

PROGRAMME



Hydrocephalus Society

International Society for Hydrocephalus
and Cerebrospinal Fluid Disorders

WORLD CONGRESS **HYDROCEPHALUS** 2026

31 July-3 August

São Paulo, Brazil

hydrocephalus-meeting.com

Become a Member Now

The Hydrocephalus Society is an open community that encourages collaboration, partnerships and networking between all professionals related to the field of Hydrocephalus and CSF Disorders.

As a member of the Hydrocephalus Society, you will join a community of peers that fosters an environment of cooperation and works towards ensuring ethical, high-quality care for patients, and increasing awareness regarding Hydrocephalus and CSF disorders on a global scale.

Hydrocephalus Society members enjoy several benefits related to personal and professional development, as well as to the creation of opportunities for collaborations and partnerships.

The benefits we offer to our members are the following:



EDUCATION	DISCOUNTS	PROFESSIONAL DEVELOPMENT & NETWORKING
<ul style="list-style-type: none">• Exclusive access to the video minutes of all Hydrocephalus World Congresses• Exclusive access to the recordings of the Hydrocephalus Society Global Webinar Series (2021,2022,2023,2024,2025, 2026)• Exclusive access to all abstract books of previous Hydrocephalus World Congresses	<ul style="list-style-type: none">• Significant Members' discount for the Annual Hydrocephalus World Congress• Special Discount for scientific paper publications at the Fluids & Barriers of the CNS Journal with impact factor 6.2	<ul style="list-style-type: none">• Observership opportunities in high volume Hydrocephalus departments• Right to participate and vote at the General Assembly of the Hydrocephalus Society• Right to be elected as Board Director• The chance to host the Hydrocephalus World Congress in your country• Access (by request) to the Members' Directory of the Society



Hydrocephalus Society

International Society for Hydrocephalus
and Cerebrospinal Fluid Disorders

READY TO JOIN? VISIT THE HYDROCEPHALUS SOCIETY WEBSITE

ishcsf.com

Friday, 31 July 2026			
	EDUCATIONAL SEMINAR HALL		
12:00-16:00	EDUCATIONAL SEMINAR ON NEUROENDOSCOPY		
12:00-12:45	PART 1: NEUROANATOMY		
12:45-14:00	PART 2: NEUROENDOSCOPY		
14:00-14:30	<i>Coffee Break</i>		
14:30-15:30	PART 3: CASE STUDIES - VP OR ENDOSCOPY?		

Saturday, 1 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
07:00-08:00	<i>Registrations</i>		
08:00-08:50	OPENING OF THE CONGRESS		
08:50-09:20	SESSION 1: HAKIM LECTURE		
09:20-10:20	SESSION 2: REHABILITATION AND SOCIAL IMPACT	SESSION 3: ADULT HYDROCEPHALUS	SESSION 4: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
10:20-11:00	<i>Coffee Break & Exhibition</i>		
11:00-12:20	SESSION 5: YOUNG INVESTIGATORS AWARDS I		
12:20-13:10	Hydrocephalus Society Annual General Meeting		
13:10-13:15	Fluids and Barriers of the CNS Update		
13:15-14:20	<i>Industry Sponsored Lunch Seminar</i>		
14:20-15:30	SESSION 6: ADULT HYDROCEPHALUS	SESSION 7: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS	SESSION 8: NEUROIMAGING
15:30-16:15	<i>Coffee Break & Exhibition</i>		
16:15-17:45	SESSION 9: ADULT HYDROCEPHALUS	SESSION 10: PEDIATRIC HYDROCEPHALUS	SESSION 11: YOUNG INVESTIGATORS SPECIAL SESSION

Sunday, 2 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
08:30-09:20	SESSION 12: JOINT ROUND TABLE: THE HEART OF THE MATTER: INTEGRATING PATIENT ADVOCACY INTO NEUROSURGICAL EXCELLENCE		
09:20-10:50	SESSION 13: YOUNG INVESTIGATORS AWARDS II		
10:50-11:20	<i>Coffee Break & Exhibition</i>		
11:20-12:40	SESSION 14: THE BIG DATA ERA IN HYDROCEPHALUS: AI TOOLS AND LARGE COHORTS	SESSION 15: ADULT HYDROCEPHALUS	SESSION 16 ORAL FLASH PRESENTATIONS OF ePOSTERS
12:45-14:00	<i>Industry Sponsored Lunch Seminar</i>		
14:00-15:30	SESSION 17: YOUNG INVESTIGATORS AWARDS III		
15:30-16:10	<i>Coffee Break & Exhibition</i>		
16:10-17:30	SESSION 18: HYDROCEPHALUS SOCIETY-EANS JOINT SESSION: SPONTANEOUS INTRACRANIAL HYPOTENSION (SIH) – A COMMON CSF DISORDER	SESSION 19: ADULT HYDROCEPHALUS	SESSION 20: INTRACRANIAL PRESSURE

Monday, 3 August 2026			
	GRAND BALLROOM I - II	GRAND BALLROOM III	JARDIM
08:00-09:30	SESSION 21: ADULT HYDROCEPHALUS	SESSION 22: EXPERIMENTAL HYDROCEPHALUS	SESSION 23: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
09:20-10:20		SESSION 25: NEUROIMAGING	SESSION 26: PEDIATRIC HYDROCEPHALUS
09:30-10:20	SESSION 24: INPH GUIDELINES UPDATE		
10:20-11:00	<i>Coffee Break & Exhibition</i>		
11:00-12:30	SESSION 27: INTRACRANIAL PRESSURE	SESSION 28: ORAL PRESENTATIONS - VARIOUS TOPICS	SESSION 29: ORAL PRESENTATIONS - VARIOUS TOPICS
12:35-13:40	Industry Sponsored Lunch Seminar		
13:40-15:30	SESSION 30: ADULT HYDROCEPHALUS	SESSION 31: ORAL FLASH PRESENTATIONS OF EPOSTERS	SESSION 32: ORAL PRESENTATIONS - VARIOUS TOPICS
15:30-16:30	CLOSING OF THE CONGRESS		

Friday, 31 July 2026

GRAND BALLROOM III

12:00-16:00 EDUCATIONAL SEMINAR ON NEUROENDOSCOPY

Chairs: **Giorgio Palandri & Fernando Gomes Pinto**

12:00-12:45 Part 1: Neuroanatomy

12:00-12:15 Surgical anatomy of the lateral ventricles

Wen Hung Tzu

12:15-12:30 Neuroanatomy of the cistern

Leila Maria Da Roz

12:30-12:45 Craniometric landmarks for ventricular neuroendoscopy-microsurgical anatomy of ventricular approach

Eduardo Carvalho Ribas

12:45-14:00 Part 2: Neuroendoscopy

12:45-13:00 Neuroendoscopy in the treatment of hydrocephalus: Principles and indications

Alberto Feletti

13:00-13:15 Neuroendoscopy training process in models

Christian Diniz Ferreira

13:15-13:30 Endoscopic ventricular anatomy-what we need to know

Koshiro Nishikuni

13:30-13:45 Neuroradiological insights into ventricular anatomy using cross-sectional imaging

Leandro Lucato

13:45-14:00 Endoscopic third ventriculostomy in adults: Patient selection and clinical outcomes

Mark Hamilton

14:00-14:30 Coffee Break

14:30-15:30 Part 3: Case Studies-VP or Endoscopy?

