
Hao Wu (China)

MS2-2-1 Does less than gross total resection of vestibular schwannoma result in improved outcomes?
Keynote
Michael J. Link
Department of Neurologic Surgery, Mayo Clinic, USA

MS2-2-2 Favorable facial never function; hearing preservation in vestibular schwannoma surgery
Shin Jung
Department of Neurosurgery, Chonnam National University Hwasun Hospital, Korea

MS2-2-3 Surgery for small vestibular schwannomas
Amir R. Dehdashti
Department of Neurosurgery, Northshore University Hospital, USA

MS2-2-4 Microsurgical management of vestibular schwannomas
Martin Sames
Department of Neurosurgery, University J.E.Purkinje, Masaryk Hospital, Czech Republic

MS2-2-5 Our strategy and surgical experiences in management of vestibular schwannoma
Hao Wu
Ear Institut, Shanghai Jiaotong University School of Medecine / Department of Otolaryngology Head and Neck Surgery, Xinhua Hospital, Shanghai Jiaotong University School of Medicine, China

MS2-2-6 Vestibular schwannoma: Personal experience, preferable treatment
Eduard Zverina
1st Faculty of Medicine, University Hospital Motol, Charles University Prague, Czech Republic / 3rd Faculty of Medicine, University Hospital Kralovske Vinohrady, Charles University Prague, Czech Republic
Plenary Session 2-2
10:40~12:00  Room B (Conference Room 1009)

Masters of ENT & Neck Surgery
Moderators: Shingo Murakami (Japan)
Giovanni Danesi (Italy)

PS2-2-1  Lateral skull base approaches for skull base paragangliomas: Experience of over 400 cases
Mario Sanna
Gruppo Otologico, Italy

PS2-2-2  Endoscopic management of sinonasal malignancy: Oncologic outcomes
Carl H. Snyderman
Department of Otolaryngology, University of Pittsburgh Medical Center.
Department of Neurological Surgery, University of Pittsburgh Medical Center, USA

PS2-2-3  Sinonasal cancers: Progress, challenges, and future directions
Ehab Hanna
Department of Head and Neck Surgery, MD Anderson Cancer Center, USA

PS2-2-4  Hearing rehabilitation with cochlear implant in patients with single side deafness after
translabyrinthine resection of tumours of the inner ear canal
Jörg Schipper
Department of Otolaryngology, University Hospital Düsseldorf, Germany

PS2-2-5  Surgical strategy for small acoustic neuroma having good hearing
Shingo Murakami
Department of Otolorhinolaryngology, Head and Neck Surgery, Nagoya City University, Japan

Luncheon Satellite 2-2
12:10~13:10  Room B (Conference Room 1009)

CSL Behring Luncheon Satellite Session
THIS IS THE Japanese Endoscopic Skull Base Surgery
Moderator: Kiyoshi Saito (Japan)

LS2-2-1  Indication and Limitation of Endoscopic Endonasal Skull Base Surgery
Hiroyoshi Akutsu
Department of Neurosurgery, Tsukuba University, Japan

LS2-2-2  Endoscopic Keyhole Skull Base Surgery
Tadashi Watanabe
Japanese Red Cross Nagoya Daini Hospital, Japan

Main Session 2-6
13:50~15:20  Room B (Conference Room 1003)

Anterior Skull Base: Utilisation of Appropriate Strategies and Approaches
Moderators: Stacey Gray (USA)
Takayuki Nakagawa (Japan)
Sung J. Cho (Korea)

MS2-6-1  Anterior skull base closing by polyethylene implants
Claude F. Litre
Department of Neurosurgery, University Reims, France

MS2-6-2  Multilayer resection of olfactory neuroblastoma using endoscopic endonasal approach
Takayuki Nakagawa
Department of Otolaryngology, Kyoto University, Japan

MS2-6-3  A randomized trial of lumbar drainage after endoscopic skull base surgery
Paul A. Gardner
Department of Neurological Surgery, University of Pittsbargh Medical Center, USA
MS2-6-4  The supraorbital approach for anterior skull base, sallar and paraseller tumors

Sung J. Cho  
Department of Neurosurgery, Soonchunhyang University Seoul Hospital, Korea

MS2-6-5  Surgery of esthesioneuroblastoma

Rungsak Siwanuwath  
Department of Neurosurgery, Chulalongkorn University, Thailand

MS2-6-6  Treatment outcome and strategy for olfactory neuroblastoma

Hiroaki Motegi  
Hokkaido University Graduate School of Medicine, Department of Neurosurgery, Japan

Concurrent Session 2-5  
15:50~17:20  Room B (Conference Room 1008)

Pituitary Adenoma: Various Approaches & Management

Moderators: Filippo F. Angileri  (Italy)  
Oleksandr Voznyak  (Ukraine)  
Sun Ho Kim  (Korea)

