

INTERNATIONAL MENINGIOMA SOCIETY



# International Meningioma Society Meeting

8-11 May 2025 Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



www.imsistanbul2025.org





Foreword



## INTERNATIONAL MENINGIOMA

# International Meningioma Society Meeting 8-11 May 2025

Hilton Istanbul Bosphorus Hotel, Istanbul – Türkive



# FOREWORD



Meningioma is the most common primary intracranial tumor and its care takes up a significant of a neurosurgeons daily practice. The motivation to end the pain and suffering of the patients and the continuous emerging of new technical problems has fired a continuous but always fresh interest in understanding the biology of meningiomas since the early days of neurosurgery. However; after decades of research meningiomas still try to puzzle and surprise the caregivers. Since the beginning of the 1990's a natural initiative emerged to bring international neurosurgeons, radiation oncologists, basic research scientists and epidemiologists together in meetings to join forces. These inspiring meetings drew the attention of world known distinguished academicians, who further improved the scientific diversity and sophistication of the international meetings. During the fifth meeting past presidents of former meetings came together and decided to form an "International Meningioma Society", which would organize the effort on meningioma research and care, ensure the regularity of the meetings and promote international communication and collaboration. "The International Meningioma Society" was formed in September 2008 and aims at advancing the art of science of the field of clinical care and research in meningiomas and thereby promote the best possible care for patients suffering from meningiomas. I am grateful to all senior neurosurgeons who have spent a great effort in meningioma research and care and I am inviting everyone with an interest on meningiomas to join forces in this Society.

#### Prof. Suresh Nair

President of International Meningioma Society



Welcome Messages



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



## WELCOME MESSAGES





Respected Member of the International Meningioma Society,

With this mail we wish to invite you to the 13<sup>th</sup> International Meningioma Society meeting which will take place on May 8-11<sup>th</sup> in Istanbul-Turkey.

The International Meningioma Society was formed to foster advancements in the clinical care and research of meningiomas, aiming to provide the best possible care. The Society was established in September 2008 following a series of inspiring meetings that began with the first "International Symposium on Skull Base Meningiomas" which was organized by Prof Rudolf Fahlbusch in Bamberg-Germany in 1992 and the "First international workshop on Surgery of the intracranial venous system" organized by Prof Akira Hakuba in Osaka-Japan in 1994. These gatherings brought together neurosurgeons, radiation oncologists, basic research scientists and epidemiologists from all around the World to collaborate on understanding meningiomas better. The decision to form a society was made during the fifth meeting of these international gatherings, highlighting a collective desire to organize efforts in meningioma research and care, ensure the continuity of these important meetings, and promote international communication and collaboration. Obviously, these meetings of the International Meningioma Society form the glue that holds together the spirit of the society. Keeping with this tradition, this 13th IMS meeting will feature all the novelties in Meningioma Treatment and Research that even the most experienced of the field are eagerly waiting for.

The meeting is supported, among many prestigious Societies and Academies, by the Rhoton Society, which is organizing a pre-meeting course on "intracranial venous system", to honor the tradition of former Meningioma Society meetings. Among the supporting international societies are the World Academy of Neurological Surgery, the Turkish Neurosurgical Society, the Turkish Neurosurgical Academy, and the Southeast Europe Neurosurgical Society.

In addition to a full scientif ic program, the 2025 Istanbul meeting will take place in one of the most scenic and chic Hotels in Istanbul, the Hilton Bosphorus. The meeting will take place during the most enjoyable spring bloom season of Istanbul and will offer a rich social program.

We will be honored to have you with us in this one in a lifetime event.

**Prof. Koray Özduman** Scientif ic Chair **Prof. M. Necmettin Pamir** *Congress President* 



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



#### WELCOME MESSAGES



Dear Colleagues,

It is my honor and privilege to invite you to "Rhoton 3D Course: Microsurgical and Endoscopic Anatomy and Approaches for Skull Base Meningiomas with special emphasis on Cerebral Venous System" on the 8<sup>th</sup> of May 2025.

Although the title of the initial meetings was "Cerebral Venous System and Meningiomas", after the establishment of the International Meningiomas Society, the focus shifted towards Skull Base Surgery and Meningiomas. In this regard, our premeeting course primarily aims to honor the roots of the Rhoton's influence on microsurgical anatomy of the skull base and reemphasize the importance of relevant cerebral venous network. Our additional objective is to follow Dr. Rhoton's goal to improve the neurosurgical care of patients with skull base pathologies by delineating anatomical step-by-step 3D dissections for complex skull base approaches to the neurosurgeons.

This course follows the neuroanatomical heritage paved by Prof. Albert L. Rhoton, a great researcher and devoted educator, to extend the imperative knowledge of endoscopic and microsurgical anatomy for the surgery of the Skull Base. The course will be beneficial for not only neurosurgeons specializing in the skull base field, but for all neurosurgeons and residents looking to expand their knowledge on skull base surgery. The course will be held on the 8<sup>th</sup> of May 2025 followed by the Congress on Meningiomas, in the city of Istanbul. As the organizing committee and members of the International Meningioma Society, it would be our pleasure to see you join us in our lovely city with its rich historical heritage where the Asian and European parts of Turkey meet.