14:30-14:50 Case Study 1

Alberto Feletti

14:50-15:10 Case Study 2

Christian Diniz Ferreira

15:10-15:30 Case Study 3

Koshiro Nishikuni

15:30-16:00 Discussion

Saturday, 1 August 2026

GRAND BALLROOM I - II

07:00-08:00 Registrations

08:00-08:50 OPENING OF THE CONGRESS

Chairs: **Giorgio Palandri & Fernando Gomes Pinto**

08:00-08:10 Welcome address by the hydrocephalus society president
Giorgio Palandri

08:10-08:20 Welcome address by the congress president
Fernando Gomes Pinto

08:20-08:30 Welcome address
Mara Gabriilli, Senator

08:30-08:40 Welcome address
Dr. Eleuses Paiva, Secretary of Health of the State of São Paulo

08:40-08:50 Welcome address
Prof. Dr. **Carlos Gilberto Carlotti Jr**

GRAND BALLROOM I - II

08:50-09:20 SESSION 1: HAKIM LECTURE

Chairs: **Mark Hamilton & Michael Williams**

08:50-09:20 Normal pressure hydrocephalus: Dos and don'ts - Lessons learnt from 5000+ cases
Uwe Kehler

GRAND BALLROOM I - II

09:20-10:20 SESSION 2: REHABILITATION AND SOCIAL IMPACT

Chairs: **Ahmed Toma & Richard Edwards**

09:20-09:30 Pre-operative prehabilitation for NPH: the concept
Fernanda Martins

09:30-09:40 Urological implications of NPH
Carlos Ricardo Doi Bautzer

09:40-09:50 Physiatric and multiprofessional rehabilitation for NPH
Linamara Battistella

09:50-10:00 Socioeconomic determinants and territorial disparities in congenital hydrocephalus: the impact of income and social protection policies
Barbara Bonatti

10:00-10:10 Hydrocephalus association patient-powered interactive engagement registry (HAPPIER)
Samantha Lanjewar

10:10-10:20 Discussion

GRAND BALLROOM III

09:20-10:20 SESSION 3: ADULT HYDROCEPHALUS

Chairs: **Rodolfo Casimiro Reis & Eric Schmidt**

- 09:20-09:30 12-month cognitive and functional outcomes following ventriculoperitoneal shunting for iNPH in the PENS trial
Nickolas Dasher & Michael Williams
- 09:30-09:40 Genome-wide association study of normal pressure hydrocephalus in an expanded FinnGen cohort identifies novel genetic risk variants
Joel Rasanen
- 09:40-09:50 CSF outflow resistance as a mechanobiological marker in normal pressure hydrocephalus
Alexandra Vallet & Eric Schmidt
- 09:50-10:00 Home ICP monitoring in shunted NPH: Valve settings and body position during daily life
Simon Malpas
- 10:00-10:10 Brain pathology modifies three-year shunt surgery outcomes in iNPH: A prospective registry study
Anti Luikku
- 10:10-10:20 Safety and efficacy of endovascular shunting for normal pressure hydrocephalus: 180-day results from a prospective, multicenter single-arm study
Pedro Lylyk & Adel Malek

JARDIM

09:20-10:20 SESSION 4: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS

Chairs: **Carolyn Harris & Chris Carswell**

- 09:20-09:30 Does shunt drainage correlate with headaches in hydrocephalus? Interim results from a longitudinal study using wearable, noninvasive shunt flow monitors in patients with chronic headaches
Chad Webb
- 09:30-09:40 Chronic Post dural puncture headaches: The leak we sometimes find - A bicentric Surgical findings study
Amir El Rahal
- 09:40-09:50 Real-time visualization of cerebrospinal fluid flow in shunts: A wearable, non-invasive thermal imager for shunt function assessment
Chase Correia
- 09:50-10:00 Two years' experience with home based ICP monitoring; efficacy and clinical value
Peter Hoppner
- 10:00-10:10 Remote digital cognitive testing is feasible in iNPH and can identify disease specific deficits
Chris Carswell
- 10:10-10:20 Continuous remote monitoring of CSF shunt flow: Clinical feasibility and utility in low-access settings
Chase Correia

10:20-11:00 Coffee Break & Exhibition

GRAND BALLROOM I - II

11:00-12:20 SESSION 5: YOUNG INVESTIGATORS AWARDS I

Chairs: **Fernanda Martins & Fabian Fluerebrock**

- 11:00-11:10 Sheep rumination induces increase in intracranial pressure pulse amplitude
Martina Roncoroni
- 11:10-11:20 Long-term effects of cerebrospinal fluid shunting on quality of life in idiopathic normal pressure hydrocephalus
Giovanni Grasso
- 11:20-11:30 Functional outcomes following shunt surgery in idiopathic normal pressure hydrocephalus patients with and without Alzheimer's disease neuropathology
Rosa Sahlstrom
- 11:30-11:40 Integrating Postural ICP Mapping and Ophthalmic Biomarkers for the Predictive Modelling of Shunt Performance in Idiopathic Intracranial Hypertension.
Hannah Eskender
- 11:40-11:50 Dynamic shifts in cerebrospinal fluid biomarkers and baseline androgen profiles in idiopathic normal pressure hydrocephalus
Adela Bubenikova
- 11:50-12:00 Digital biomarkers in normal pressure hydrocephalus: instrumented Timed Up and Go for assessing and predicting shunt response
Arianna Vignaroli
- 12:00-12:10 The "snowstorm": early neuroendoscopic lavage as a stage-dependent strategy in pyogenic ventriculitis
Niccolo Neri
- 12:10-12:20 Investigating genetic factors in Normal Pressure Hydrocephalus: a case-control whole exome sequencing study
Gianna Fote