CS2-5-1  Multidisciplinary management of aggressive pituitary adenomas  
Filippo F. Angileri  
Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Italy

CS2-5-2  Transcranial surgery of giant pituitary adenomas  
Oleksandr Voznyak  
Hospital "Feofaniya", Centre of Neurosurgery, Ukraine

CS2-5-3  Surgical treatment of giant pituitary adenoma  
Kenichi Ishibashi  
Department of Neurosurgery, Osaka City General Hospital, Japan

CS2-5-4  Snare technique for the remodeling of the arachnoid pouch to prevent cerebrospinal fluid rhinorrhea and hematoma collection during transsphenoidal surgery for suprasellar-extended pituitary tumors  
Sun Ho Kim  
Department of Neurosurgery, Yonsei University Health Systems, Korea

CS2-5-5  Endoscopic combined endonasal and transcranial approach for parasellar lesions  
Tadashi Watanabe  
Nagoya Daini Red Cross Hospital, Japan

CS2-5-6  Up-to-date MRI findings for the diagnosis of pituitary adenomas  
Masamichi Kurosaki  
Facility of Medicine Tottori University, Japan

CS2-5-7  Transsphenoidal endoscopic surgery of pituitary adenomas (experience 4,200 operations)  
Vladimir Cherebillo  
Department of Neurosurgery, Military Medical Academy, Russia

Panel Discussion 2-2  
17:20~18:30  Room B (Conference Room 1009)

Endoscopic Approaches to the Lateral Skull Base

Moderators: Mohamed M.K. Badr-El-Dine  (Egypt)  
Seiji Kakehata  (Japan)

PD2-2-1  Endoscopic transcranial corridors to the lateral skull base  
Daniele Marchioni  
Otolaryngology Department, University Hospital of Verona, Italy

PD2-2-2  Exclusive endoscopic approach to the acoustic neuroma  
Livio Presutti  
Otolaryngology Department, University Hospital of Modena, Italy
PD2-2-3  Totally endoscopic transcanal infracochlear approach to a petrous apex cholesterol granuloma
Seiji Kakehata
Yamagata University Faculty of Medicine Department of Otolaryngology H&N, Japan

PD2-2-4  Superageniculate approach to the petrous apex
Nirmal Patel
Otology/Neurotology/Skull Base Surgeon Director, Kolling Deafness Research Centre, Macquarie University, Australia

PD2-2-5  Exclusively endoscopic resection of vestibular schwannoma and other CPA lesions
Robert Behr
Department of Neurosurgery, Academic Hospital of the University of Marburg, Germany

Evening Satellite 2
18:30~19:15  Room B (Conference Room 1009)

Baxter Evening Satellite Session
Moderator: Isao Date (Japan)

ES2-1  Recent trends Hemostasis in Skull Base Surgery (in Euro)
Francesco Tomasello
Department of Biomedical and Dental Sciences and Morphofunctional Imaging, University of Messina, Italy

ES2-2  Recent trends Hemostasis in Skull Base Surgery (in Japan)
Masahiro Toda
Department of Neurosurgery, Keio University School of Medicine, Japan

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## Breakfast Seminar 2-3

7:30~8:30 Room C (Conference Room 1008)

### Ultimate Management of Orbital and Frontal Sinus Tumors

**Moderators:** Takahiro Asakage (Japan)  
Yoshihiro Natori (Japan)  
Stefan Florian (Romania)

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<th>Session</th>
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<th>Speaker</th>
<th>Affiliation</th>
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<td>BS2-3-1</td>
<td>Surgery in and around the orbit</td>
<td>Christian Matula</td>
<td>Neurosurgical Department, Medical University of Vienna, Austria</td>
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<tr>
<td>BS2-3-2</td>
<td>Surgical indication and localization of the intraobital tumor</td>
<td>Yoshihiro Natori</td>
<td>Department of Neurosurgery, Aso Iizuka Hospital</td>
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<tr>
<td>BS2-3-3</td>
<td>The endoscopic endonasal approach for orbital and orbital apex lesions</td>
<td>Paul A. Gardner</td>
<td>Department of Neurological Surgery / University of Pittsburgh Medical Center, USA</td>
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<tr>
<td>BS2-3-4</td>
<td>Endoscopic sinus surgery of frontal sinus disease</td>
<td>Shinichi Haruna</td>
<td>Department of Otorhinolaryngology Dokkyo Medical University, Japan</td>
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<tr>
<td>BS2-3-5</td>
<td>Surgical treatment of frontal sinus carcinoma</td>
<td>Takahiro Asakage</td>
<td>Department of Otolaryngology Tokyo Medical and Dental University, Japan</td>
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## Main Session 2-3

8:40~10:10 Room C (Conference Room 1008)