Best regards, **Prof. Dr. Necmettin Tanrıöver** *Course Director* 





# INTERNATIONAL MENINGIOMA SOCIETY





## International Meningioma Society

#### **International Meningioma Society**

Suresh Nair, President

Jacques Morcos, President Elect

Basant K. Misra, Vice President

Florian Roser, Secretary - Treasurer

Vladimir Benes, Past President

#### **Past Presidents**

Takeshi Kawase 2006-2008 William T. Couldwell 2014-2016

Peter Mc Black 2008-2010

M. Necmettin Pamir 2010-2012

M. Necmettin Pamir 2012-2014

Kenji Ohata 2016-2018

Michael McDermott 2018-2020

> Vladimir Benes 2020-2023



Committees





#### Committees

#### **Congress President**

M. Necmettin Pamir

#### **Scientific Chair**

Koray Özduman

#### **International Scientific Advisory Board**

Ossama Al-Mefty Miguel Arraez Vladimir Benes William Couldwell Murat Günel Imad N. Kanaan Tiit Mathiesen Michael McDermott Torstein Melling Basant K. Misra Jennifer Moliterno Kenji Ohata Lukas Rasulic Thomas Santarius

#### Local Organizing Committee

Nejat Akalan Emel Avcı Baran Bozkurt Savaş Ceylan Hakan Emmez Uygur Er Abuzer Güngör Türker Kılıç Selçuk Peker İhsan Solaroğlu Zeki Şekerci Necmettin Tanrıöver



Faculty



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



(In Alphabetical Order)

#### Faculty

Ufuk Abacıoğlu, Türkiye Mathew Abraham, India Feridun Acar, Türkiye Güliz Acker, Germany Akın Akakın, Türkiye Nejat Akalan, Türkiye Kaya Aksoy, Türkiye Göktuğ Akyoldaş, Türkiye Ossama Al-Mefty, USA Nur Altınörs, Türkiye Kenan Arnautovic, USA Miguel Arraez, Spain Cem Atabey, Türkiye Emel Avcı, Türkiye Oğuz Baran, Türkiye Serhat Baydın, Türkiye Pınar Kuru Bektaşoğlu, Türkiye Vladimir Benes, Czech Republic Mustafa Berker, Türkiye Hemant Bhartiya, India Hüseyin Biçeroğlu, Türkiye Peter Black, USA Baran Bozkurt, Türkiye Melih Bozkurt, Türkiye Viktor Braun, Germany Savaş Ceylan, Türkiye Malay Chakraborty, India Benedicto Oskar Colli, Brasil William Couldwell, USA Şükrü Çağlar, Türkiye Emrah Çeltikçi, Türkiye Orhun Mete Çevik, Türkiye

Musa Çırak, Türkiye Cengiz Cokluk, Türkiye Adnan Dağçınar, Türkiye İhsan Doğan, Türkiye Ayça Erşen Danyeli, Türkiye Kuntal Kanti Das, India Alp Dincer, Türkiye İlhan Elmacı, Türkiye Hakan Emmez, Türkive Uygur Er, Türkiye Rudolf Fahlbusch, Germany Stefan Florian, Romania Murat Geyik, Türkiye Ethem Göksu, Türkiye Murat Gunel, USA Bülent Güçlü, Türkiye Abuzer Güngör, Türkiye Mehmet Sabri Gürbüz, Türkiye Mehmet Hacıhanefioğlu, Türkiye Şahin Hanalioğlu, Türkiye Ömer Batu Hergünsel, Türkiye Zeynep Hüseyinoğlu, Türkiye Semra Işık, Türkiye Ahmet İlkay İşıkay, Türkiye Harsh Jain, India Ali Kafadar, Türkiye Gökmen Kahiloğulları, Türkiye Serdar Kahraman, Türkiye Michel Kalamarides, France Imad Kanaan, Saudi Arabia Ali Karadağ, Türkiye Agadadash Kasymov, Azerbaijan



INTERNATIONAL MENINGIOMA SOCIETY

# International Meningioma Society Meeting

8-11 May 2025 Hilton Istanbul Bosphorus Hotel, Istanbul — Türkiye



(In Alphabetical Order)

#### Faculty

Hayri Kertmen, Türkiye Türker Kılıç, Türkiye Hasan Kocaeli, Türkiye Kenan Koç, Türkiye Said Koçyiğit, Türkiye Douglas Kondziolka, USA Barış Küçükyürük, Türkiye Carolina Martins, Brazil Tiit Mathiesen, Denmark Michael McDermott, USA Torstein R. Meling, Denmark Girish Menon, India Basant K. Misra, India Jennifer Moliterno, USA Jacques Morcos, USA Bahaeddin Muhsen, Saudi Arabia Surath S.K Munasinghe, Sri Lanka Suresh Nair, India Hirofumi Nakatomi, Japan Anil Nanda, USA Kenji Ohata, Japan Ibrahim Omerhodzic, Bosnia-Herzegovina Koray Özduman, Türkiye Erkin Özgiray, Türkiye Barış Özöner, Türkiye Ünal Özüm, Türkiye Necmettin Pamir, Türkiye **Dilip Panikar, India** Selcuk Peker, Türkiye Raghavendran Radhakrishnan, India Lukas Rasulic, Serbia Fausto Rodriguez, USA

Florian Roser, United Arab Emirates Akın Sabancı, Türkiye Hakan Sabuncuoğlu, Türkiye Burak Sade, Türkiye Tomislav Sajko, Croatia Madiid Samii, Germany Thomas Santarius, UK Zihni Sanus, Türkiye Arun Srivastava, India İhsan Solaroğlu, Türkiye Figen Söylemezoğlu, Türkiye Uwe Spetzger, Germany Krish Sridhar, India Ulrich Sure, Germany Zeki Şekerci, Türkiye Sait Şirin, Türkiye Necmettin Tanrıöver, Türkiye Özgür Taşkapılıoğlu, Türkiye Bekir Tuğcu, Türkiye Constantin Tuleasca, Switzerland Keki Turel, India Uğur Türe, Türkiye Mehmet Erhan Türkoğlu, Türkiye Hasan Çağlar Uğur, Türkiye Ece Uysal, Türkiye Mustafa Uzan, Türkiye Harun Yaşar, Türkiye Tevfik Yılmaz, Türkiye Gelareh Zadeh, USA İbrahim Ziyal, Türkiye



Pre-Meeting Course

Dedicated to Prof. Albert Rhoton Jr.





