



May 15-17, 2019 • Galilion Hotel, Israel

SCIENTIFIC PROGRAM

Wednesday, May 15, 2019

13:00 Registration, Light lunch and visit of the exhibition

13:50 OPENING REMARKS

Jean F. Soustiel, Chair of the Scientific Committee
Yigal Shoshan, President, Israel Neurosurgical Society

14:00 - 14:50 Session I - TUMORS: BASIC SCIENCE

Chairs: Iddo Paldor, Israel

Andrew A. Kanner, Israel

FREE PAPERS

14:00 Thrombin Activity in Human Meningioma Cells and the Correlation to WHO Grading System, Tumor Size and Tumor Edema

Noa Rennert, Efrat Shavit-Stein, Dvora Nass, Gal Grinberg, Joab Chapman, Moshe Attia

Dept. of Neurosurgery, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel

14:08 Red Blood Cells Parameters Highlights Glioblastoma Patients Subgroup With Improved Median Overall Survival

Tehila Kaisman-Elbaz^{1, 2}, Yonatan Elbaz³, Vladimir Merkin¹, Lianne Dym², Ariel Noy², Maya Atar-Vardi², Romi Bari⁴, Konstantin Lavrenkov⁵, Israel Melamed¹ ¹Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, ²Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, ³Dept. of Physics, Negev Nuclear Research Center, Dimona, ⁴Clinical Research Center, Soroka University Medical Center, Be'er Sheva, ⁵Institute of Oncology, Soroka University Medical Center, Be'er Sheva, Israel

14:16 The Prognostic Value of Pretreatment Neutrophil/Lymphocyte Ratio in Patients with Glioblastoma: A Retrospective Cohort Study of Patients Treated with Surgery and Stupp Protocol

Agam Brenner^{1, 2}, Michael Friger³, David B. Geffen^{1, 2}, **Tehila Kaisman-Elbaz^{2, 4}**, Konstantin Lavrenkov^{1, 2}

¹Dept. of Oncology, Soroka University Medical Center, Be'er Sheva, ²Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, ³Dept. of Public Health, Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, ⁴Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel

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Wednesday, May 15, 2019 (cont.)

14:00 - 14:50 Session I - TUMORS: BASIC SCIENCE (cont.)

14:24 Matrix Metalloproteinase 9 Expression Level and its Correlation With Glioblastoma Invasiveness and Patients' Survival

Snir Haddad¹, Yael Eskira¹, Zohar Hovev¹, Maya Atar-Vardi², Sivan Turiel², Noa Rotem-Dai¹, Vladimir Merkin³, Israel Melamed³, Konstantin Lavrenkov⁴, Tehila Kaisman-Elbaz^{1,3}

¹Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, ²Clinical Research Center, Soroka University Medical Center, Be'er Sheva, ³Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, ⁴Institute of Oncology, Soroka University Medical Center, Be'er Sheva, Israel

14:32 Discussion

14:50 - 15:40 Session II - INVITED LECTURES

Chairs: **Zvi Ram**, Israel

Jacob Zauberman, Israel

14:50 Gliomas - Diagnostic Challenges, Benefits and Perspectives of in Depth Molecular Analyses

Andreas Helmut Robert von Deimling

Dept. of Neuropathology, University of Heidelberg, CCU Neuropathology, German Cancer Center, Heidelberg, Germany

15:05 Low Grade Gliomas - Challenge of Eloquent Area Surgery

Hugues Duffau

Dept. of Neurosurgery, Montpellier University Medical Center, Montpellier, France

15:20 High Grade Glioma - Impact of Technological Advances on Survival

Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel

15:35 Discussion



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15:40 - 16:00 Session III - DEBATE

Decision Making in High Grade Glioma. Is there Room for Desperate Measures?

550

15:40

Iddo Paldor, Israel

CON

Jacob Zauberman, Israel

15:50 **DEBATE: HOW FAR CAN WE GO?**

Moderator: Hugues Duffau, France

Panelists: Andreas Helmut Robert von Deimling, Germany

Rachel Grossman, Israel

Leor Zach, Israel Yigal Shoshan, Israel

16:00 Coffee break, poster viewing and visit the exhibition

16:30- 17:10 Session IV - TUMORS CLINICAL TRIALS

Chairs: **Yigal Shoshan**, Israel **Leor Zach**, Israel

FREE PAPERS

16:30 The Association Between Radiological Evidence of Gadolinium Deposits in the Brain and Long Term Neurological Outcome

Yoav Perez¹, Ben Shofty¹, Zvi Ram¹, Moran Artzi², Rachel Grossman¹ ¹Dept. of Neurosurgery, ²Sagol Brain Institute, Tel Aviv Sourasky Medical Center,

Tel Aviv, Israel

16:38 The Effects of TTFields on Pivotal Anti-Tumoral T Cell Functions Hadar Simchony^{1,2}, Zvi Ram¹, Ilan Volovitz², Gil Diamant²

¹Dept. of Neurosurgery, ²The Cancer Immunotherapy Laboratory of the Neurosurgery Dept., Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

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Wednesday, May 15, 2019 (cont.)