### Management of Skull Base Malignancies: Know It All

**Moderators:** Franco De Monte (USA)  
Derrick T. Lin (USA)  
Takashi Sugawara (Japan)

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<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
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<tr>
<td>MS2-3-1</td>
<td>Multimodal management outcome of malignancies of the skull base</td>
<td>Franco De Monte</td>
<td>Department of Neurosurgery, M.D. Anderson Cancer Center, USA</td>
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<tr>
<td>MS2-3-2</td>
<td>Quality of life of patients undergoing skull base operations</td>
<td>Dan M. Fliss</td>
<td>Department of Otolaryngology, Head and Neck Surgery and Maxillofacial Surgery, Tel Aviv Sourasky Medical Center, Israel</td>
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<tr>
<td>MS2-3-3</td>
<td>Management of temporal bone cancer</td>
<td>Jong W. Chung</td>
<td>Department of Otorhinolaryngology-Head &amp; Neck Surgery, University of Ulsan College of Medicine, Asan Medical Center, Korea</td>
</tr>
<tr>
<td>MS2-3-4</td>
<td>Extended orbital exenteration for sinonasal malignancy w/ orbital apex extension</td>
<td>Takashi Sugawara</td>
<td>Department of Neurosurgery, Tokyo Medical and Dental University, Japan</td>
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<tr>
<td>MS2-3-5</td>
<td>New insights into perineural spread of cancer</td>
<td>Benedict J. Panizza</td>
<td>Department of Otolaryngology – Head and Neck Surgery, University of Queensland / Princess Alexandra Hospital, Australia</td>
</tr>
<tr>
<td>MS2-3-6</td>
<td>Apparent diffusion coefficient and diffusion-weighted MR imaging are useful for the diagnosis of head and neck malignancies with skull base invasion</td>
<td>Takenori Ogawa</td>
<td>Department of Otolaryngology, Head and Neck Surgery, Tohoku University Graduate School of Medicine, Japan</td>
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Main Session 2-7
13:50~15:20 Room C (Conference Room 1009)

Priority of Simulation in The Education of Skull Base Surgery

Moderators: Christian Matula (Austria)
         Ian J. Witterick (Canada)
         Hirofumi Nakatomi (Japan)

MS2-7-1  Education and training in skull base surgery -AO neuro delivering opportunities
Keynote
Christian Matula
Neurosurgical Department, Medical University of Vienna, Austria

MS2-7-2  Educating future skull base surgeons: Simulation and competency
Ian J. Witterick
University of Toronto, Department of Otolaryngology-Head & Neck Surgery, Canada

MS2-7-3  Surgical simulation of brainstem lesions with 3D-fusion images
Hirofumi Nakatomi
Department of Neurosurgery, University of Tokyo Hospital, Japan

MS2-7-4  Simulation based skills training in skull base surgery
Ashish Suri
Department of Neurosurgery, All India Institute of Medical Sciences, India

MS2-7-5  Preoperative simulation for skull base approach
         - Usefulness and limitation -
Fusao Ikawa
Department of Neurosurgery, Graduate School of Biomedical and Health Sciences, Hiroshima University, Japan

MS2-7-6  Image-guided deep seated glioma surgery
Kazuya Motomura
Department of Neurosurgery, Nagoya University Graduate School of Medicine, Japan

Concurrent Session 2-6
15:50~17:20 Room C (Conference Room 1008)

Petroclival / Posterior Fossa Tumors: Innovative Surgical Strategy

Moderators: Vivian A. Elwell (UK)
         Yoshinobu Seo (Japan)
         Louis A. B. Borba (Brazil)

CS2-6-1  A Transcavernous anterior petrosectomy: An anterolateral perspective of the midclival area
Keynote
Alexander I. Evins
Department of Neurological Surgery, Weill Cornell Medical College, USA

CS2-6-2  The microsurgical treatment of intracranial tumors in the midline skull base
Yugang Jiang
Department of Neurosurgery, Second Xiangya Hospital of Central South University, China

CS2-6-3  Safe strategy of transpetrosal approach for tumors around the petrous apex
Yoshinobu Seo
Department of Neurosurgery, Nakamura Memorial Hospital, Japan

CS2-6-4  Management of the petrosal apex cholesteatoma: Nagoya city university experience
Akira Inagaki
Department of Otolaryngology-Head and Neck Surgery, Nagoya City University, Graduate School of Medical Sciences, Japan

CS2-6-5  Surgical treatment of epidermoid cysts presenting with trigeminal neuralgia
Yoshinori Higuchi
Department of Neurological Surgery, Chiba University Graduate School of Medicine, Japan

CS2-6-6  Role of vertebral artery occlusion in the management of cervical spine tumours
Vivian A. Elwell
Department of Neurosurgery, The National Hospital for Neurology and Neurosurgery, UK
Use of actuator-driven pulsed water jet in meningioma surgery
Toshiki Endo
Department of Neurosurgery, Kohnan Hospital, Japan