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# 8 May 2025 Thursday

# HALL B

#### PRE-MEETING COURSE Course Director: Necmettin Tanriöver

#### Faculty

Carolina Martins, Akın Akakın, Oğuz Baran, Serhat Baydin, Baran Bozkurt, Hüseyin Biçeroğlu, Orhun Mete Çevik, Abuzer Güngör, Ali Karadağ, Barış Küçükyürük

#### 10.00-10.10 Opening Remarks

Microsurgical Neuroanatomy and *Necmettin Pamir, Necmettin Tanriöver* Skull Base Approaches

#### 10.10-10.40 One-Piece vs. Two-Piece Orbitozygomatic Craniotomies: Barış Küçükyürük Microsurgical Anatomy of the Orbital Fissures and the Cavernous Sinus

10.40-11.10 Transylvian and Subtemporal Routes to Perimesencephalic *Serhat Baydin* Cisterns: Cranio-Orbitozygomatic Pretemporal Transcavernous and Anterior Transpetrosal (Kawase) Modifications **3D Presentation** 

#### 11.10-11.30 Coffee Break

11.30-12.00	Microsurgical Anatomy of the Lateral and III. Ventricle: Anterior Interhemisferic Transcallosal-Interforniceal and Transchoroidal Approaches - <b>3D Presentation</b>	Baran Bozkurt
12.00-12.15	Microsurgical Anatomy of the Deep Venous System and the Basal Vein: Implications for Skull Base Surgical Approaches <b>3D Presentation</b>	Orhun Çevik
12.15-12.30	Microsurgical Anatomy of the Superior Petrosal Venous Complex: Implications for Subtemporal Transtentorial and Retrosigmoid Approaches – <b>3D Presentation</b>	Abuzer Güngör



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HALL B

12.30-13.00	Endoscopic Surgical Anatomy of the Ventral Skull Base: Extensions and Limitations of EESB Approaches <b>3D Presentation</b>	Necmettin Tanrıöver
13.00-13.30	Lunch	
13.30-14.00	<b>Keynote Lecture</b> Microsurgical Anatomy of the Dural Arteries: Implications in Surgery of Skullbase Meningiomas	Carolina Martins
14.00-14.30	Microsurgical Anatomy of the Cerebellum and the Brain Stem with Special Emphasis on Fourth Ventricle Lateral Recess: Modifications of the Telovelar Approach <b>3D Presentation</b>	Akın Akakın
14.30-15.00	Cerebellopontine Angle and Its Neurovascular Relationships: Temporal Bone Anatomy in Relation to Retrosigmoid Approach <b>3D Presentation</b>	Oğuz Baran
15 00-15 20	Coffee Break	

15.20-15.50	Far-Lateral Approach and Its Paracondylar Mo <b>3D Presentation</b>	odifications	H	lüseyin Biçeroğlu
15.50-16.20	Microsurgical Anatomy and Approaches to the Foramen - <b>3D Presentation</b>	e Jugular		Ali Karadağ
16.20-16.30	Closing Remarks Microsurgical Anatomy for Accurate, Safe and Gentle Surgery	Necmettin	Tanrıöver,	Carolina Martins



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## 8 May 2025 Thursday

# HALL B

#### 18.00 Opening Ceremony and Welcome Message

Prof. Koray Özduman *Scientific Chair* 

Prof. M. Necmettin Pamir Congress President

Prof. Suresh Nair President of International Meningioma Society

Prof. Hayri Kertmen President of Turkish Neurosurgical Society

Presentation of Gold Medal of the International Meningioma Society

Prof. Suresh Nair

Prof. Madjid Samii

18:30 Welcome Cocktail

Hilton Bosphorus Hotel, Şadırvan Terrace



Scientific Program



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 9 May 2025 Friday

# HALL A

#### MAIN SESSION 1 Chairmen: Suresh Nair, Necmettin Pamir

	Introduction	Necmettin Pamir
07.30-08.15	Honorary Lecture: Surgical Treatment of Meningiomas, What we Have Learned in More Than 50 Years	Madjid Samii
08.15-08.30	Significance of "Meningioma Society"	Rudolf Fahlbusch
08.30-08.45	Surgery of Cavernous Sinus Meningiomas	Kenji Ohata
08.45-09.00	From Normal Meninges to Meningiomas	Michel Kalamarides
09.00-09.15	Histological Correlations of Molecular Findings in Meningiomas	Ayça Erşen Danyeli
09.15-09.30	Environmental, Genetic, and Epidemiological Issues with Meningiomas	Anil Nanda
09.30-09.45	Clinical Impact of Meningioma Microenvironment	Tiit Mathiesen
09.45-10.00	Molecular Corraalates of Aggressive and High Grade Meningiomas	Hirofumi Nakatomi
10.00-10.15	Ectopic Meningiomas of The Peripheral Nervous System: Diagnosis and Management	Lukas Rasulic
10.15-10.30	Optical Genome Mapping: A State of the Art Tool for the Evolution of Meningioma	Michael McDermott
10.30-10.45	Discussion	
10.45-11.15	Coffee Break	



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 9 May 2025 Friday

# HALL A

#### SESSION 1 Chairmen: William Couldwell, Kaya Aksoy

11.15-11.25	Tailored Microsurgical Approach to TSM	Imad Kanaan
11.25-11.35	Results of the International TSM Study and Implications for Real-World Neurosurgery	Michael McDermott
11.35-11.45	What Needs to be Published on Meningiomas in 2025: Insights from an Editor in Chief	Florian Roser
11.45-11.55	Microsurgical Treatment of TSM	Barış Küçükyürük
11.55-12.05	TSM and Challenging Factors for Extradural Anterior Clinoidectomy	Emel Avcı
12.05-12.15	Visual Detoriation Following Surgery for Suprasellar Men	ningiomas Girish Menon
12.15-12.25	Suprasellar Meningiomas: Approach Selection Based on Tumor Texture	Florian Roser
12.25-12.35	Anterior Clinoidectomy in Periclinoidal Meningiomas	Burak Sade
12.35-12.45	Tuberculum Sella Meningiomas	Stefan Florian
12.45-12.55	Operative Approach to Skull Base Meningiomas – Learning Curve	Raghavendran Radhakrishnan
12.55-13.05	Suprasellar Meningiomas	Dilip Panikar
13.05-13.15	Discussion	
13.15-14.30	Lunch Break	