16:30- 17:10 Session IV - TUMORS CLINICAL TRIALS (cont.)

Low Grade Gliomas in the Elderly - Single Center's Experience Over 18 Years

Amit Azriel^{1, 2, 3}, Benjamin Ho³, Michael Gonzales⁴, Yuval Sufaro^{1, 2},

Samuel Moscovici^{3, 5}, Katharine Drummond^{3, 6}

¹Dept. of Neurosurgery, Soroka Medical Center, Be'er Sheva, Israel, ²Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, Israel, ³Dept. of Neurosurgery, The Royal Melbourne Hospital, Parkville, VIC, Australia, ⁴Dept. of Pathology, The Royal Melbourne Hospital, Parkville, VIC, Australia, ⁵Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel, ⁶Dept. of Surgery, University of Melbourne, Parkville, VIC, Australia

- 16:54 Survival in Patients Treated for Anaplastic Meningioma in Our Center
 Issael Jesus Ramirez, Yigal Shoshan, Emil Margolin
 Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem,
 Israel
- 17:02 Glioblastoma Multiforme After Stereotactic Radiosurgery Treatment for Arterio-Venous Malformation; Case Report and Review of the Literature Saadit Sarah Houri¹, Marc Vigoda², Alex Losus³, Yigal Shoshan¹

 ¹Dept. of Neurosurgery, ²Dept. of Radiotherapy, ³Center for Neuro-Oncology, Hadassah Hebrew University Medical Center, Jerusalem, Israel

17:10 - 18:00 Session V - INVITED LECTURES

Andreas Helmut Robert von Deimling, Germany Ido Strauss, Israel

17:10 Surgical Anatomy of Cerebral Cortex: A Surgical Road Map for Access to Eloquent Areas Part I

Guilherme Carvalhal Ribas

Chairs:

Dept. of Surgery, University of Sao Paulo Medical School; Neurosurgeon at Hospital Israelita Albert Einstein, Sao Paulo, Brazil





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Wednesday, May 15, 2019 (cont.)

17:10 - 18:00 Session V - INVITED LECTURES (cont.)

The Role of Electrophysiological Monitoring in Intra-Axial Tumors
 Akiva Korn
 Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

17:40 The Brain Connectome Investigated by Electrical Stimulation **Hugues Duffau**

Dept. of Neurosurgery, Montpellier University Medical Center, Montpellier, France

17:55 Discussion

18:00 - 18:15 Session VI - BRIEF PRESENTATIONS

Chair: Mony Benifla, Israel

18:00 Giant Anterior Skull Base Hemangiopericytoma
Doron Edelman, Yuval Grober, Shady Jahshan, Jean F. Soustiel
Dept. of Neurosurgery, Galilee Medical Center, Nahariya, Israel

18:03 A Possible Association Between Arnold-Chiari Type I Malformation and Epilepsy: Case Series and Review

Uri Pinchas Hadelsberg¹, Hadassah Goldberg², Neelan Marianayagam¹, Gustavo Rajz¹

¹Dept. of Neurosurgery, Shaare Zedek Medical Center, Jerusalem, ²Dept. of Pediatric Neurology, Schneider Children's Medical Center, Petah Tikva, Israel

18:06 Shunt-Dependent Hydrocephalus After Aneurysmal Subarachnoid Hemorrhage - Systematic Review and Meta-Analysis

Ariel Lutenberg^{1, 2}, Paolo di Russo², Davide Di Carlo², Paolo Perrini²

¹Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel,
²Dept. of Neurosurgery, University of Pisa, Pisa, Italy





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18:00 - 18:15 Session VI - BRIEF PRESENTATIONS (cont.)

18:09 First In-Human Experience With Integration of a Hydrocephalus Shunt Device Within a Customized Cranial Implant

Netanel Benshalom¹, **Amir Wolff²**, Chad Gordon³, Gabriel Santiago³, Mark Luciano⁴

¹Dept. of Neurosurgery, Rabin Medical Center Beilinson, Petah Tikva, Israel, ²OMFS, Rambam Healthcare Campus, Haifa, Israel, ³Dept. of Neuroplastic and Reconstructive Plastic Surgery, Johns Hopkins Hospital, Baltimore, MD, USA, ⁴Dept. of Neurosurgery, Johns Hopkins University School of Medicine, Johns Hopkins Hospital, Baltimore, MD, USA

- 18:12 The Occurrence of Meningitis and External Ventricular Drainage
 Saleh Habiballah¹, Eli Ben-Chitrit², Uri Hadelsberg¹, Gustavo Rajz¹
 ¹Dept. of Neurosurgery, ²Infectious Disease Unit, Shaare Zedek Medical Center, Jerusalem, Israel
- 18:15 End of day's sessions
- 19:30 Dinner
- 21:00 Social Event