Surgery of Middle Skull Base and Posterior Fossa Lesions: Applying the Optimum Approach
Moderators: Keki Turel (India)
            Apio Antunes (Brazil)
            Agung Budi Sutiono (Indonesia)

PP2-3-1  Application of transpetrosal approach in combined simultaneous surgery
Kenichiro Iwami
Department of Neurosurgery, Fukushima Medical University, Japan / Aichi Medical University, Japan

PP2-3-2  Intradural anterior transpetrosal approach for petroclival lesions
Shinya Ichimura
Department of Neurosurgery, Charité-Universitätsmedizin, Germany / Department of Neurosurgery, Shizuoka City Shimizu Hospital, Japan

PP2-3-3  Navigation-guided drilling technique for the skull base surgery in the middle and posterior fossae
Toshihiro Ogiwara
Department of Neurosurgery, Shinshu University School of Medicine, Japan

PP2-3-4  Withdrawn

PP2-3-5  Three subtypes of trigeminal schwannoma in relation with meninges pattern
Agung B. Sutiono
Neurosurgery, Padjadjaran University / Hasan Sadikin Hospital, Indonesia

PP2-3-6  Treatment decision-making for petrous apex and petroclival meningiomas
Tetsuro Sameshima
Department of Neurosurgery, University of Hamamatsu, Japan

PP2-3-7  Reoperation for posterior fossa lesion
Takao Yasuhara
Department of Neurological Surgery, Okayama University Graduate School of Medicine, Japan
Breakfast Seminar 2-4
7:30~8:30 Room D (Conference Room 1001)

Surgery of Pituitary Adenomas and Complication Avoidance
Moderators: Imaduddin N. Kanaan (Saudi Arabia)
Mohammed E. El-Fiki (Egypt)
Maryam Jalessi (Iran)

BS2-4-1 Challenges in management of Cushing disease
Imad N. Kanaan
Department of Neurosciences, King Faisal Specialist Hospital and Research Centre, Saudi Arabia

BS2-4-2 Results of endoscopic resection of acromegaly due to pituitary adenoma
Mohammed E. El-Fiki
Department of Neurosurgery University of Alexandria, Egypt

BS2-4-3 Surgical management of pituitary adenoma: Results in 108 patients treated in a single neurosurgery unit
Ganesh Krishnamurthy
Department of Neurosurgery, Sri Ramachandra University, India

BS2-4-4 Usefulness of endoscopic assisted microsurgery for skull base tumors
Hiroyuki Kinouchi
Department of Neurosurgery, University of Yamanashi, Japan

BS2-4-5 Management of nasal mucosa and olfactory function in an endoscopic skull base surgery
Masayoshi Kobayashi
Department of Otorhinolaryngology-Head and Neck Surgery Mie University Graduate School of Medicine, Japan

BS2-4-6 Can we predict visual impairment based on the size of pituitary tumor?
Maryam Jalessi
Skull Base Research Center, ENT-Head & Neck Surgery Research Center and Department, Hazrat Rasoul Akram Hospital, Iran University of Medical Sciences, Iran

Concurrent Session 2-1
8:40~10:10 Room D (Conference Room 1001)

Update on Cavernous Sinus Surgery
Moderators: Vinko V. Dolenc (Slovenia)
Christianto B. Lumenta (Germany)
Ya-zhuo Zhang (China)

CS2-1-1 Surgery on cavernous sinus lesions
Atul Goel
Department of Neurosurgery, K. E. M. Hospital and Seth G.S. Medical College, India

CS2-1-2 Surgery of the cavernous sinus tumors
Kyu-Sung Lee
Gangnam Severance Hospital, Yonsei University Health System, Department of Neurosurgery, Korea

CS2-1-3 Surgery for cavernous sinus lesions
Ashish Suri
Department of Neurosurgery, All India Institute of Medical Sciences, India

CS2-1-4 Endoscopic endonasal transsphenoidal approach for pituitary adenomas invading the cavernous sinus
Savas Ceylan
Department of Neurosurgery, University of Kocaeli, Turkey

CS2-1-5 Endoscopic treatment of invasive pituitary adenomas in cavernous sinus
Ya-zhuo Zhang
Department of Neurosurgery, Beijing Neurosurgical Institute, China

CS2-1-6 Review of cavernous sinus surgeries in the past five years
Ying Mao
Department of Neurosurgery, Huashan Hospital, Fudan University, China
TOKIBO Luncheon Satellite Session

“The use of Quantum Molecular Resonance Bipolar in the management of skull base and posterior fossa tumors”

Petro-occipito-Trans-Sigmoid Approaches for parapharyngeal tumors with intradural extension

Moderator: Mario Sanna (Italy)

**LS2-3-1** Transcervical approach to parapharyngeal space tumors
Gianluca Piras
Gruppo Otologico, Italy

**LS2-3-2** Transcervical-transmastoid approaches to the parapharyngeal space tumors
Sampath Chandra Prasad
Gruppo Otologico, Italy