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 9 May 2025 Friday

# HALL B

#### SESSION 2 Chairmen: Kenji Ohata, Hakan Emmez

11.15-11.25	Updates on Skull Base Surgery for Foramen Magnum Meningiomas	Torstein Meling
11.25-11.35	Craniocervical Junction Meningiomas	Vladimír Beneš
11.35-11.45	Microsurgery for Foramen Magnum Meningiomas	Malay Chakraborty
11.45-11.55	Far-Lateral Approach for Foramen Magnum Meningiomas	Serhat Baydın
11.55-12.05	Pre-Foramen Magnum Meningiomas	Şükrü Çağlar
12.05-12.15	Microsurgery of FMM	Baran Bozkurt
12.15-12.25	Definitions of Posterior Fossa Meningioma Subtypes	İhsan Doğan
12.25-12.35	Surgical Treatment of Foramen Magnum Meningiomas	Ethem Göksu
12.35-12.45	Infratonsillar Approach for Foramen Magnum Meningiomas	Krish Sridhar
12.45-12.55	Craniocervical Meningiomas	Tomislav Sajko
12.55-13.05	Foramen Magnum Meningiomas	Stefan Florian
13.05-13.15	Discussion	

13.15-14.30 Lunch Break

13.45 AC Meeting of IMS



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# 9 May 2025 Friday

# HALL A

#### SESSION 3 Chairmen: Florian Roser, Nejat Akalan

14.30-14.40	Endoscopic Resection of TSM	Savaş Ceylan
14.40-14.50	Pitfalls and Pearls of Endoscopy in Skull Base Meningiomas	Hüseyin Biçeroğlu
14.50-15.00	Endoscopic Management of Skull Base Meningiomas	Necmettin Tanrıöver
15.00-15.10	Endonasal Endoscopic Approaches for Anterior Fossa Meningiomas	Gökmen Kahiloğulları
15.10-15.20	Transorbital Endoscopic Approach to Sphenoorbital Meningiom	as Emrah Çeltikçi
15.20-15.30	Complication Avoidance in Endoscopic Anterior Fossa Meningioma Surgery	Ahmet İlkay Işıkay
15.30-15.40	Extradural Anterior Clinoidectomy in Paraselllar Meningiomas	Mehmet Sabri Gürbüz
15.40-15.50	Surgical Treatment of Anterior Clinoidal Meningiomas	Göktuğ Akyoldaş
15.50-16.00	Microsurgical Management of Anterior Skull Base Meningiomas	Malay Chakraborty
16.00-16.10	Single Piece Clinioidectomy: A Novel Technique for Rapid and Effective Control of the Proximal Carotid	Mathew Abraham
16.10-16.20	Natural History of Meningiomas in NF2 Cases	Semra Işık
16.20-16.30	Discussion	

16.30-17.00 Coffee Break



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# HALL B

#### **SESSION 4** Chairmen: Anil Nanda, Emel Avcı

14.30-14.40	Paramedian Supracerebellar Transtentorial Approach fo Incisural Meningiomas	r <i>Uğur Türe</i>
14.40-14.50	Prone Position and Anatomical Aspects of Tentorium in Supracerebellar Transtentorial Approach To Mesial Tem Region Meningiomas	
14.50-15.00	Interhemispheric Approach to Falx Meningiomas: Anatomical Considerations and Microsurgical Subtletie	<i>Uwe Spetzger</i> s
15.00-15.10	Falcine and Parasagittal Meningiomas	Kenan Arnautovic
15.10-15.20	Tentorial Incisural Meningiomas	Girish Menon
15.20-15.30	Falcotentorial Meningiomas	Hasan Kocaeli
15.30-15.40	Surgical Treatment of Falcotentorial Meningiomas	İlhan Elmacı
15.40-15.50	Pineal Region Meningiomas	Türker Kılıç
15.50-16.00	Surgical Approach Selection in Tentorial Meningiomas	Ece Uysal
16.00-16.10	Natural History of Meningiomas at Different Locations	Ömer Batu Hergünsel
16.10-16.20	Meningioma Mimics-The surprises	Raghavendran Radhakrishnan
16.20-16.30	Discussion	

16.30-17.00 Coffee Break



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 9 May 2025 Friday

# HALL A

#### SESSION 5 Chairmen: Vladimír Beneš, Musa Çırak

17.00-17.10	Resectability of Sphenoorbital Meningioma: Experience in 95 cases	William Couldwell
17.10-17.20	Medial SWM: Towards Total Convexitisation	Mathew Abraham
17.20-17.30	Complex SWM: Surgical Challenges and Solutions	Agadadash Kasymov
17.30-17.40	Medial SWM: Avoiding Problems is the Key	Krish Sridhar
17.40-17.50	Surgical Approach to Medial SWM Encasing Proximal Arteries	Erkin Özgiray
17.50-18.00	SWM: Outcome After Microsurgical Management: Clinical Review of 75 Cases	Hemant Bhartiya
18.00-18.10	Minimal Invasive Transorbital Approach for Cavernous Sinus Meningiomas	Ali Karadağ
18.10-18.20	Microsurgical Treatment of Giant Frontobasal Meningiomas	Erhan Türkoğlu
18.20-18.30	Association Between Preoperative Flair Hyperintensity and Postoperative Diffusion Changes and Morbidity in Meningioma Surgery	Şahin Hanalioğlu
18.30-18.40	Current Insigts into Pathogenesis and Management of Pediatric Meningiomas	Nejat Akalan
18.40-18.50	Medial SWM: How Much is Too Much?, How Safe is Safe?	Arun Srivastava
18.50-19.00	Discussion	