12:20-13:10 Hydrocephalus Society Annual General Meeting

13:10-13:15 Fluids and Barriers of the CNS Update

13:15-14:20 Industry Sponsored Lunch Seminar

GRAND BALLROOM I - II

14:20-15:30 SESSION 6: ADULT HYDROCEPHALUS

Chairs: **Benjamin Elder & Chifumi Iseki**

- 14:20-14:30 Cost analysis of NPH treatment: What healthcare managers need to know
Rodolfo Casimiro Reis
- 14:30-14:40 NPH patient journey in a center of excellence: Does it make a difference
Fernando Hakim
- 14:40-14:50 Social determinants of health in idiopathic normal pressure hydrocephalus care pathways: A single center 10-year experience
Mark Luciano
- 14:50-15:00 Traditional imaging measures in idiopathic normal pressure hydrocephalus: A secondary analysis of the PENS trial
Mark Luciano

- 15:00-15:10 Artificial intelligence classification algorithm to detect the presence of the DESH sign in normal pressure hydrocephalus: A diagnostic tool.
Isabella Lacoutoure-Silgado
- 15:10-15:20 Complications after shunt surgery for idiopathic normal pressure hydrocephalus: optimal timing of postoperative imaging
Aslan Laskhkarivand
- 15:20-15:30 12-month gait and balance outcomes following ventriculoperitoneal shunting for iNPH in the PENS trial
Naomi Abel

GRAND BALLROOM III

14:20-15:30 SESSION 7: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
Chairs: **Raphael Bertani & Carolyn Harris**

- 14:20-14:30 Shunt obstruction and the pathway to data-informed improved catheter design
Carolyn Harris
- 14:30-14:40 Toward data-driven optimization of patient-specific shunt settings
Fabian Fluerebrock
- 14:40-14:50 AI-based segmentation and setting detection of shunt valve settings in CT scans
Amir El Rahal
- 14:50-15:00 Therapeutic role of venous sinus stenting in pediatric idiopathic intracranial hypertension
Petr Skalicky
- 15:00-15:10 A new paradigm in personalised shunting: artificial intelligence for position prediction in patients with cerebrospinal fluid dynamic disorders
Emalee Burrows
- 15:10-15:20 What predicts success in endoscopic third ventriculostomy? A systematic review
Giovanna Trevisan
- 15:20-15:30 Telemetric intracranial pressure waveform analysis to optimise shunt function in normal pressure hydrocephalus
Arjun Ahluwalia

JARDIM

14:20-15:30 SESSION 8: NEUROIMAGING
Chairs: **Karin Kockum & Shigeki Yamada**

- 14:20-14:30 Longitudinal changes in periventricular lesion volume are associated with ventricular morphology changes in normal pressure hydrocephalus of the pens trial
Shimeng Wang
- 14:30-14:40 Detangling orthostatic headaches in spontaneous intracranial hypotension: A matter of CSF acceleration
Katharina Wolf
- 14:40-14:50 Intracranial arterial, venous and CSF volume change interaction during cardiac cycle in chronic hydrocephalus patients versus healthy elderly volunteers
Kimi Owashi

- 14:50-15:00 Methodological analysis of the PENS trial: An automatic pipeline for calculating Evan's index and callosal angle for NPH
Shimeng Wang
- 15:00-15:10 Methodological analysis of the PENS trial: An automatic pipeline for measuring corpus callosum arching
Shimeng Wang
- 15:10-15:20 Automated calculation of a quantitative DESH score in T1-weighted brain MRI for reproducible radiological assessment of hydrocephalus
Sara Qvarlander
- 15:20-15:30 AI-assisted analysis of brain parenchyma deformation and strain in patients with spontaneous intracranial hypotension
Amir El Rahal

15:30-16:15 *Coffee Break & Exhibition*

GRAND BALLROOM I - II

16:15-17:55 SESSION 9: ADULT HYDROCEPHALUS

Chairs: **Madoka Nakajima & Ignacio Jusue Torres**

- 16:15-16:25 Invited talk on post-traumatic hydrocephalus
Saul Almeida da Silva
- 16:25-16:35 Plasma p-tau217 reflects cognitive decline in idiopathic normal pressure hydrocephalus patients with comorbid Alzheimer's disease pathology
Chihiro Kamohara
- 16:35-16:45 Cognitive trajectories after shunt surgery in idiopathic normal pressure hydrocephalus: a domain sensitive framework for defining cognitive impairment and treatment response
Lisa Healy
- 16:45-16:55 The effect of ventriculoperitoneal shunt (VPS) in patients with idiopathic normal pressure hydrocephalus (iNPH) who did not undergo a tap test: Preliminary results of a prospective cohort study
Rodolfo Casimiro Reis
- 16:55-17:05 What continuous catheter recordings reveal about telemetric snapshot ICP monitoring
Sang Ho Kim
- 17:05-17:15 Tiered, mechanically-anchored framework for idiopathic normal pressure hydrocephalus
Eric Schmidt
- 17:15-17:25 Impact of Alzheimer's disease biomarkers and DESH score on tap test response in idiopathic normal pressure hydrocephalus
Yunfan You
- 17:25-17:35 The impact of CSF diversion on frailty and functional independence in normal pressure hydrocephalus: A 24-month prospective study
Samuel Jeffery

- 17:35-17:45 Reversible DESH in normal pressure hydrocephalus: Longitudinal volumetric changes and evidence of pseudoatrophy reversal after shunting
Fernando Hakim
- 17:45-17:55 Transcranial Doppler in Normal Pressure Hydrocephalus: A Systematic Review and Meta-Analysis of Diagnostic, Prognostic, and Monitoring Applications
Alexandra Ramos

GRAND BALLROOM III

16:15-17:55 SESSION 10: PEDIATRIC HYDROCEPHALUS
Chairs: **Francesca Pappafava & Leonardo Cadorin de Araujo**

- 16:15-16:25 Fetal neurosurgery for the treatment of hydrocephalus
Sergio Cavalheiro
- 16:25-16:35 Neurokids Project in Brazil
Nelci Zanon
- 16:35-16:45 Elevated pressure - impaired neural stem cell differentiation potentially disrupting ventricular zone genesis
Spencer Sabahat
- 16:45-16:55 Temporal evolution and predictive modeling of congenital hydrocephalus in Brazil (2010-2024)
Barbara Bonatti
- 16:55-17:05 Insights from patient-driven gene discovery approach for congenital hydrocephalus studies: the role of DIP2A in brain development and congenital hydrocephalus
Engin Deniz
- 17:05-17:15 Thirteen years of surgical bundles against pediatric shunt infection: meta-regression, dose-response, and external validation across 12,020 procedures
Leonardo Cadorin de Araujo
- 17:15-17:25 Mortality from congenital hydrocephalus in brazil: Ecological analysis and temporal projections (1996-2030)
Barbara Bonatti
- 17:25-17:35 Zwitterionic surface modification reduces astrocyte-microglia co-culture cell adhesion on ventricular shunt catheters in a flow model
Amirhoessein Shahriari
- 17:35-17:45 Evaluating the incidence and risk factors for ventriculo-peritoneal shunt sepsis in a rural hospital in South Africa
Patrick Lekgwara
- 17:45-17:55 Preliminary use of a novel, programmable, CSF flow-regulating device in the management of complex pediatric and transitional hydrocephalus
Richard Edwards