**LS2-3-3** Infratemporal Fossa Approach for parapharyngeal tumors involving the jugular foramen
Alessandra Russo
Gruppo Otologico, Italy

**LS2-3-4** The use of Quantum Resonance Bipolar in Endoscopic Endonasal and Open Skull Base Surgery
Paul A. Gardner
University of Pittsburgh School of Medicine, USA

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Concurrent Session 2-2

**Surgery of Giant Vestibular Schwannoma: Conquering the Challenge**

Moderators: Eiji Kohmura (Japan)
Sunil K. Gupta (India)
Apio Antunes (Brazil)

**CS2-2-1** Techniques of facial nerve preservation in large and giant vestibular schwannomas
Suresh Nair
Department of Neurosurgery, Sree Chitra Tirunal Institute for Medical Sciences & Technology, India

**CS2-2-2** Surgical management of giant vestibular schwannoma: A review of 657 cases
Ping Zhong
Department of Neurosurgery, Huashan Hospital, Fudan University, China

**CS2-2-3** Surgery of giant or large vestibular schwannoma
Eiji Kohmura
Department of Neurosurgery, Kobe University Graduate School of Medicine, Japan

**CS2-2-4** ‘Complete extra-arachnoidal dissection’ and ‘Tailored drilling of the internal auditory canal’ – Our techniques for surgery of Giant Vestibular Schwannomas
Sunil K. Gupta
Department of Neurosurgery, PGIMER, India

**CS2-2-5** Surgical results for the treatment of T3 and T4 acoustic schwannomas
Apio Antunes
Department of Neurosurgery, Universidade Federal Do Rio Grande Do Sul, Porto Alegre Medical School, Brazil

**CS2-2-6** Radical removal of giant acoustic neuromas
Antonio Cerejo
Department of Neurosurgery, University of Porto, Portugal

**CS2-2-7** Giant vestibular schwannomas - Nuances and challenges of good neurological outcome based on personal experience of about 1000 operations
Keki Turel
Department of Neurosurgery, Bombay Hospital Institute of Medical Sciences, India

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Panel Discussion 2-1  
15:50~17:20  
Room D (Conference Room 1001)

Robotic Surgery for Skull Base Lesions

Moderators: Jörg Schipper (Germany)  
Akio Morita (Japan)  
Marco D. Caversaccio (Switzerland)

PD2-1-1  Robotic system for neurosurgery  
William Couldwell  
Department of Neurosurgery, University of Utah, USA

PD2-1-2  Validation of precision for a multi-port approach to the cochlea  
Jörg Schipper  
Department of Otorhinolaryngology, University Hospital Düsseldorf, Germany

PD2-1-3  Medical engineering and micro-neurosurgery  
Akio Morita  
Department of Neurological Surgery, Nippon Medical School, Japan

PD2-1-4  Development of robotics neurosurgery in shinshu university  
Tetsuya Goto  
Department of Neurosurgery, Shinshu University School of Medicine, Japan

PD2-1-5  Advances of robotic cochlear implantation in Bern  
Marco D. Caversaccio  
University Hospital Bern, Department of ORL, Head and Neck surgery / Artorgcenter, Switzerland

Proffered Paper 2-4

17:20~18:30  
Room D (Conference Room 1001)

Endoscopic Skull Base Surgery: Progression of Newer Techniques

Moderators: Diego Mazzatenta (Italy)  
Khireddine A. Bouyoucef (Algeria)  
Rahadian I. Susilo (Indonesia)

PP2-4-1  Mapping of cranial nerves in endoscopic endonasal surgery of skull base tumors  
Alexey N. Shkarubo  
Neurooncology, The N.N. Burdenko Neurosurgical Institute, Russia

PP2-4-2  3-Dimensional multimodal imaging and intraoperative navigation in endoscopic skull base surgery  
Sumin Geng  
Department of Neurosurgery, Beijing Tiantan Hospital / Capital Medical University, China

PP2-4-3  Significance of identifying posterior septal arteries with ultrasound doppler  
Norio Ishiwatari  
Department of Neurosurgery, Chiba University, Japan

PP2-4-4  Endoscopic endonasal approach for skull base tumors  
Mohamed S. Saber  
Department of Neurosurgery, Frantz Fanon University Hospital of Bilia, Algeria

PP2-4-5  Pure single nostril Endoscopic Endonasal Transsphenoidal Hypophisectomy surgery: Clinical series of 50 cases  
Rahadian I. Susilo  
Department of Neurosurgery, Faculty of Medicine Airlangga University / Dr Soetomo General Hospital, Indonesia

PP2-4-6  Endoscopic transoral transclival approach to jugular foramen and hypoglossal canal: Anatomy study and clinical implications  
Mingchu Li  
Department of Neurosurgery, Capital Medical University Xuanwu Hospital, China / Skull Base Surgery Center, China International Neuroscience Institute (China-INI), China