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 9 May 2025 Friday

# HALL B

#### SESSION 6 Chairmen: Tiit Mathiesen, Koray Özduman

17.00-17.10	Long-Term Outcome of GK for Meningiomas	Douglas Kondziolka
17.10-17.20	Long-Term Results of Combined Microsurgery and Gama Knife Surgery in Intracranial Meningiomas: An Experience with 243 Cases	Basant K. Misra
17.20-17.30	Radiosurgery for Atypical Meningiomas	Selçuk Peker
17.30-17.40	Analyses of Recurrences after Gama Knife for Meningioma Surgery	Koray Özduman
17.40-17.50	Advantages of Adjuvant Radiosurgery in Skull Base Meningiomas: Non-competitive but Complementary	Hakan Emmez
17.50-18.00	DOTATOC, PET-Guided SRS for Meningiomas	Güliz Acker
18.00-18.10	Radiotherapy of Meningiomas: Current Scientific Evidence	Ufuk Abacıoğlu
18.10-18.20	Extracorporeal Irradiation of Tumorous Calvaria (EITC) in Meningiomas	Thomas Santarius
18.20-18.30	Re-SRS for Recurrence of Benign Meningiomas after Initial SRS	Sait Şirin
18.30-18.40	Single Fraction Hypo-Fractionated SRS for Perioptic Meningiomas	Constantin Tuleasca
18.40-18.50	Management of Multiple Meningiomas	Oğuz Baran
18.50-19.00	Discussion	



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 10 May 2025 Saturday

# HALL A

#### MAIN SESSION 2 Chairmen: Basant K. Misra, Zeki Şekerci

	Introduction	Necmettin Pamir
07.30-08.15	Honorary Lecture: Future of Meningioma Microsurgery	Ossama Al-Mefty
08.15-08.30	Meningioma Research: The Editor's Perspective	Douglas Kondziolka
08.30-08.45	Molecular Oncogenesis of Meningiomas	Murat Gunel
08.45-09.00	Clinical Correlations of Molecular Findings in Meningiomas	Jennifer Moliterno
09.00-09.15	Radiation in Management of Grade 2 (Atypical) Meningioma	William Couldwell
09.15-09.30	Molecular Predictors of Response to surgery and Radiation Therapy in Meningiomas	Gelareh Zadeh
09.30-09.45	Posterior Interhemispheric Trans-parietooccipital Fissure Approach to Atrial Meningiomas	Uğur Türe
09.45-10.00	Surgery for Foramen Magnum Meningiomas	Miguel Arraez
10.00-10.30	"Vinco Dolenc" Lecture: Introduction Surgical Treatment of Cavernous Sinus Meningiomas	Necmettin Pamir Jacques Morcos
10.30-10.45	Discussion	

10.45-11.15 Coffee Break



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 10 May 2025 Saturday

# HALL A

#### **SESSION 7** Chairmen: Imad Kanaan, Türker Kılıç

11.15-11.25	The Paths for Aggressive Meningioma Development	Michel Kalamarides
11.25-11.35	Simpson and Beyond: Prediction of Recurrence of Meningioma	s Tiit Mathiesen
11.35-11.45	Definition of High Risk Meningiomas	Koray Özduman
11.45-11.55	Evolution of the "Atypical Meningioma" Concept	Fausto Rodriguez
11.55-12.05	The Rostrocaudal Gradient in Meningioma Biology	Pınar Kuru Bektaşoğlu
12.05-12.15	Is the Incidence of Atypical Meningiomas Increasing Over The Years?	Harun Yaşar
12.15-12.25	Treatment Strategies in Atypical Meningiomas	Zeki Şekerci
12.25-12.35	Is Size a Reliable Predictor of a High Grade Meningiomas	Said Koçyiğit
12.35-12.45	Anaplastic Meningiomas: What Have We Learned in the Last 2 Decades and Our Patients any Better as a Result	Thomas Santarius
12.45-12.55	Management of Recurrent Meningiomas	Nur Altınörs
12.55-13.05	High-throughtout Combinatorial Drug Screening of FDA-approved Drugs Identifies Potential Synergistic Drug Partners for the Treatment of Aggressive Meningiomas	Viktor Braun
13.05-13.15	Surgical Management of Hypervascular Meningiomas	Tevfik Yılmaz
13.15-13.30	Discussion	
13.30-14.30	Lunch Break	



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



# 10 May 2025 Saturday

# HALL B

# SESSION 8

Chairmen: Michael McDermott, Şükrü Çağlar

11.15-11.25	Functional Preservaation Surgery for CPS Meningiomas Utilizing "Visualization of the Feeding Center, Pial Feeder and Neural Function	Hirofumi Nakatomi
11.25-11.35	Arachnoid and Cisterns in Skull Base Meningiomas	<i>Vladimír Bene</i> š
11.35-11.45	The Enigma of Parasagittal Meningioma	Keki Turel
11.45-11.55	Staged `intentional` bridging vein ligation: A Safe Strategy for Gaining Wide Access to Skull Base Meningiomas	Kenji Ohata
11.55-12.05	Vein Protection Techniques in Meningioma Surgery	Abuzer Güngör
12.05-12.15	Vascular Complications in Meningioma Surgery	Hasan Çağlar Uğur
12.15-12.25	Bridging Vein protection in Falx Meningiomas	Murat Geyik
12.25-12.35	Venous Infarction in Parasagittal Meningioma Surgery	Kenan Koç
12.35-12.45	Venous outflow of Parasagittal Meningiomas	Zihni Sanus
12.45-12.55	Excision of Large Cerebral Venous Sinuses for Complete Resection of Invasive Meningiomas	Ulrich Sure
12.55-13.05	Management of Meningiomas with Dural Sinus Invasion	Serdar Kahraman
13.05-13.15	A Single Center Experience with Meningiomas of Diverse Locations and Histopathological Types Operative Approaches, Outcomes and lessons learnt	Harsh Jain
13.15-13.30	Discussion	