JARDIM

16:15-17:30 SESSION 11: YOUNG INVESTIGATORS SPECIAL SESSION

Chairs: **Fabian Fluerebrock & Linda D'Antona**

16:15-16:35 Designing a sustainable clinical career: Lessons from leadership and research

Karin Kockum

16:35-16:55 The reversible brain: How normal pressure hydrocephalus guided my career and revealed the power of multidisciplinary brain recovery

Fernando Gomes Pinto

16:55-17:05 Insights on work and research philosophy

Bryn Martin

17:05-17:30 Discussion

Sunday, 2 August 2026

GRAND BALLROOM I - I

08:30-09:20 **SESSION 12: JOINT ROUND TABLE: THE HEART OF THE MATTER: INTEGRATING PATIENT ADVOCACY INTO NEUROSURGICAL EXCELLENCE**

Moderator: **Michael Williams**

08:30-09:20 **Roundtable Discussion:**

Giorgio Palandri, *Hydrocephalus Society*

Juergen Beck, *European Association of Neurosurgical Societies-EANS*

Samantha Lanjewar, *Hydrocephalus Association*

Taiji Tsunemi, *Japanese Movement Disorders Society*

GRAND BALLROOM I - II

09:20-10:50 **SESSION 13: YOUNG INVESTIGATORS AWARDS II**

Chairs: **Carolyn Harris & Fernando Gomes Pinto**

09:20-09:30 Spatiotemporal characterization of choroid plexus organoid development
Celine Tran

09:30-09:40 Proximal revision free survival of ventricular shunt catheters following prophylactic flushing with noninvasive proximal flushing device: A multi-center experience
Ricardo Domingo Cabreja

09:40-09:50 Prevalence of mortality among iNPH patients undergoing ventriculoperitoneal shunting and its predictors
Derrick Obiri-Yeboah

09:50-10:00 Mitigating valve artifacts in post-shunt surgery MRI of the PENS trial using a 3D diffusion model
Shimeng Wang

10:00-10:10 Cortical auditory evoked potentials as neurophysiological markers of functional status and surgical response in idiopathic normal pressure hydrocephalus
Sandro Matas

10:10-10:20 Frailty does not alter postoperative improvement after shunting in idiopathic normal pressure hydrocephalus
Helen Hasanen

10:20-10:30 Assessing cognitive change with cerebrospinal fluid removal in NPH using the NPH-Cognitron, a novel 12-test digital cognitive battery
Alexander Hayes

10:30-10:40 A novel ageing population in neurosurgery: Late-midlife outcomes of individuals first shunted in infancy over 50 years ago
Arjun Ahluwalia

10:40-10:50 A germinal matrix hemorrhage CX3CR1GFP/+CCR2RFP/+ dual-reporter mouse model provides insights into central versus peripheral contributions to the cellular immune responses underlying hydrocephalus induction
Gio Jison

10:50-11:20 **Coffee Break & Exhibition**

GRAND BALLROOM I - II

**11:20-12:40 SESSION 14: THE BIG DATA ERA IN HYDROCEPHALUS:
AI TOOLS AND LARGE COHORTS**

Chairs: **Ahmed Toma & Shigeki Yamada**

- 11:20-11:30 Strategy for implementation of AI tools in clinical practice: Lessons learned from the imaging perspective
Karin Kockum
- 11:30-11:40 Diagnostic accuracy of smart device-based Gait-AI and imaging-AI DESH index for iNPH (Hakim's disease): A proposed next standard
Shigeki Yamada
- 11:40-11:50 Is iNPH truly a reversible dementia? How proteomic profiles inform strategic shunting in the complex brain
Niccolo Neri
- 11:50-12:00 Impact of endoscopic fornical manipulation on cognitive outcome: A prospective analysis of 60 intraventricular procedures
Riccardo Valiera
- 12:00-12:10 Deep learning for cerebrospinal fluid flow segmentation in phase-contrast MRI of hydrocephalus patients
Kimi Owashi
- 12:10-12:20 Diagnostic performance and clinical relevance of AI imaging diagnosis of Idiopathic Normal Pressure Hydrocephalus: A systematic review and meta-analysis
Anna Murat
- 12:20-12:30 When a complication becomes a learning opportunity
Daniele Rigamonti
- 12:30-12:40 Discussion

GRAND BALLROOM III

11:20-12:40 SESSION 15: ADULT HYDROCEPHALUS

Chairs: **Niccolo Neri & Laurence Watkins**

- 11:20-11:30 Brain sagging resolution after cranioplasty in hemicraniectomy patients
Amir El Rahal
- 11:30-11:40 Biomarkers and microbiome signatures in idiopathic normal pressure hydrocephalus: Results from a pilot study
Zeljka Maglica
- 11:40-11:50 Cerebrospinal fluid and plasma biomarker profiles in idiopathic normal pressure hydrocephalus compared with Alzheimer's and Parkinson's disease
Francesca Pappafava
- 11:50-12:00 Functional MRI reveals expanded and reorganized motor networks in idiopathic normal pressure hydrocephalus
Ondrej Bradac
- 12:00-12:10 External ventricular drainage strategies: Bolt vs tunnelled catheters and automated vs passive drainage — A retrospective cohort study
Emalee Burrows

- 12:10-12:20 Unveiling the man behind normal pressure hydrocephalus: The unpublished archives of Dr. Salomón Hakim
Fernando Hakim
- 12:20-12:30 Heterogeneous cortical volume loss in perisylvian structures in idiopathic normal pressure hydrocephalus
Paula Seixas
- 12:30-12:40 The early-stage iNPH therapeutic window: When radiological hallmarks precede clinical expression
Alexandra Ramos