PP2-4-7  Withdrawn
Suprasellar and Third Ventricular Tumors: Safer Surgical Management

Moderators: Antonio Cerejo (Portugal)
            Amr M. Safwat (Egypt)

BS2-5-1  Trans lamina terminalis approach to 3rd ventricle in craniopharyngioma
Antonio Cerejo
Department of Neurosurgery, University of Porto, Portugal

BS2-5-2  Avoiding complications of the endoscopic third ventriculostomy
Imane Bersali
Department of Neurosurgery - Frantz Fanon University Hospital of Blida, Algeria

BS2-5-3  Contra lateral approach to supra sellar meningioma
Manas Panigrahi
Department of Neurosurgery, Krishna Institute of Medical Sciences, Hyderabad, India

BS2-5-4  Safe way for management of incompletely excised craniopharyngiomas
Amr M. Safwat
Department of Neurosurgery, Faculty of Medicine, Cairo University, Egypt

Sponsored Satellite Session 1

8:10~8:40 Room E (Conference Room 1002)

MSD Morning Satellite Session

Moderator: Masazumi Fuji (Japan)

SSS2-1-1  Usefulness of intraoperative visual evoked potential and electrooculographic monitoring for anterior skull base and parasellar tumor surgery
Takakazu Kawamata
Department of Neurosurgery, Tokyo Women’s Medical University, Japan

SSS2-1-2  Selection of skull base technique in removing parasellar tumors
Keisuke Maruyama
Department of Neurosurgery, Kyorin University School of Medicine, Japan

Main Session 2-4

8:40~10:10 Room E (Conference Room 1001)

Paragangliomas and Jugular Foramen Tumors: Recent Management

Moderators: Michael Gleeson (UK)
            Nabil Mohamed Abdel Rahman (Egypt)
            Jie Tang (China)

MS2-4-1  Paragangliomas and jugular foramen tumors: Recent management
Michael Gleeson
Department of Neurosurgery, National Hospital for Neurology and Neurosurgery, UK

MS2-4-2  Surgical management of giant glomus jugulars tumors
Luis A. B. Borba
Department of Neurosurgery, Federal University of Parana, Brazil

MS2-4-3  New trends in management of temporal bone paragangliomas
Giovanni Danesi
ENT Department University of Kocaeli, Italy

MS2-4-4  The interdisciplinary management of jugular foramen tumors in Alexandria
Nabil Mohamed Abdel Rahman
Department of Neurosurgery, Alexandria University, Egypt

MS2-4-5  Tumors of the jugular foramen : Diagnosis and management
Ricardo Ramina
Department of Neurosurgery, Neurological Institute of Curitiba, Brazil
MS2-4-6 Microsurgical treatment for non-glomus tumors of jugular foramen
Jie Tang
Department of Neurosurgery, Beijing Tiantan Hospital, China

Concurrent Session 2-3
13:50~15:20 Room E (Conference Room 1003)

Surgery of Craniopharyngioma: How To Excel?
Moderators: Eka J. Wahjoepramono (Indonesia)
Siviero Agazzi (USA)
Saleem Abdulrauf (USA)

CS2-3-1 Lamina terminalis approach for craniopharyngioma
Ibrahim Sbeih
Department of Neurosurgery, Ibn Alhaytham Hospital, Jordan

CS2-3-2 Middle fossa approach to craniopharyngiomas
Siviero Agazzi
University of South Florida Dpt of Neurosurgery, USA

CS2-3-3 Surgery of craniopharyngioma
Eka J. Wahjoepramono
Department of Neurosurgery, Pelita Harapan University, Indonesia

CS2-3-4 Craniopharyngioma: Modernistic view
Samy Youssef
Department of Neurosurgery, University of Colorado, USA

CS2-3-5 Endoscopic endonasal surgery for the management of pediatric craniopharyngioma
Phillip B. Storm
Neurosurgery / Children’s Hospital of Philadelphia / University of Pennsylvania, USA

CS2-3-6 Nuances in supra-sellar tumor surgery
Saleem Abdulrauf
Department of Neurological Surgery, Saint Louis University Center for Cerebrovascular and Skull Base Surgery, USA

Proffered Paper 2-1
15:50~17:20 Room E (Conference Room 1002)

Chordoma Surgery: Favorable Strategies and Outcome
Moderators: Shaan M. Raza (USA)
Kentaro Watanabe (France)
Jacques Morcos (USA)

PP2-1-1 Staged surgical strategy with far medial endoscopic endonasal approach and endoscopy-assisted far lateral transcranial approach for chordoma of the craniovertebral junction and upper cervical spine
Shunya Hanakita
Department of Neurosurgery, Hospital Lariboisiere, University of Paris VII-Diderot, France

PP2-1-2 Endoscopic endonasal surgery for chordomas and chondrosarcomas
Takuma Hara
Department of Neurosurgery, University of Tsukuba, Japan