Reshef Levi Stand-up comedian show **Yarden Klayman** - Saxophone Player and D.J





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Thursday, May 16, 2019

08:00 Registration, coffee, poster viewing and visit the exhibition

08:30 - 09:15 Session VII - MINIMALLY INVASIVE APPROACH
OF SKULL BASE TUMORS

Chairs: Nevo Margalit, Israel

Israel Melamed, Israel

FREE PAPERS

O8:30 The Use of Reverse Rotation Flap for the Reduction of Nasal Morbidity Following Endoscopic Endonasal Skull Base Surgeries: A Comparative Study Ohad Chemo¹, Uri Peleg¹, Nevo Margalit², **Lior Gonen²**Otolaryngology Head and Neck Surgery, Dept. of Neurosurgery, Shaare Zedek Medical Center, Jerusalem, Israel

O8:38 Analysis of Endoscopically Assisted Supraorbital Key Hole Approach for Resection of Anterior Cranial Fossa Meningiomas in the Department of Neurosurgery

Arimantas Tamasauskas

Dept. of Neurosurgery, Neuroscience Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania

08:46 Ophthalmoplegia Due To Pituitary Adenoma: Anatomy Rolls the Dice Yuval Grober, Doron Steinitz-Edelman, Jean F. Soustiel Dept. of Neurosurgery, Galilee Medical Center, Nahariya, Israel

08:54 Stereotactic Radiosurgery Outcomes for Atypical Pituitary Adenoma
Avital Perry, Christopher S. Graffeo, Michael J. Link, Bruce E. Pollock
Dept. of Neurologic Surgery, Mayo Clinic, Rochester, MN, USA

09:02 Quality of Life Following Endoscopic Endonasal Surgery for Pituitary Macroadenoma

Elad Avraham¹, Dayana Cohen-Kobi², Amit Azriel¹, Israel Melamed¹, Sofia Kordeluk³, **Yuval Sufaro**¹

¹Dept. of Neurosurgery, ²Dept. of Endocrinology, ³Dept. of Otolaryngology, Soroka University Medical Center, Be'er Sheva, Israel

09:10 Discussion





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Thursday, May 16, 2019 (cont.)

09:15 - 10:15 Session VIII - ENDOSCOPIC SURGERY FOR SKULL BASE TUMORS

Chairs: Israel Melamed, Israel

Sergey Spektor, Israel

INVITED LECTURES

09:15 Learning Curve for Endoscopic Resection of Skull Base Tumor

Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

09:30 **Endoscopic Surgery for Craniopharyngioma**

Gill E. Sviri

Dept. of Neurosurgery, Head and Neck Center, Rambam (Maimonides) Health Care Campus, Haifa, Israel

09:45 Endoscopic Endonasal Skull Base Surgery - Advances and Limitations

Paul Gardner

UPMC Center for Cranial Base Surgery, Depts. of Otolaryngology and Neurological Surgery, The Eye & Ear Institute, Pittsburgh, PA, USA

10:00 DEBATE: ENDOSCOPIC SURGICAL RESECTION OF SKULL BASE TUMOR: GIMMICK OR SURGICAL BREAKTHROUGH

Moderator: Zvi Ram, Israel

Panelists: Moshe Attia, Israel

> Paul Gardner, USA Gill E. Sviri, Israel Samuel Tobias, Israel

10:15 - 11:00 **KEYNOTE LECTURE**

Being a Lawyer in a Conflicted Society

Avigdor Feldman

Criminal and Human Rights Lawyer

11:00 Coffee break, poster viewing and visit the exhibition

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Thursday, May 16, 2019 (cont.)

11:30 - 12:30 Session IX - MANAGEMENT OF SKULL BASE TUMORS

Chairs: **Lior Gonen**, Israel

Gill E. Sviri, Israel

INVITED LECTURES

11:30 Trends in Skull Base Surgery

Nevo Margalit

Dept. of Neurosurgery, Shaare Zedek Medical Center, Jerusalem, Israel

11:45 The Challenge of Ventral Foramen Magnum Meningiomas. Evolution of the Surgical Concept in the Radiosurgical Era

Jean F. Soustiel

Dept. of Neurosurgery, Galilee Medical Center, Nahariya, Israel

12:00 Transpetrosal Approach for Petroclival Meningiomas

Sergey Spektor

Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel

12:15 Radiosurgery for Acoustic Neuromas: Long-Term Assessment in 526 Patients Roberto Spiegelman

Dept. of Neurosurgery, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel

12:30 - 13:05 Session X - BEST PAPER AWARDS

Chairs: Yigal Shoshan, Israel

Jean F. Soustiel, Israel

Best Paper Award Recipient Presentation and Lecture

12:30 Yigal Shoshan and Jean F. Soustiel: Presentation of Award Recipients





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12:30 - 13:05

Session X - BEST PAPER AWARDS (cont.)