JARDIM

11:20-12:40 SESSION 16: ORAL FLASH PRESENTATIONS OF EPOSTERS

Chairs: **Naomi Abel & Uwe Kehler**

- 11:20-11:25 Age-related variation in iCP wave amplitude across hydrocephalic conditions
Emalee Burrows
- 11:25-11:30 Impact of concomitant neurodegeneration on clinical outcomes in normal pressure hydrocephalus
Juan Daniel Ramirez Munoz
- 11:30-11:35 Hydrocephalus in neurocysticercosis: From obstruction to inflammation—
A heterogeneous and surgically challenging spectrum
Edgar M. Carrasco
- 11:35-11:40 Etiology of hydrocephalus among patients treated in a referral center over the last 10 years (2015-2025)
Joao Pedro Craco Lorentz
- 11:40-11:45 Does shunt revision leads to improvement in patients with iNPH evidenced by gait objective assessment
Derrick Obiri-Yeboah
- 11:45-11:50 Biomarker signature predicting response to cerebrospinal fluid diversion, complementing clinical–radiological assessment in hydrocephalus
Francesco Tuniz & Cristina Cuppone
- 11:50-11:55 A systematic review of normal pressure hydrocephalus presentation in patients under 60 years of age
Henrique De Paula
- 11:55-12:00 CSF biomarkers for differential diagnosis and surgical prognosis in normal pressure hydrocephalus
Hao Xu
- 12:00-12:05 The effect of ventriculoperitoneal shunt (VPS) on anxiety and depression symptoms among patients with idiopathic normal pressure hydrocephalus (iNPH) – Preliminary results of a case series
Rodolfo Reis
- 12:05-12:10 Outcomes of single-incision, laparoscopic placement of a fully subcutaneous short peritoneal catheter (SLAPS) for ventriculoperitoneal shunt in normal pressure hydrocephalus: A single-center cohort subanalysis
Raphael Bertani

- 12:10-12:15 Invasive preoperative investigations and decision-making in idiopathic normal pressure hydrocephalus
Giovanni Grasso
- 12:15-12:20 Clinical features, aetiologies, and outcomes of patients with secondary hydrocephalus: A retrospective cohort study
Vaasu Bansal
- 12:20-12:25 Ventriculoperitoneal shunts vs endoscopic surgery in patients with neurocysticercosis-induced hydrocephalus: A systematic review and meta-analysis
Pedro Tadao Hamamoto Filho
- 12:25-12:30 Reintervention and complication rates after cerebrospinal fluid shunting for intracranial arachnoid cysts: A systematic review and meta-analysis
Paula Seixas
- 12:30-12:35 Large volume LP v prolonged CSF drainage in predicting likely response to shunt insertion in iNPH: A single centre comparison of assessing different diagnostic methods on the same patients
Eva Rosito
- 12:35-12:40 Mini-mental state examination as a cognitive indicator after the tap test in normal pressure hydrocephalus
Vitoria Pinheiro

12:45-14:00 **Industry Sponsored Lunch Seminar**

GRAND BALLROOM I - II

14:00-15:30 **SESSION 17: YOUNG INVESTIGATORS AWARDS III**

Chairs: **Ignacio Jusue Torres & Giorgio Palandri**

- 14:00-14:10 Brain volume changes after targeted closure of spinal CSF leak in spontaneous intracranial hypotension
Federico Cagnazzo
- 14:10-14:20 Automatic clinical concept extraction for the early diagnosis of idiopathic normal pressure hydrocephalus: A natural language processing approach
Emalee Burrows
- 14:20-14:30 AI-assisted quantification of brain shifts and volume changes in Spontaneous intracranial hypotension
Amir El Rahal
- 14:30-14:40 Synergistic value of the ALPS index and CSF tau-profiles for optimized multimodal stratification of shunt responsiveness in suspected normal pressure hydrocephalus
Cristina Cuppone
- 14:40-14:50 Severity grading score predicts surgical intervention in iNPH patients with shunt-related chronic subdural hematoma
Emilie Skytoen
- 14:50-15:00 Comprehensive MRI volumetric analysis of fluid and parenchymal compartments in idiopathic normal pressure hydrocephalus
Gabriel Semione
- 15:00-15:10 Invasive ICP monitoring for suspected shunt under-drainage: Defining clinically useful ranges and thresholds
Sang Ho Kim

- 15:10-15:20 Volumetric predictors of ventriculomegaly in vestibular schwannoma: A pilot MRI study
Adela Bubenikova
- 15:20-15:30 Discussion

GRAND BALLROOM I - II

16:10-17:30 **SESSION 18: HYDROCEPHALUS SOCIETY-EANS JOINT SESSION: SPONTANEOUS INTRACRANIAL HYPOTENSION (SIH) – A COMMON CSF DISORDER**
Chairs: **Katharina Wolf & Michael Williams**

- 16:10-16:25 Impact on patients and health care system
Diogo Edelmath
- 16:25-16:40 Imaging and endovascular cure
Federico Cagnazzo
- 16:40-16:55 Surgical cure for all leaks
Florian Volz
- 16:55-17:10 NPH, IIH, and SIH-CSF and cognition
Juergen Beck
- 17:10-17:30 Discussion

GRAND BALLROOM III

16:10-17:30 **SESSION 19: ADULT HYDROCEPHALUS**
Chairs: **Fernando Hakim & Diego Alejandro Quintero**

- 16:10-16:20 Breaching trust
Daniele Rigamonti
- 16:20-16:30 Health-related quality of life after shunting in idiopathic normal pressure hydrocephalus: a meta-analysis of patient-reported outcomes
Henrique Hideki Kohayagawa Saito
- 16:30-16:40 Change in tinetti score following high-volume CSF drainage is associated with progression to ventriculoperitoneal shunting in suspected normal pressure hydrocephalus
Samuel Jeffery
- 16:40-16:50 Digital gait analysis reveals multisegmental gait phenotypes in normal pressure hydrocephalus before and after lumbar puncture using a standardized Hakim protocol
Juan Daniel Ramirez Munoz
- 16:50-17:00 Ventricular cannulation-associated intracerebral hemorrhage in adult ventriculoperitoneal shunt: A retrospective cohort study
Xuhao Fang
- 17:00-17:10 Neurofluids flow dynamics evolution in chronic hydrocephalus patients who improved after shunt
Kimi Owashi

- 17:10-17:20 Normal pressure hydrocephalus; Unraveling a syndrome
Neil Graff-Radford
- 17:20-17:30 Escaping the multi-shunt paradigm: Neuroendoscopy in multiloculated hydrocephalus
Guilherme Adabo

JARDIM

16:10-17:30 SESSION 20: INTRACRANIAL PRESSURE
Chairs: **Fabian Fluerebrock & Bryn Martin**

- 16:10-16:20 Computer vision pipeline for posture estimation and pressure synchronization in chronic sheep trials
Martina Roncoroni
- 16:20-16:30 Utility of intracranial pressure monitoring in idiopathic intracranial hypertension patients with refractory headaches: An 8-year single-surgeon, specialized-center retrospective study
Mark Luciano
- 16:30-16:40 Lumbar puncture opening pressure and continuous ICP monitoring: Concordance and clinical implications in idiopathic intracranial hypertension
Mark Luciano
- 16:40-16:50 Greater obesity severity is associated with worse patient-reported outcomes after ventricular shunting for idiopathic intracranial hypertension
Sana Murtaza
- 16:50-17:00 Comparative effectiveness of venous sinus stenting and ventricular shunting for idiopathic intracranial hypertension: A phenotype-stratified, propensity-matched cohort study
Mark Luciano
- 17:00-17:10 Complete resolution of papilledema and visual outcomes in venous sinus stenting versus shunting for intracranial hypertension: A systematic review and meta-analysis
Andre Pina
- 17:10-17:20 Reduced risk of shunt revision with programmable vs fixed-pressure valves in iNPH: A systematic review and meta-analysis
Luiz Fernando Carvalho
- 17:20-17:30 Trans-stenotic pressure gradient thresholds in venous sinus stenting: A bibliometric analysis of their origin and evidentiary basis
Luis Flavio Fabrini Paleare