13.30-14.30 Lunch Break



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# 10 May 2025 Saturday

# HALL A

#### SESSION 9 Chairmen: Hayri Kertmen, Ali Kafadar

14.30-14.40	Petroclival Meningiomas - The Good, the Bad and the Ugly	Anil Nanda
14.40-14.50	When to Utilize or Ignore The Temporal Bone in PCM Surgery?	Jacques Morcos
14.50-15.00	Treatment Strategy in PCM: An Experience with 180 Cases	Basant K. Misra
15.00-15.10	Surgery for Trigeminal Neuralgia After SRS for PCM Meningiomas	Bahaeddin Muhsen
15.10-15.20	Middle Fossa Anatomy for Meningioma Resection	Akın Akakın
15.20-15.30	Middle Fossa Interdural Approach to PCM	Suresh Nair
15.30-15.40	Meningiomas in and Around the Petrous Apex: A Sigmoid or an Anterior Transpetrosal Route?	Kuntal Kanti Das
15.40-15.50	A Twist in the Tail - a Meningioma with an Associated Vascular Anomaly	Dilip Panikar
15.50-16.00	Petrous Face Meningiomas	Ibrahim Omerhodzic
16.00-16.10	Surgical Dilemmas in PCM	Miguel Arraez
16.10-16.20	Posterior Clinoidal Meningiomas	Hüseyin Biçeroğlu
16.20-16.30	Discussion	
16.30-17.00	Coffee Break	



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# 10 May 2025 Saturday

# HALL B

#### SESSION 10 Chairmen: Mustafa Uzan, Mehmet Hacıhanefioğlu

14.30-14.40	Origin and Arachnoid Plane: Cornerstones in Meningioma Surge	ry İbrahim Ziyal
14.40-14.50	Arterial Enchacement by Skull Base Meningiomas: Focusing on Arterial Preservation	Kuntal Kanti Das
14.50-15.00	Is the tail a Surgical target in Meningiomas?	Mustafa Berker
15.00-15.10	Preoperative Embolization of Meningiomas	Ünal Özüm
15.10-15.20	Origin of Intraventricular Meningiomas	Zeynep Hüseyinoğlu
15.20-15.30	Current Value of Simpson Grading System	Orhun Mete Çevik
15.30-15.40	Strategies to Enhance Outcomes and Minimize Complications in Challenging Cases of Meningioma Surgery Under Limited Resources	Surath Munasinghe
15.40-15.50	Complications in Meningioma Surgery	Cengiz Çokluk
15.50-16.00	Brain edema in Meningiomas	Uygur Er
16.00-16.10	Bone invasion in Parasagittal Meningiomas	Bülent Güçlü
16.10-16.20	Interosseous Meningiomas	Ibrahim Omerhodzic
16.20-16.30	Discussion	

16.30-17.00 Coffee Break



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# 10 May 2025 Saturday

# HALL A

Akın Sabancı

Bekir Tuğcu

Melih Bozkurt Hemant Bhartiva

Barış Özöner

#### SESSION 11 Chairmen: Keki Turel, İhsan Solaroğlu

- 17.00-17.10 Microsurgical Treatment of OGM
- 17.10-17.20 Surgical Treatment of OGM
- 17.20-17.30 Microsurgical Techniques and Complication Avoidance in OGM Surath Munasinghe
- 17.30-17.40 Skull Base Bone Reconstruction in OGM
- 17.40-17.50 Best Surgical Approach for OGM
- 17.50-18.00 Olfactory Groove Meningiomas
- 18.00-18.10 Discussion

#### 10 May 2025 Saturday

# HALL B

#### SESSION 12 Chairmen: Ibrahim Omerhodzic, Uygur Er

17.00-17.10	Spinal Meningiomas	Kenan Arnautovic
17.10-17.20	Surgical Strategies in a Large Series of Spinal Meningiomas	Ulrich Sure
17.20-17.30	Spinal Intradural Meningiomas	Arun Srivastava
17.30-17.40	Surgical Treatment of Spinal Meningiomas	Hakan Sabuncuoğlu
17.40-17.50	Arachnoidal Disection Techniques in Spinal Meningiomas	Cem Atabey
17.50-18.00	Pediatric Spinal Meningiomas	Özgür Taşkapılıoğlu

18.00-18.10 Discussion



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## 11 May 2025 Sunday

# HALL B

#### MAIN SESSION 3 Chairmen: Peter Black, Uygur Er

Introduction

07.30-07.45	Codes for Successful Skull Base Meningioma Micros	urgery Imad Kanaan
07.45-08.00	Tentorial Meningiomas	Benedicto Oscar Colli
08.00-08.15	Molecular Findings in Sphenoorbital Meningiomas	Jennifer Moliterno
08.15-08.30	Recent Advances of Radiology of Meningiomas	Alp Dinçer
08.30-08.45	Molecular Findings and Their clinical correlation in Pediatric Populations	Adnan Dağçınar
08.45-09.00	Changing Landscapes in Understanding of Meningiomas and Surgery	Suresh Nair
09.00-09.15	SRS for Skull Base Meningiomas Upfront Versus Flowing Microsurgical Resection	Constantin Tuleasca
09.15-09.30	Liquid Biopsy and Artificial Intelligence as Tools to Detect Signatures of CNS Malignancies	İhsan Solaroğlu
09.30-09.45	Using Deep-Learning AI Algorithms for Molecular Classification Based on HandE	Gelareh Zadeh
09.45-10.00	Complications in the Management of Meningiomas-1	Keki Turel
10.00-10.15	Complications in the Management of Meningiomas-2	Keki Turel
10.15-10.30	Chordoid Meningiomas	Figen Söylemezoğlu
10.30-10.45	Contribution of Turkish Neurosurgical Journal to Meningioma Literature	Ali Kafadar
10:45-11:00	Discussion	
11.00-11:15	Closing remarks	ureh Nair, M. Necmettin Pamir



Poster

Presentations



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



PP-01

# MICROSURGICAL MANAGEMENT OF CRANIOCERVICAL JUNCTION MENINGIOMAS: OUR EXPERIENCE

Malay Chakraborty

Chairman and Director of Neurosurgery, Senior Consultant Neurosurgeon, Thalamus Institute of Medical Sciences, Siliguri, West Bengal,India

**OBJECTIVES:** Craniocervical junction meningiomas are rare lesions and unique surgical entities. Though extremely challenging, gross total resection of these benign lesions, often leads to good outcome. We present our surgical experience with these difficult lesions and thereby evaluate the clinical course of the patients being operated upon for CV junction meningiomas.