12:35 Best Resident Clinical Research Award

The Incidence and Impact of Post-Operative Stroke in Surgery for LGG **Assaf Berger**¹, Garry Tzarfati¹, Mathias Costa¹, Marga Serafimova¹, Akiva Korn¹, Tali Alfasi¹, Daniel Aviram², Alon Kashanian¹, Zvi Ram¹, Rachel Grossman¹ ¹Dept. of Neurosurgery, ²Dept. of Anaesthetics, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

12:50 Best Resident Basic Science Research Award

A Novel Compound Targeting Protease Receptor 1 Activators for the Treatment of Glioblastoma

Ehud Sheinberg^{1,7}, Efra Shavit-Stein^{2,7}, Valery Golderman^{2,7}, Shirley Sharabi^{3,7}, Anton Wohl^{4,7}, Shany Guly Gofrit^{2,7}, Zion Zibly^{4,7}, Natalia Shelestovich⁵, David Last³, David Guez³, Dianne Daniels³, Orna Gera^{2,7}, Kate Feingold^{2,7}, Zeev Itsekson-Hayosh^{1,7}, Nurit Rosenberg⁶, Ilia Tamarin⁶, Amir Dori^{2,7}, Nicola Maggio^{2,7}, Yael Mardor^{3,7}, Joab Chapman^{2,7}, Sagi Harnof^{4,7}
¹Dept. of Neurosurgery, Rabin Medical Center, Petach Tikva, ²Dept. of Neurology and Joseph Sagol Neuroscience Center, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, ³The Advanced Technology Center, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, ⁴Dept. of Neurosurgery, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, ⁵Pathology Institute, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, ⁶Institute of Thrombosis and Heamostasis, Coagulation Laboratory, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, ⁷Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

13:05 Lunch, poster viewing and visit the exhibition

14:00 - 15:00 Session XI - MANAGEMENT OF SKULL BASE TUMORS

Chairs: Moshe Attia, Israel
Sergey Spektor, Israel

FREE PAPERS

14:00 Combined Surgical Approach for Complex Lesion of the Infratemporal Fossa Lior Lev Tov^{1,2}, Dana Peso¹, Ziv Gil³, Gill E. Sviri^{1,2}

¹Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, ²The Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel Institute of Technology, Haifa, ³Dept. of Otolaryngology Head and Neck Surgery, Rambam Healthcare Campus, Haifa, Israel

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14:00 - 15:00 Session XI - MANAGEMENT OF SKULL BASE TUMORS (cont.)

- Surgical Treatment of Anterior Clinoid and Inner Third Sphenoid Wing Meningiomas: Analysis of 12 Consecutive Patients
 Samuel Tobias, Yuval Gruber, Moshe Elron, Amir Hadanny, Doron Edelman, Jean F. Soustiel
 Dept. of Neurosurgery, Galilee Medical Center, Nahariya, Israel
- 14:16 Surgical Management of Spheno-Orbital Meningioma: 16-Years' Experience
 Samuel Moscovici, Carlos Alberto Candanedo, Jose E. Cohen, Rani Patal,
 Yigal Shoshan, Sergey Spektor
 Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem,
 Israel
- 14:24 The M1 Subtype Predominates Among Infiltrating Tumor-Associated Macrophages in Phenotypically Aggressive Vestibular Schwannoma Avital Perry¹, Christopher S. Graffeo¹, Lucas P. Carlstrom¹, Aditiya Raghunathan², Collin C. Driscoll³, Brian A. Neff³, Mathew L. Carlston³, Michael J. Link¹, Jamie J. Van Gompel¹
 ¹Dept. of Neurologic Surgery, ²Dept. of Pathology, ³Dept. of Otolaryngology, Mayo Clinic, Rochester, MN, USA
- Subtemporal Transtentorial Approaches (STTA) to Paramidbrain, Tentorial Notch, and Mediobasal Temporal Lesions
 Carlos Alberto Candanedo, Samuel Moscovici, Sergey Spektor
 Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel
- 14:40 Assessment of Optic Pathway Structure and Function in Patients With Compression of the Optic Chiasm: A Correlation With Optical Coherence Tomography

Yuval Sufaro¹, Pramit M. Phal^{2,3}, Christopher Steward^{3,4}, Andrew D. Nichols⁵, Chris Kokkinos², Patricia M. Desmond³, Helen Danesh-Meyer⁶, Andrew H. Kaye^{7,8}, Bradford A. Moffat⁹

¹Dept. of Neurosurgery, Soroka University Medical Centre, Be'er Sheva, Israel, ²Epworth Medical Imaging, Epworth Richmond Hospital, Richmond, VIC, Australia, ³Dept. of Radiology, University of Melbourne, Parkville, VIC, Australia, ⁴Dept. of Radiology, The Royal Melbourne Hospital, Parkville, VIC, Australia, ⁵Dept. of Neurosurgery, The Alfred Hospital, Melbourne, VIC, Australia, ⁶Dept. of Ophthalmology, University of Auckland, Auckland, New Zealand, ⁷Dept. of Neurosurgery, University of Melbourne, Parkville, VIC, Australia, ⁸Dept. of Neurosurgery, Royal Melbourne Hospital, Parkville, VIC, Australia, ⁹Dept. of Anatomy and Neuroscience, Melbourne Neuroscience Institute, University of Melbourne, Parkville, VIC, Australia

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Thursday, May 16, 2019 (cont.)