17:30-18:00 Coffee Break & Exhibition

Monday, 3 August 2026

GRAND BALLROOM I - II

08:00-09:30 **SESSION 21: ADULT HYDROCEPHALUS** Chairs: **Giorgio Palandri & Fernando Hakim**

- 08:00-08:10 The importance of organizing the geriatric neurosurgery subspecialty in Brazil and Latin America
Fernando Gomes Pinto
- 08:10-08:20 Experimental hypertension in animal models submitted to cerebral volume infusion: How is intracranial compliance?
Eduardo Colombari
- 08:20-08:30 iNPH as mechanistic probe for clearance research in neurodegenerative diseases
Eric Schmidt
- 08:30-08:40 Potential for dementia prevention in Latin America: A public health policy perspective
Regina Paradela
- 08:40-08:50 Long journey in diagnosis and decision making for treatment of Hakim disease (idiopathic normal pressure hydrocephalus) in an urban area, Sendai, Japan
Chifumi Iseki
- 08:50-09:00 The presence of potential patients with idiopathic normal pressure hydrocephalus in the Okhotsk region of Hokkaido and associated clinical challenges: Toward future awareness strategies
Teruo Kimura
- 09:00-09:10 Hormonal and endocrine disturbances in spontaneous intracranial hypotension: A comparative cohort study
Amir El Rahal
- 09:10-09:20 Could gait analysis in the home environment support the assessment of shunt responsiveness to ventriculoperitoneal shunt treatment?
Sandra Fernandes Dias & Marianne Schmid Daners
- 09:20-09:30 Outcomes after single-incision, laparoscopic placement of a fully subcutaneous short peritoneal catheter (SLAPS) for ventriculoperitoneal shunt: A single-center experience
Raphael Bertani

GRAND BALLROOM III

08:00-09:20 **SESSION 22: EXPERIMENTAL HYDROCEPHALUS** Chairs: **Juan Daniel Ramirez Muñoz & Marianne Schmid Daners**

- 08:00-08:10 Functional interaction between ependymal ciliary movement and glymphatic pathway in chronic hydrocephalus model mice complicated with Alzheimer's pathology
Kaito Kawamura
- 08:10-08:20 Inflammatory protease-mediated barrier failure as a mechanistic framework for the origin of intraventricular hemorrhage
Leandro Castaneyra Ruiz

- 08:20-08:30 Impaired choroid plexus function promotes age-related neurodegeneration
Madoka Nakajima
- 08:30-08:40 Toward a controllable ovine normal pressure hydrocephalus model
Karl Werner
- 08:40-08:50 Evaluation of the administration of coenzyme Q10 and curcumin on brain lesions resulting from experimental hydrocephalus: a dose-response study
Tiago Neri Di Lorenzo
- 08:50-09:00 Role of continuous ICP monitoring in the diagnosis and treatment of post-traumatic hydrocephalus (PTH): prospective study and pressure curves analysis in a series of 10 patients
Luigi De Gennaro
- 09:00-09:10 Hydrostatic forces from distal catheter length can induce drainage despite virtual off setting
Michael Le
- 09:10-09:20 Diffusion tensor imaging metrics differentiate idiopathic normal pressure hydrocephalus from Alzheimer's disease and healthy aging
Diego Quintero

JARDIM

08:00-09:20 SESSION 23: TECHNICAL ADVANCES IN TREATMENT AND DIAGNOSIS
Chairs: **Ahmed Toma & Kaito Kawamura**

- 08:00-08:10 A Posterior craniometric landmark with a standardized 90° trajectory for reproducible freehand ventriculostomy: A CT-based study
Kaio Barros
- 08:10-08:20 Assisted versus freehand ventricular catheter placement in pediatric hydrocephalus: A systematic review and meta-analysis of randomized controlled trials
Renato Pereira
- 08:20-08:30 Case studies of a investigational wireless, wearable, noninvasive hydrocephalus shunt flow monitor across outpatient, emergency, and perioperative clinical settings
Chad Webb
- 08:30-08:40 Estimation of human brain fluid clearance using intrathecal imaging contrast agents
Aslan Lashkarivand
- 08:40-08:50 Random forest pixel classification for automated cerebral ventricle identification on intraoperative and transcranioplasty ultrasound: A proof-of-concept study
Raphael Bertani
- 08:50-09:00 An open-source AI-driven pipeline for automated ventricular segmentation and morphometric analysis in normal pressure hydrocephalus and the first open benchmark in the field
Matheus Rech
- 09:00-09:10 Our experience in management of Chiari I malformation with syrinx based on intracranial pressure monitoring
Charlie Richardson
- 09:10-09:20 Cranial suture displacement as a mechanism of intracranial volume expansion in idiopathic normal pressure hydrocephalus: A volumetric and geometric modeling study
Leonardo Brenner

GRAND BALLROOM I - II

09:30-10:20 SESSION 24: INPH GUIDELINES UPDATE

Chair: **Mark Hamilton**

09:20-09:50 International iNPH guidelines update part 1: Methods and results
Mark Hamilton

09:50-10:20 International iNPH guidelines update part 2: Implications for today and the future
Michael Williams

GRAND BALLROOM III

09:20-10:20 SESSION 25: NEUROIMAGING

Chairs: **Alexandra Ramos Márquez & Shigeki Yamada**

09:20-09:30 Neuroimaging in normal pressure hydrocephalus: What every physician should know
Paula Ricci Arantes

09:30-09:40 White matter changes in normal pressure hydrocephalus and Alzheimer's disease:
A comparative study
Hongliang Li

09:40-09:50 Metabolic difference of the default mode network between normal pressure
hydrocephalus and elderly control: A multi-regional ¹H-MRS study
Ki-Su Park

09:50-10:00 Anterior eye displacement in spaceflight: A previously unrecognized structural
change in astronauts
Bryn Martin

10:00-10:10 Radiological predictors of initial and sustained response to shunt insertion in normal
pressure hydrocephalus
George Tsermoulas

10:10-10:20 Neurofluids contributions to ICP excitation and relaxation during the cardiac cycle in
chronic hydrocephalus
Kimi Owashi