**METHODS:** There were 12 patients who were operated upon for CV junction meningiomas at our centre from 2005 to 2020. MRI (Plain + Contrast) was the investigation of choice for these lesions and they were operated using either midline corridor with suboccipital craniotomy/craniectomy or a far lateral approach with or without condylar drilling depending upon the size of the tumor. The posterior arch of C1 or the spinous process of C2 was resected depending upon the spinal extension of the tumor. The records of the patient with respect to clinico-radiological features, surgical strategies and outcomes including mortality/morbidity were analyzed.

**RESULTS:** Amongst all 12 patients who were operated (9 female, 3 males), gross total resection could be achieved in 10 patients, and subtotal resection in 2 patients. The mean follow up duration was 24 months. The most common post operative complication was 9th and 10th Cranial Nerve palsy and this study was not associated with any mortality. The ones with subtotal resection underwent radiotherapy and there were no recurrences repeated in the last 6 months.

**CONCLUSIONS:** Microsurgical management of Craniocervical junction meningiomas continue to pose a challenge to neurosurgeons especially where neighbouring neurovascular structures are involved. However, meticulous and sharp microsurgical dissection maintaining the arachnoid plane is of utmost importance to resect the tumor completely. The results of our study is consistent with many other studies which demonstrates the fact that total resection is the key to fetch best outcomes in such difficult lesions.

**Keywords:** Craniocervical junction meningiomas, skull base meningiomas, foramen magnum meningiomas, microsurgical approaches



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye



PP-02

# A 10-YEAR, SINGLE-CENTER SURGICAL EXPERIENCE OF PATIENTS WITH INTRACRANIAL MENINGIOMA IN ADULTS

Nursena Tanrıverdi, <u>Pınar Kuru Bektaşoğlu</u>, Jülide Hazneci, Erhan Çelikoğlu Department of Neurosurgery, Istanbul Fatih Sultan Mehmet Education and Research Hospital, Istanbul, Türkiye

Meningiomas are the most common primary brain tumors in adults. There are three pathological grades, and the majority of them are benign tumors that develop slowly. Meningiomas often appear between the ages of 40 and 70. Females predominate males by a ratio of 2:1. Total surgical resection is the gold standard in meningioma treatment. Preoperative radiological features often give clues about the meningiomas' biological nature and help surgeons plan the surgical strategies. The primary aim of this study is to investigate the preoperative radiological features and postoperative definitive pathological diagnosis and explain how these findings affect the surgical outcome.

In this study, we retrospectively analyzed our 10-year registry for adult patients operated on for intracranial meningiomas. Their age, gender, signs and symptoms at admission, seizure history, localization and preoperative imaging features of the tumor, Simpson grading for extent of resection, preoperative and postoperative neurological examination findings, pathological diagnosis, and further treatment requirements were noted.

In total, there were 216 patients in our study; 157 were female (72.7%), and 59 were male (27.3%). There were no gender differences for age, and the mean age was 57.56 (range: 20-92). The most common complaint at admission was headache (54.1%), followed by seizure activity (17.1%). Most of the time, there was only one lesion in the preoperative magnetic resonance imaging. Twenty-seven (12.5%) of the patients had grade II (atypical) meningioma, and 189 (87.5%) of the patients had grade I meningioma.

The primary outcome presented in this study will be the potential radiological markers that would predict the surgical challenges and pathological diagnosis. Understanding the preoperative computed tomography and magnetic resonance imaging findings in detail would help surgeons ameliorate surgical outcomes. Some radiological markers would also help to predict the biological nature of the meningioma.

Keywords: adult, imaging feature, intracranial meningioma, surgical outcome







#### IS NEURONAVIGATION NECESSARY IN PARASAGITTAL MENINGIOMA SURGERY?

Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye

<u>Recai ENGÍN</u><sup>1</sup>, Cengiz Çokluk<sup>2</sup> <sup>1</sup>Samsun University, Department of Brain and Nerve Surgery <sup>2</sup>Ondokuz Mayıs University, Department of Brain and Nerve Surgery

**INTRODUCTION:** Meningiomas originate from arachnoid cap cells located on the inner surface of the dura (1). Various complications have been reported during and after surgical resection of meningiomas: venous injury, hematoma development, infection, cerebrospinal fluid (CSF) leakage (2, 3). Neuronavigation is frequently used for total removal of tumors and prevention of possible complications (4, 5).

**METHODS:** The data of patients operated for parasagittal meningioma between 2013 and 2023 in Ondokuz Mayıs University clinic were analyzed.

**RESULTS:** Of the patients operated for parasagittal meningioma, 65.9% were female. The mean age was 55.77 years. In 12 patients neuronavigation was used, 32 patients underwent surgery without neuronavigation. In the postop contrast-enhanced brain CT evaluation of the patients, no residuals were observed in 31 patients and residuals were observed in 13 patients. In the 6th month control MR image, recurrence was seen in 3 patients with no residual tumor. The use of neuronavigation had no effect on Simpson grade (p=0.512). Intraoperative craniotomy expansion was performed in 2 patients without neuronavigation. Sinus or arachnoid villus injury was observed in 6 patients without neuronavigation but not in 6 patients with neuronavigation.

**DISCUSSION:** It has been reported that the use of neuronavigation extends tumor resection and reduces recurrence (6). The reason for residual tumor in this surgery is that superior sagittal sinus invasion prevents total excision of the tumor. It has been reported that the use of neuronavigation in cranial surgeries shortens the operation time and causes less blood loss with smaller craniotomies and shortens the hospitalization period (4, 6, 7). In our study, tumor dural surface area/cranitomy area ratio was calculated and we found that neuronavigation significantly reduced the craniotomy size.

**CONCLUSION:** With neuronavigation in meningioma surgery, smaller craniotomies with less blood loss and minimized risk of vascular injury can be achieved.