PP2-1-3 Endoscopic surgery for cranial chordoma and chondrosarcoma compressing brainstem
Hirotaka Hasegawa
Department of Neurosurgery, University of Tokyo, Japan

PP2-1-4 Temporal bone chondrosarcomas (CSAs): Site specific surgical strategies
Shaan M. Raza
Department of Neurosurgery, The University of Texas M.D. Anderson Cancer Center, USA

PP2-1-5 Outcome of clival chordomas with mean follow-up of 10 years
Kiyoshi Saito
Department of Neurosurgery, Fukushima Medical University, Japan
PP2-1-6  Increasing the surgical corridor in deep-seated lesions: The value of the endoscopic assistance
Kentaro Watanabe
Department of Neurosurgery, Lariboisiere Hospital, France

PP2-1-7  Skull base chordomas and chondrosarcomas: Outcomes of multi-disciplinary management
Jawad Yousef
Department of Neurosurgery, Salford Royal NHS Foundation Trust, UK

Proffered Paper 2-5
17:20~18:30 Room E (Conference Room 1002)

Importance of Image-guided Operation: Educational Benefits

Moderators: Luis Fernando M. Silva Jr. (Brazil)
Masazumi Fujii (Japan)

PP2-5-1  Neuronavigation and ICG angiography for the posterior transpetrosal approach
Kazuhiko Kurozumi
Department of Neurosurgery, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan

PP2-5-2  A novel method for imaging white matter pathways in distorted brain anatomies that combines MRI tractography with visual evoked potentials
Say Ayala-Soriano
Department of Neurosurgery, University College London, Institute of Child Health / Great Ormond Street Hospital / Department of Neuroimaging, Institute of Child Health, UK

PP2-5-3  Image-guided skull base surgery, from surgical simulation toward navigation
Masazumi Fujii
Department of Neurosurgery, Fukushima Medical University, Japan

PP2-5-4  Capturing skull and brain surface by kinect v2 for brain-shift simulated by GPU
Hiroshi Noboro
Osaka Electro-Communication University, Japan

PP2-5-5  Withdrawn

PP2-5-6  A training model for ICA in endoscopic endonasal surgery
Jun Muto
The Ohio State University, Department of Neurological Surgery, USA / Keio University School of Medicine, Department of Neurosurgery, Japan

PP2-5-7  Sylvian aesthetics in skull base
Ismail H. Aydin
Department of Neurosurgery, Istanbul Aydin University, Turkey
Japanese Session 2-1
7:30~8:30 Room F (Conference Room 801-2)

Different Approaches for Vascular Surgery (Session in Japanese)
Moderators: Fusao Ikawa (Japan)
              Kentaro Mori (Japan)

JS2-1-1 2 cases of giant aneurysms operated via transpetrosal approach in posterior fossa
Kazumi Ohmori
Department of Neurosurgery/ Stroke Center, Nishinomiya Watanabe Cardiovascular Center, Japan

JS2-1-2 Treatment for Unruptured Aneurysms of Basilar Artery - Superior Cerebral Artery via Anterior Temporal Approach
Go Matsuoka
Department of Neurosurgery, Tokyo Women's Medical University, Japan

JS2-1-3 The surgical strategy for parasellar vascular lesions via transzygomatic subtemporal approach
Yasuo Hironaka
Department of Neurosurgery, Nara Medical University, Japan

JS2-1-4 Direct trapping for right PICA dissecting aneurysm with left transcondylar approach: A case report
Tomoyuki Nakano
Department of Neurosurgery, Tokyo Medical and Dental University, Japan

JS2-1-5 Surgical strategy of AVMs in the posterior fossa using fruitful 3-dimensional simulation
Hisaharu Gotou
Department of Neurosurgery, Yamaguchi University, Japan

JS2-1-6 Surgical Treatment and outcome for Paraclinoid Aneurysms
Toshiyuki Tsuboi
Department of Neurosurgery, Teishinkai Hospital, Japan

JS2-1-7 Osteoplastic procedure for frontotemporal craniotomy
Yasuhiro Sanada
Department of Neurosurgery, Kindai University, Japan

Japanese Session 2-2
8:40~10:10 Room F (Conference Room 801-2)

Endoscopic Surgery/Suprasellar Tumors: Advanced Treatment (Session in Japanese)
Moderators: Amami Kato (Japan)
              Hiroyuki Akatsu (Japan)

JS2-2-1 The 2 cases undergoing endoscopic extended TSS with reconstruction of sellar floor using nasal floor flap
Yuri Aimi
Department of Neurosurgery, Yokkaichi Municipal Hospital, Japan

JS2-2-2 Endoscopic transsphenoidal surgery: Evolution of surgical technique and equipment
Shohei Kohno
Department of Neurosurgery, Ehime University, Japan