JARDIM

09:20-10:20 SESSION 26: PEDIATRIC HYDROCEPHALUS

Chairs: **Richard Edwards & Mark Luciano**

09:20-09:30 Spina bifida and congenital hydrocephalus in newborns: Prevalence analysis in
Brazilian states from 2010 to 2024
Giovana Lira Duarte

09:30-09:40 Endoscopic third ventriculostomy versus ventriculoperitoneal shunting for pediatric
hydrocephalus: a 10-year tertiary center experience
Tarsis Pissolato

09:40-09:50 Ventricular collapse and proximal catheter revision in young children with shunted
non-tumoural hydrocephalus: a retrospective cohort study
Lisa Hagens

- 09:50-10:00 Ventriculo-gallbladder shunt: case series and literature review
Leandro Amaral
- 10:00-10:10 Performance of adjustable pressure valves compared to fixed pressure valves in the management of pediatric congenital hydrocephalus
Gabriel Antunes Feijo
- 10:10-10:20 Hydranencephaly plus mimicking severe congenital hydrocephalus: A case report
Giovanna Trevisan
- 10:20-11:00 *Coffee Break & Exhibition*

GRAND BALLROOM I - II

11:00-12:30 SESSION 27: INTRACRANIAL PRESSURE

Chairs: **Sara Qvarlander & Katharina Wolf**

- 11:00-11:10 Brain neuromodulation in patients with NPH through the implantation of an internal cerebrospinal fluid shunt: the rationale
Manoel Jacobsen Teixeira
- 11:10-11:20 Optic nerve sheath diameter ultrasonography and invasive cisternal pressure monitoring for risk stratification and surgical selection in idiopathic intracranial hypertension
Luigi De Gennaro
- 11:20-11:30 Reoperation rates and hospital stay in venous sinus stenting versus shunting for idiopathic intracranial hypertension: A meta-analysis
Danielly De Souza
- 11:30-11:40 Lumbar infusion test in pediatric cerebrospinal fluid disorders: A combined review and institutional experience
Petr Skalicky
- 11:40-11:50 Surgical versus endovascular treatment for idiopathic intracranial hypertension
Samiya Abi Jaoude
- 11:50-12:00 Estimation of a disability weight for spontaneous intracranial hypotension with a patient-derived utility-based approach
Florian Volz
- 12:00-12:10 Cognitive function and spontaneous intracranial hypotension (SIH): A curable spinal dementia
Katharina Wolf
- 12:10-12:20 Noninvasive intracranial dynamics monitoring in complex hydrocephalus: A case report
Gustavo Frigieri
- 12:20-12:30 A reversed CSF–venous pressure gradient as a hemodynamic signature of cerebrospinal fluid–venous fistulas
Federico Cagnazzo

GRAND BALLROOM III

11:00-12:30 SESSION 28: ORAL PRESENTATIONS - VARIOUS TOPICS

Chairs: **Rodolfo Casimiro Reis & Chifumi Iseki**

- 11:00-11:10 Leveraging markerless video-based gait analysis to diagnose iNPH
James Liao
- 11:10-11:20 Temporal changes in finger tapping response to the tap test in idiopathic normal pressure hydrocephalus (iNPH)
Yoko Shimizu
- 11:20-11:30 Wireless, passive flow patency sensor for early detection of shunt malfunction in hydrocephalus
Seunghyun Lee
- 11:30-11:40 Temporary CSF diversion methods: Analysis of hospital stay and treatment costs in Brazil
Pedro Henrique Cieslak
- 11:40-11:50 Long-term stability of at-home measurements of ICP
Simon Malpas
- 11:50-12:00 Cost-effectiveness analysis of programmable versus fixed-pressure valves for normal pressure hydrocephalus under the SUS perspective
Aretha Luz
- 12:00-12:10 Expert consensus on the diagnosis and treatment of low-pressure hydrocephalus in China
Xuehai Wu
- 12:10-12:20 Diagnostic accuracy of cerebrospinal fluid drainage tests in predicting shunt response in idiopathic normal pressure hydrocephalus: a meta-analysis
Luca Andrews
- 12:20-12:30 Armoring the shunt: Antibiotic-impregnated catheters and infection risk in hydrocephalus – A meta-analysis
Marcela Pereira

JARDIM

11:00-12:30 SESSION 29: ORAL PRESENTATIONS - VARIOUS TOPICS

Chairs: **Eric Schmidt & Ignacio Jusue-Torres**

- 11:00-11:10 Identification of cerebrospinal fluid biomarkers for the differential diagnosis of idiopathic normal pressure hydrocephalus: a systematic review and meta-analysis
Ki-Su Park
- 11:10-11:20 Proportional mortality and stratification by maternal education in congenital hydrocephalus in Brazil
Barbara Bonatti
- 11:20-11:30 A systematic review of symptomatic choroid plexus cysts in children: A rarity or a nomenclature misdiagnosis?
Fernando Cotrim Gomes
- 11:30-11:40 Can biomarkers in cerebrospinal fluid predict outcomes in pediatric hydrocephalus?
Giovanna Trevisan

- 11:40-11:50 Rigid versus flexible neuroendoscopy in pediatric hydrocephalus: What does the evidence show? A systematic review
Giovanna Trevisan
- 11:50-12:00 Artificial intelligence in hydrocephalus related research: A brief bibliometric analysis
Pedro Henrique Cieslak
- 12:00-12:10 Lumbar cistern peritoneal shunt under epidural anesthesia —Operational points and clinical observation
Hao Xu
- 12:10-12:20 Complication rates of programmable vs non-programmable shunts in hydrocephalus: A bayesian pairwise meta-analysis of randomized controlled trials
Renato Pereira
- 12:20-12:30 Objective gait biomarkers define a distinct motor signature in idiopathic normal pressure hydrocephalus, a potentially reversible gait disorder: A systematic review and meta-analysis
Diego Quintero