Keywords: Parasagittal Meningioma, Intraoperative Neuronavigation, Brain Tumor



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# A CASE REPORT OF GIANT PAPILLARY MENINGIOMA IN THE LEFT FRONTOTEMPORAL REGION PRESENTING WITH SEIZURE

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**INTRODUCTION:** Meningiomas are the most common primary tumours of the CNS. In the latest update in 2021, meningiomas are classified into grades 1-3 according to histopathological features such as the number of mitotic figures, invasive growth pattern, specific morphological subtypes and anaplastic features as well as genetics. Grade 3 meningiomas are around 1-3%.

**MATERIALS-METHODS:** In this case, a patient who was brought to the emergency department with the complaint of seizure and who was operated because of a 8\*7\*7 cm giant meningioma in the left frontotemporal region on radiological imaging is presented.

**RESULTS:** A 73-year-old man was brought to the emergency department with a generalised tonic-clonic seizure. After the seizure was controlled, he was taken to intensive care unit. Brain MRI showed marked oedema around the mass and 1 cm midline shifting. Antioedema treatment was started and the patient was taken to surgery 2 days later. Total excision was performed with a pteroinal approach. After 1 week, the patient was discharged without neurodeficit and was referred to radiation oncology after the pathology revealed papillary meningioma.

**DISCUSSION:** WHO grade 3 papillary meningiomas are associated with high recurrence rates and poor prognosis. In the literature, it has been reported that the 5-year survival rate of papillary meningiomas after surgical resection is less than 50%. Despite radiotherapy, recurrence rates are 30-40%. After maximum excision of the tumour, oncology follow-up is as important as neurosurgical follow-up. Surgical treatment, especially in giant tumours, plays an important role in relieving symptoms and improving the patient's quality of life.

**CONCLUSION:** Intracranial masses should be considered in the differential diagnosis of patients presenting with seizures. Considering the aggressive progression of malignant tumours such as papillary meningioma, adjuvant treatment and regular clinical follow-up are of great importance in addition to surgical intervention.

Keywords: Seizure, Papillary Meningioma, Left Frontal Tumour







#### MICROSURGICAL NUANCES IN THE MANAGEMENT OF OLFACTORY GROOVE MENINGIOMAS Malay Chakraborty

International

Meningioma

Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye

Chairman and Director of Neurosurgery, Senior Consultant Neurosurgeon, Thalamus Institute of Medical Sciences, Siliguri, West Bengal, India

**BACKGROUND:** Olfactory groove meningiomas comprises of one of the most challenging lesions of the anterior skull base. We represent our experience in the microsurgical management of these lesions.

**METHOD:** A retrospective study was done on 30 patients (2015-2019) with radiologically evident Olfactory groove meningioma, who underwent microsurgical resection by the presenting author himself. Depending on the size of the lesion, they were approached either by pterional or the classical bicoronal scalp flap with unilateral/bilateral craniotomies. The goal in all the cases were to achieve either a gross total resection (Simpson's Grade 1/grade 2) or a maximal safe resection and also to preserve at least one olfactory tract. Coagulation of the dural attachment and peeling out the tumor tissue off the branches of ACA using microneurosurgical techniques has been a standard in all our cases. Their post operative status was determined by assessing the clinical condition of the patient and also by getting a CT/MRI done subsequently.

**RESULTS:** Out of the 30 patients, 24 of them underwent gross total resection while 6 of them had subtotal resection. 2 patients died in the post op period (both had subtotal resection done and higher grade of tumor). The mean follow up was for a period of 24 months.

**CONCLUSION:** Olfactory groove meningiomas are quite challenging lesions and transcranial surgery using standard microneurosurgical principles often fetches good outcome. Total tumor resection (Simpson's Grade 1) with adequate skull base reconstruction should be the primary goal for these space occupying lesions.

**Keywords:** Anterior Skull Base. Olfactory Groove. Microneurosurgery



Hilton Istanbul Bosphorus Hotel, Istanbul – Türkiye

May 2025





#### INTRAVENTRICULAR MENINGIOMAS: UNMASKING RARE INTRACRANIAL ENIGMA-A SINGLE CENTRE STUDY

<u>Ankush Ramesh Parate</u>, GEORGE Chandy VILANILAM, Krishnakumar Kesava Pisharody Department of Neurosurgery, Sree Chitra Thirunal Institute of Medical Sciences and Technology, Thiruvananthapuram, Kerala, India

Intraventricular meningiomas (IVMs) are rare (0.5-5%) and usually low-grade brain neoplasms. Meningiomas mostly arise in the cerebral meninges and are among the most frequent tumors of the central nervous system.

Intraventricular meningiomas originate from the choroid plexus' stroma and arise at the tela choroidea. Here, arachnoid cells are found secondary to the embryologic origin of the choroid plexus Most meningiomas are sporadic, but some are associated with genetic syndromes or mutations. The lateral ventricle is the most common location (88.4%), with a minority found in the fourth ventricle (8.7%) or third ventricle (2.9%).

#### Methodology

This is a single centre retrospective study of the Intraventricular Meningiomas that were operated in last 25 years. The age distribution, location, presenting symptoms and signs, extent of resection, histopathological report and its recurrence were studied. These patients were regularly followed for minimum of 3 years

**RESULTS:** A total of 2744 patients were operated for Meningioma from the last 25 years out of which 20 were Intraventricular Meningiomas. The most common presenting symptoms were headache, visual impairment (60%) and cognitive changes (20%). All of the Meningiomas were in lateral ventricle – trigone (95%, 19 patients) and body of ventricle (5%, 1 patient) ranging in sizes from 4 to 11cm. Total removal was achieved in 19 cases and the pathology report disclosed was Transitional (5 patients) and Fibroblastic (4 patients) type of meningioma (WHO grade I) with 9 patients having both morphology and atypical Meningiomas in 2 patients. Hydrocephalus, CSF leakage and cerebral edema were the postoperative complications. Five patients has recurrence.

**CONCLUSION:** Intraventricular meningiomas usually reach a large size before being diagnosed. The surgical treatment is the most suitable option and total removal should represent the main goal of the procedure. A study with larger sample size with participation of multiple centers is required.

Keywords: Intraventricular Meningioma, trigone, tela choroidea





## Notes





## Notes





## Notes

# CONTACT



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