JS2-2-3 Radiologic anatomy and evaluation of the ophthalmic artery penetrating the optic strut
Bunsho Asayama
Department of Neurosurgery, Nakamura Memorial Hospital, Japan

JS2-2-4 Reconstruction of the skull base after endoscopic transsphenoidal surgery in our institution
Takahito Fukui
Department of Neurosurgery, Nakamura Memorial Hospital, Japan

JS2-2-5 Surgical simulation of endoscopic endonasal anterior skull base surgery using 3D head model
Satoru Kodama
Department of Otolaryngology, Head and Neck Surgery, Oita University Faculty of Medicine, Japan

JS2-2-6 Suprasellar meningiomas: Contralateral extended subfrontal approach
Yoshihiro Minamida
Department of Neurosurgery, Sunagawa City Medical Center, Japan
Controversies in Skull Base Surgery (Session in Japanese)

Moderators: Yoshinori Higuchi (Japan)
             Yasushi Shin (Japan)

JS2-3-1 A case of huge atypical meningioma in the middle fossa resected by intentional multi-staged surgery
         Kohei Kanaya
         Department of Neurosurgery, Shinshu University School of Medicine, Japan

JS2-3-2 Cerebellopontine angle tumor presenting with cranial nerve hyperactive dysfunction
         Yoshinori Higuchi
         Department of Neurological Surgery, Chiba University Graduate School of Medicine, Japan

JS2-3-3 The concept and the surgical techniques for the minimally invasive surgery for the craniocervical region
         Yasushi Shin
         Department of Neurosurgery, Osaka Police Hospital, Japan

JS2-3-4 The efficacy of the drainage via mastoidectomy for cerebellar abscess: A case report
         Yumiko Okada
         Department of Neurosurgery, Murata Hospital, Japan

JS2-3-5 Closure of opened mastoid aircell by pediculated muscle flap in the lateral suboccipital craniotomy
         Tetsuya Goto
         Department of Neurosurgery, Shinshu University School of Medicine, Japan

JS2-3-6 A case of facial nerve reconstruction using vascularized bi-directional nerve graft
         Nobuhiro Konno
         Department of Otolaryngology, Hakodate Municipal Hospital, Japan

JS2-3-7 Clinical analysis of squamous cell carcinoma of the ethmoid sinus
         Takeharu Ono
         Department of Otolaryngology-Head and Neck Surgery, Kurume University School of Medicine, Japan

Transcranial Skull Base Surgery: Improvement for the Better Outcome

Moderators: Qing Xie (China)
             Tetsuro Sameshima (Japan)
             Ashish Suri (India)

PP2-2-1 Trans-eyelid approach in treating meningioma of anterior and middle cranial base
         Qing Xie
         Huashan Hospital of Fudan University, China / Department of Neurosurgery, Fudan University, China

PP2-2-2 Middle infratemporal fossa keyhole approach for the parapharyngeal tumors
         Yoichi Nonaka
         Department of Neurosurgery, Shin-Yurigaoka General Hospital, Japan

PP2-2-3 Effect of fibrin glue injection into the cavernous sinus on the venous drainage
         Terushige Toyooka
         Department of Neurosurgery, National Defense Medical College, Japan

PP2-2-4 Anatomical and clinical findings of modified orbitozygomatic craniotomy
         Toshiaki Kodera
         Department of Neurosurgery, University of Fukui, Japan

PP2-2-5 Trans-SOF approach for paraclinoid lesions: Operative tips and cadaveric study
         Naoki Otani
         Department of Neurosurgery, National Defense Medical College, Japan
PP2-2-6  Evaluation of variation in the course of the facial nerve in acoustic neuromas
Tetsuro Sameshima
Department of Neurosurgery, University of Hamamatsu, Japan

PP2-2-7  Radical resection of craniopharyngioma via the extradural temporopolar approach
Nakao Ota
Department of Neurosurgery, Sapporo Teishinkai Hospital, Japan
Panel Discussion 2-3
17:20~18:30 Room F (Conference Room 801-2)

Facial Nerve Schwannoma: Surgical Techniques

Moderators: Jong Woo Chung (Korea)
           Yang-Sun Cho (Korea)
           In Seok Moon (Korea)

PD2-3-1 Common management strategies of Facial Nerve Schwannomas
          Romain Kania
          Otorhinolaryngology Head Neck Surgery, Paris Sorbonne University, France

PD2-3-2 Facial nerve schwannoma-consideration for the best outcome
          Jong Woo Chung
          Otorhinolaryngology Head & Neck Surgery, University of Ulsan College of Medicine, Asan Medical Center,
          Korea

PD2-3-3 Management of facial nerve tumor
          Yang-Sun Cho
          Department of Otolaryngology, Sungkyunkwan University, Samsung Medical Center, Korea

PD2-3-4 Who is the best candidate for stripping technique in the facial nerve schwannoma?
          In Seok Moon
          ENT, Yonsei University College of Medicine, Korea