14:00 - 15:00 Session XI - MANAGEMENT OF SKULL BASE TUMORS (cont.)

14:48 Delayed CSF Leak in Patients After Craniotomy for Resection of Skull Base Tumors Lea Kahanov, Cezar José Mizrahi, Jose Cohen, Samuel Moscovici, Sergey Spektor Dept. of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, Israel

14:56 Discussion

15:00 - 15:50 Session XII - GUIDANCE AND TRAINING IN SKULL BASE SURGERY

Chairs: Roberto Spiegelman, Israel Samuel Tobias, Israel

FREE PAPERS

15:00 To Be As Pilots - Complications, Analysis and Avoidance

Melamed Israel¹, Vladimir Merkin¹, Yuval Sufaro¹, Amit Azriel¹, Alex Shtreisent¹, Annat Horev², Ilan Shelef²

¹Dept. of Neurosurgery, ²Dept. of Radiology, Soroka University Medical Center, Be'er Sheva, Israel

15:08 QEVO (Micro-Inspection Tool)-Assisted Craniotomy Improving Surgical Results in Skull Base Surgery: Hadassah Experience

Carlos Alberto Candanedo, Samuel Moscovici, Nurit Bedussa, Sergey Spektor Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel

15:16 Readily Available Models for Acquiring Basic Microsurgical Skills in Neurosurgery: The "Grocery-Store" Lab

Omer Doron^{1, 2}, Iddo Paldor³, Erez Nossek⁴, Sergey Spektor¹, Samuel Moscovisci¹ Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel, ²Dept of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel, ³Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, Israel, ⁴Dept. of Neurosurgery, NYU Langone Health, New York, NY, USA





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15:00 - 15:50

Session XII - GUIDANCE AND TRAINING IN SKULL BASE SURGERY (CONT.)

- Anatomical Step-By-Step Dissection of Complex Skull Base Approaches for Trainees: Surgical Anatomy of the Posterior Petrosal Approach
 Christopher S. Graffeo¹, Avital Perry¹, Maria Peri-Celda², Lucas P. Carlstrom¹,
 Collin W. Driscoll³, Michael J. Link¹
 ¹Dept. of Neurologic Surgery, Mayo Clinic, Rochester, MN, ²Dept. of Neurologic Surgery, Albany Med, Albany, GA, ³Dept. of Otolaryngology, Mayo Clinic, Rochester, MN, USA
- 3D Printing for Complex Cranial Education: Skull Base Tumor Case Illustrations

 Avital Perry¹, Christopher S. Graffeo¹, Lucas P. Carlstrom¹, Michael J. Link¹,

 Jonathan Morris²

 ¹Dept. of Neurologic Surgery, ²Dept. of Radiology, Mayo Clinic, Rochester, MN,
- 15:40 Intraoperative VEP (Visual Evoked Potentials) Monitoring During Anterior Skull Base Surgery: What Are We Not Seeing?
 Juan Leon¹, Samuel Moscovici¹, Carlos Alberto Candanedo¹, Saadit Sarah Houri¹, Kobi Goldstein², Jose E. Cohen¹, Sergey Spektor¹
 ¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, ²Dept. of Neurophysiology, Surgical Monitoring Services, Beit Shemesh, Israel
- 15:48 Discussion





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15:50 - 17:00 Session XIII - TUMORS

Chairs: Rachel Grossman, Israel
Jean F. Soustiel, Israel

FREE PAPERS

15:50 Early Post-Surgical Hormonal Levels for Functioning Adenoma as Remission Predictors - 4 Years of Experience

Yuval Grober

Dept. of Neurosurgery, Galilee Medical Center, Nahariya, Israel

15:58 Initial Experience Using the Visualase MRI-Guided Stereotactic Laser Ablation System for Epileptogenic Lesions

Ido Strauss¹, Firas Fahoum², Orna Aizenstein³, Itzhak Fried⁴
¹Dept. of Neurosurgery, ²Epilepsy Unit, ³Neuroradiology Unit, ⁴Functional Neurosurgery Unit, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

16:06 Intra-Operative Neurophysiological Monitoring in Resection of Parasagittal and Convexity Meningiomas Located in Eloquent Area

Dana Peso¹, Lior Lev Tov¹, Muna Jubran², Idan Strul³, Akiva Korn², Gill E. Sviri¹
¹Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, ²Surgical Monitoring Services, Beit Shemesh, ³The Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel Institute of Technology, Haifa, Israel

16:14 Outcomes of Awake Craniotomy for Low Grade Glioma Using a Simplified Methodology are Comparable to Previous Reports

Amit Azriel^{1,2,3}, Oshi Swarup³, Brad Hockey⁴, Katharine Drummond^{3,5}
¹Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel, ²Faculty of Health Sciences, Ben Gurion University of the Negev, Be'er Sheva, Israel, ³Dept. of Neurosurgery, The Royal Melbourne Hospital, Parkville, VIC, Australia, ⁴Dept. of Anesthetics, The Royal Melbourne Hospital, Parkville, VIC, Australia, ⁵Dept. of Surgery, University of Melbourne, Parkville, VIC, Australia

16:22 Surgical Management of Pre-Pontine Neuroenteric Cysts

Saadit Sarah Houri¹, Samuel Moscovici¹, Juan Leon¹, Amit Azrieli², Jose Cohen¹, Andrew Kaye³, Sergey Spektor¹

¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel, ²Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel, ³Dept. of Neurosurgery, The Royal Melbourne Hospital, Melbourne, VIC, Australia





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15:50 - 17:00

Session XIII - TUMORS (CONT.)

16:30 Pre-Operative Localization of Epileptogenic Zones by Magnetic Source Imaging, Electroencephalography-Functional Magnetic Resonance Imaging and Their

Assaf Berger^{1,2}, Noa Cohen^{2,3}, Tomer Gazit³, Mordekhay Medvedovsky⁴, Firas Fahoum^{2,5}, Aaron Meller², Dana Ekstein⁴, Mony Benifla^{6,7}, Itzhak Fried^{1,2}, Ido Strauss^{1,2}

¹Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, ²Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, ³Sagol Brain Institute, Tel Aviv Sourasky Medical Center, Tel Aviv, ⁴Dept. of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, ⁵Dept. of Neurology, Tel Aviv Sourasky Medical Center, Tel Aviv, ⁶Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, ⁷The Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel Institute of Technology, Haifa, Israel

16:38 Pediatric Posterior Fossa Incidentalomas

Danil Kozyrev¹, Shlom Constantini¹, Deki Tsering², Robert Keating², Sharif Basal¹, Jonathan Roth¹

¹Dept. of Pediatric Neurosurgery, Dana-Dwek Children's Hospital, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel, ²Division of Neurosurgery, Children's National Medical Center Neurology, Washington, DC, USA

16:46 Pineal Region Tumors in Adults

Shmuel Bejell¹, Amir Khriesh¹, Marius Constantinescu¹, Mony Benifla², Gill E. Sviri¹

¹Dept. of Neurosurgery, ²Dept. of Neurosurgery and Pediatric Neurosurgery, Rambam Healthcare Campus, Haifa, Israel

16:54 Discussion

17:00 Coffee break, poster viewing and visit the exhibition





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17:30 - 18:15 Session XIV - INVITED LECTURES

Chairs: Yigal Shoshan, Israel

Jean F. Soustiel, Israel

17:30 The Role of Radiosurgery in Skull Base Tumors

Andrew A. Kanner

Dept. of Neurosurgery and Stereotactic Radiosurgery Unit, Rabin Medical Center, Petah Tikva, Israel

17:45 The Role of Endoscopic Assisted Surgery for Skull Base Tumors

Israel Melamed

Israel

Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel

18:00 Modern Treatment of Skull Base Chordomas - From Endoscopes to Genetics

Paul Gardner

UPMC Center for Cranial Base Surgery, Depts. of Otolaryngology and Neurological Surgery, The Eye & Ear Institute, Pittsburgh, PA, USA

18:15 - 19:00 Session XV - BRIEF PRESENTATIONS - MISCELLANEOUS

Chairs: Yuval Grober, Israel Zion Zibly, Israel

18:15 The Value of Cerebrospinal Fluid Lactate Levels in Diagnosing Infections in Pediatric Neurosurgical Patients

Jonathan Roth¹, Jehuda Soleman¹, Danil A. Kozyrev¹, John N. Jabang¹, Maya Stein¹, Galia Grisaru-Soen², Haggai Benvenisti¹, Efraim Sadot², Shirley Friedman², Itay Ayalon², Shlomi Constantini¹

¹Dept. of Neurosurgery / Pediatric Neurosurgery, ²Pediatric Infectious Disease Unit, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

18:18 E-Bike Related Cranial Injuries in Pediatric Population
 Yevgeny Karepov¹, Danil A. Kozyrev¹, Moni Benifla², Vladimir Shapira²,
 Shlomi Constantini¹, Jonathan Roth¹
 ¹Dept of Neurosurgery / Pediatric Neurosurgery, Tel Aviv Sourasky Medical
 Center, Tel Aviv, ²Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa,

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Medical Center, Tel Aviv, Israel

18:15 - 19:00

Session XV - BRIEF PRESENTATIONS - MISCELLANEOUS (cont.)

18:21 Cranial Hydatid Cysts in Israel - A Rare But Live Entity Jonathan Roth¹, Ben Shofty¹, Shlomi Constantini¹, Danil Kozyrev¹, Michal Raz², Galia Grisaru-Soen³, Ronen Ben-Ami⁴, Yael Paran⁴ ¹Dept. of Neurosurgery and Pediatric Neurosurgery, ²Dept. of Pathology, ³Pediatric Infectious Diseases Unit, ⁴Infectious Disease Unit, Tel Aviv Sourasky

- 18:24 MR Guided Focused Ultrasound Thalamotomy for Essential Tremor and Tremor-Dominant Parkinson's Disease: A 5 Year Single Center Experience Alon Sinai¹, Ilana Schlesinger², Maria Nassar², Ayelet Eran³, Menashe Zaaroor¹, Marius Constanatinesco¹ ¹Dept. of Neurosurgery, ²Dept. of Neurology, ³Dept. of Radiology, Rambam Healthcare Campus, Haifa, Israel
- 18:27 "Early Warning Monitor": Cardiac Gated Brain Compliance as a Novel Method for the Assessment of Intracranial Reserve Omer Doron^{1,2}, Tal Or², Nossek Erez³, Barnea Ofer², Rosenthal Guy¹ ¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel, ²Dept. of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel, ³Dept.
- 18:30 Quantifying Brain Edema Using a Novel Bedside Parameter: The Pressure **Equalization Ratio**

of Neurosurgery, NYU Langone Health, New York, NY, USA

Omer Doron^{1,2}, Carlos Candanedo¹, Claude Hemphill III³, Fernando Ramirez de Noriega¹, Geoffrey Manley³, Rosenthal Guy^{1,2} ¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel, ²Dept of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel, ³Dept. of Neurosurgery, UCSF, San Francisco, CA, USA

18:33 Spinal Radiosurgery (SRS) for Nerve Sheath Tumors Ran Harel¹, Leor Zach² ¹Dept. of Neurosurgery, ²Dept. of Radiation Oncology, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel





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Session XV - BRIEF PRESENTATIONS - MISCELLANEOUS (cont.) 18:15 - 19:00

- 18:36 The Role of Messenger Systems in Neurosurgical Practice Danil Kozyrev, Shlomi Constantini, Jonathan Roth Dept. of Pediatric Neurosurgery, Dana-Dwek Children's Hospital, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel
- 18:39 Minimally Invasive Approach for Anterolateral Cervical Cordotomy in the Treatment of Intractable Cancer Pain Gil Kimchi, Zion Zibly, Ran Harel, Roberto Spiegelmann Dept. of Neurosurgery, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel
- 18:42 Computer-Aided Radiological Longitudinal Evaluation of Vestibular Schwannomas After Stereotactic Radiosurgery Ilia Marek¹, **Leo Joskowicz¹**, Ruth Eliahou², Iddo Paldor², Yigal Shoshan² ¹School of Computer Science and Engineering, The Hebrew University of Jerusalem, Jerusalem, ²Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel
- 18:45 Onolucent Cranial Implants: Cadaver Study and Clinical Findings Supporting Therapeutic and Diagnostic Trans-Cranioplasty Ultrasound Micah Belzberg¹, Henry Brem³, Chad Gordon⁴, **Netanel Ben Shalom²** ¹Dept. of Plastic Surgery, Johns Hopkins Hospital, Baltimore, MD, USA, ²Dept. of Neurosurgery, Rabin Medical Center Beilinson, Petah Tikva, Israel, ³Dept. of Neurosurgery, Johns Hopkins Hospital, Baltimore, MD, USA, ⁴Dept. of Neuroplastic and Reconstructive Plastic Surgery, Johns Hopkins Hospital, Baltimore, MD, USA
- 18:48 Electromyography (EMG) Quantitative Assessment of Rigidity in Parkinson's Disease Patients During Deep Brain Stimulation Procedures Sami Heymann¹, Zvi Israel¹, Hagai Bergman^{2,3} ¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, ²Edmond and Lily Safra Center for Brain Sciences (ELSC), The Hebrew University of Jerusalem, Jerusalem, ³Dept. of Medical Neurobiology (Physiology), Institute for Medical Research Israel-Canada (IMRIC) (Affiliated with Faculty of Medicine, Hadassah Hebrew University), Jerusalem, Israel





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18:15 - 19:00 Session XV - BRIEF PRESENTATIONS - MISCELLANEOUS (cont.)

18:51 Optic Chiasm MRI Geometric Properties as a Predictor of Visual Deficits **Elad Avraham**, Amit Azriel, Israel Melamed, Yuval Sufaro

Dept. of Neurosurgery, Soroka University Medical Center, Be'er Sheva, Israel

- 18:54 Stent and Flow Diverter-Assisted Treatment of Acutely Ruptured Brain Aneurysms Wenad Najjar¹, José E. Cohen¹, J. Moshe Gomori², Ronen R. Leker¹, Sergey Spektor¹, Hosni Abu el Hassan¹, Shoshann Yigal¹, Eyal Itshayek³

 ¹Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem, ²Dept. of Radiology, Hadassah Hebrew University Medical Center, Jerusalem, ³Dept. of Neurosurgery, Rabin Medical Center Beilinson, Petah Tikva, Israel
- 18:57 Can Endovascular Treatments Cure Arteriovenous Malformation?

 Saadit Sarah Houri, Samuel Moscovici, Guy Rosenthal, Yigal Shoshan,

 Sergey Spektor, Jose Cohen

 Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem,

 Israel
- 19:00 End of day's sessions
- 19:30 Dinner
- 21:30 Social Event Namaste Israel A Night of Indian-Themed Dancing





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Friday, May 17, 2019

EDUCATION DAY FOR RESIDENTS

Registration, coffee, poster viewing and visit the exhibition 08:10

08:50 - 10:30 **Session I - GLIOMAS**

08:50 Meningiomas, Prediction Based on Morphology or Molecular Biology **Andreas Helmut Robert von Deimling** Dept. of Neuropathology, University of Heidelberg, CCU Neuropathology, German Cancer Center, Heidelberg, Germany

09:10 Modalities of Electrophysiological Monitoring During Surgical Resection of Intraparenchymal Tumors in Eloquent Areas

Akiva Korn

Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

09:30 Surgical Anatomy of Cerebral Cortex: A Surgical Road Map for Access to **Eloquent Areas Part II**

Guilherme Carvalhal Ribas

Dept. of Surgery, University of Sao Paulo Medical School; Neurosurgeon at Hospital Israelita Albert Einstein, Sao Paulo, Brazil

09:50 Awake Craniotomy for Surgical Resection of Glioma Located in Eloquent Areas **Rachel Grossman**

Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

CASE BASED LEARNING:

10:10 Left Insular Glioma

Zvi Ram

Dept. of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

10:30 Coffee break, poster viewing and visit the exhibition





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Friday, May 17, 2019 (cont.)

11:00 - 12:30

Session II - CEREBRAL METASTASIS

Oncological Algorithm of Decision Making for Metastasis
 Anca Leibovici
 Dept. of Neuro-Oncology / Oncology, Galilee Medical Center, Nahariya, Israel

 Surgical Approach to Multiple Metastasis
 Zion Zibly, Israel
 Dept. of Neurosurgery, Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan

11:40 Is There Still Room for Whole Brain Radiotherapy?

Orit Kaidar-Person

Oncology Institute, Neuro-Oncology, Radiation Oncology Unit, Rambam Medical Center, Haifa, Israel

CASE BASED LEARNING:

12:00 Complex Case of Metastasis

Iddo Paldor, Israel

Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, Israel

12:20 Closing remarks and feedback

12:30 Light Lunch





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E-POSTER PRESENTATIONS

- First Report of Human Infection with Sinorhizobium Meliloti Eli Ben-Chetrit¹, Marc Victor Assous², Livnat Keshet², **Uri Pinchas Hadelsberg³**, Nevo Margalit³, Tal Shahar³
 ¹Infectious Diseases Unit, ²The Clinical Microbiology Laboratory, ³Dept. of Neurosurgery, Shaare Zedek Medical Center, Jerusalem, Israel
- Our 2-Year Experience in Treating Giant Intracranial Meningiomas
 Uri Pinchas Hadelsberg, Lior Gonen, Tal Shahar, Nevo Margalit
 Dept. of Neurosurgery, Shaare Zedek Medical Center, Jerusalem, Israel
- False Localizing Signs in Skull Base Tumors
 Saadit Sarah Houri, Sergey Spektor, Fidel Valero, Jose Cohen,
 Samuel Moscovici
 Dept. of Neurosurgery, Hadassah Hebrew University Medical Center, Jerusalem,
 Israel
- 4. Aquamantys® Bipolar in Extended Endoscopic Endonasal Resection of Skull Base Lesion

Amir Khriesh¹, Shmuel Bejell¹, Dimitry Ostrovsky^{2, 3}, Ziv Gil^{2, 3}, Gill E. Sviri^{1, 3}
¹Dept. of Neurosurgery, ²Dept. of Otolaryngology, ³Head and Neck Center, Rambam Healthcare Campus, Haifa, Israel

- Are Surgical Hand-Made Illustrations Still Valuable?
 Voramol Rochanaroon, Danil Kozyrev, Jonathan Roth, Shlomi Constantini
 Dept. of Pediatric Neurosurgery, Dana-Dwek Children's Hospital, Tel Aviv
 Sourasky Medical Center, Tel Aviv, Israel
- 6. Resection of Giant Vestibular Schwannomas Using Surgical Loupes Jason J. Lefkowitz^{1, 2}, Shorook Na'ara³, Ziv Gil³, Gill E. Sviri¹
 ¹Dept. of Neurosurgery, Rambam Healthcare Campus, Haifa, ²The Ruth and Bruce Rappaport Faculty of Medicine, Technion Israel Institute of Technology, Haifa, ³Dept. of Otolaryngology Head and Neck Surgery, Rambam Healthcare Campus, Haifa, Israel
- Differential Responses to Adjuvant Versus Delayed Stereotactic Radiosurgery for Subtotally Resected Vestibular Schwannoma Avital Perry¹, Lucas P. Carlstrom¹, Christopher S. Graffeo¹, Morten Lund-Johansen², Michael J. Link¹
 ¹Dept. of Neurologic Surgery, Mayo Clinic, Rochester, MN, USA, ²Dept. of Neurologic Surgery, University of Bergen, Bergen, Norway