12:35-13:40 *Industry Sponsored Lunch Seminar*

GRAND BALLROOM I - II

13:40-15:30 SESSION 30: ADULT HYDROCEPHALUS

Chairs: **Ahmed Toma & Chris Carswell**

- 13:40-13:50 Idiopathic normal pressure hydrocephalus: When does an ageing population make a rare disease clinically recognisable?
Ahmed Toma
- 13:50-14:00 Early postoperative outcomes after ventriculoperitoneal shunting for idiopathic normal pressure hydrocephalus
Felipe Bassetto Capell
- 14:00-14:10 Impact of cervical stenosis, myelopathy and decompression on gait outcomes following ventriculoperitoneal shunting in idiopathic normal pressure hydrocephalus
Derrick Obiri-Yeboah
- 14:10-14:20 Risk of intracranial hemorrhage after cortical brain biopsy during shunt surgery for idiopathic normal pressure hydrocephalus: A prospective comparative study
Aslan Lashkarivand
- 14:20-14:30 Reversible parkinsonism in normal pressure hydrocephalus (Hakim syndrome): Evidence from lumbar tap test
Fernando Hakim
- 14:30-14:40 Durability of gait improvement after shunting in idiopathic normal pressure hydrocephalus: Evidence of decline beyond three years
Derrick Obiri-Yeboahr
- 14:40-14:50 Cochlear symptoms in patients shunted for normal pressure hydrocephalus: A 12-year single-center retrospective study
Stephane Goutagny
- 14:50-15:00 Is there a volumetric therapeutic window in idiopathic normal pressure hydrocephalus?
Rafael Holmgren

- 15:00-15:10 Cortical volume loss in skull base-adjacent and cistern-adjacent regions in iNPH: Testing the pia-arachnoid dehiscence hypothesis
Gabriel Semione
- 15:10-15:20 Callosal angle improvement following endovascular shunting for normal pressure hydrocephalus
Pedro Lylyk & Adel Malek
- 15:20-15:30 U-CARE iNPH Score as a proxy indicator: Associations between caregiver evaluation and objective clinical outcomes in idiopathic normal pressure hydrocephalus
Francesco Tuniz

GRAND BALLROOM III

13:40-15:30 SESSION 31: ORAL FLASH PRESENTATIONS OF EPOSTERS

Chairs: **Carolyn Harris & Sara Qvarlander**

- 13:40-13:45 Anti-siphon devices for overdrainage prevention in normal pressure hydrocephalus: a meta-analysis
Leticia Gusso Scremin
- 13:45-13:50 Cranio spinal complianceS during the cardiac cycle in chronic hydrocephalus
Kimi Owashi
- 13:50-13:55 The development of a predictive framework for shunt optimisation in IIH using real-time ICP mapping and waveform analysis (P2/P1 Ratio)
Hannah Eskender
- 13:55-14:00 Dynamic modulation of non-invasive ICP waveform morphology suggests extracranial sensitivity to CSF drainage and postural change
Mark Luciano
- 14:00-14:05 Venous sinus stenting as primary intervention therapy in long-standing idiopathic intracranial hypertension: A case report and systematic review.
Kim Wouters
- 14:05-14:10 Association between ventricular size and outcomes after ventricular shunting in Idiopathic Intracranial Hypertension
Sana Murtaza
- 14:10-14:15 Ventriculobiliary shunt as an alternative in complex hydrocephalus: A case report
Nicolle da Silva Dantas
- 14:15-14:20 Peritonitis caused by ventriculoperitoneal shunt infection: A diagnostic challenge in the emergency department
Stefanie Kaestner
- 14:20-14:25 Are we intervening too late? Timing of surgical treatment in pediatric hydrocephalus
Giovanna Trevisan
- 14:25-14:30 Challenges in the differential diagnosis of idiopathic normal pressure hydrocephalus against parkinson's and alzheimer's diseases: A systematic review
Raquel Menegatt
- 14:30-14:35 Reconsidering the timing of venous sinus stenting in refractory idiopathic intracranial hypertension: A case report and systematic review
Kim Wouters

Detailed Programme

- 14:35-14:40 Neuroendoscopic infection control strategy for ventriculitis in hydrocephalus after posterior fossa surgery: Aerial lavage and combined endoscopic and shunt CSF diversion
Ricardo Maldonado Padilla
- 14:40-14:45 Where are the patients lost? A meta-analysis of the INPH diagnostic cascade
Kaua Gabriel Oliveira da Silva
- 14:45-14:50 The wandering cyst: Pan-ventricular migration of racemose neurocysticercosis and pooled analysis of 28 cases
Kaua Gabriel Oliveira da Silva
- 14:50-14:55 Automated brain segmentation in a real-world normal pressure hydrocephalus cohort
Clara Belessiotis
- 14:55-15:00 Cognitive changes after the tap test in normal pressure hydrocephalus: A systematic review
Vitoria Pinheiro
- 15:00-15:05 Hakim syndrome or Hakim disease? A scoping review of the nosological framework of normal pressure hydrocephalus
Juan Daniel Ramirez Munoz
- 15:05-15:10 Impact of Alzheimer's disease co-pathology on shunt outcomes in idiopathic normal pressure hydrocephalus: A systematic review and meta-analysis
Ameya Patwardhan
- 15:10-15:15 What radiological markers can tell us about INPH severity? A prospective study
Camilla Gaiga
- 15:15-15:20 Optic Nerve Sheath Ultrasound in suspected spontaneous intracranial hypotension: Guiding therapeutic decisions and monitoring after epidural blood patch, a three-case series
Francesco Russo
- 15:20-15:25 Interim results of a comparative study of brain temperature changes across clinical environments in shunted patients
Hannah Eskender
- 15:25-15:30 Early experience with a flushing-enabled ventricular shunt for pediatric hydrocephalus in Zambia: A pilot case series
Bryn Martin

JARDIM

13:40-15:30 SESSION 32: ORAL PRESENTATIONS - VARIOUS TOPIC

Chairs: **Gianpaolo Petrella & Uwe Kehler**

- 13:40-13:50 Automated extraction of clinical concepts into shunt registries using content mapping and natural language processing
Emalee Burrows
- 13:50-14:00 Multidimensional connectomic characterization of shunt-responsive normal Pressure hydrocephalus (NPH): A feasibility study
Alexandra Ramos
- 14:00-14:10 Cerebrospinal fluid A β 42, tau protein levels and related ratios in patients with hydrocephalus: A clinical observational study
Chunyan Liu
- 14:10-14:20 Establishing the first geriatric neurosurgery academic league in Brazil: The University of São Paulo Medical School experience
Vinicius Galbim De Paula
- 14:20-14:30 Improved strategies of one-stage cranioplasty and ventriculoperitoneal shunt for post-traumatic hydrocephalus
Kun Wang
- 14:30-14:40 Water influx into CSF spaces evaluated by H215O dynamic PET
Mitsuhiro Mase
- 14:40-14:50 Correlation between BOON and MoCA scores in idiopathic normal pressure hydrocephalus (iNPH)
Chunyan Liu
- 14:50-15:00 Changes of TUG and MoCA in patients with iNPH before and after cerebrospinal fluid tap test
Yan Xing
- 15:00-15:10 Clinical course and predictors of resolution in subdural hematomas/hygromas following shunting for normal pressure hydrocephalus
Mark Luciano
- 15:10-15:20 Non-invasive manometry and DTI tractography in the surgical management of arachnoid cysts: A case-based update
Rodolfo Reis
- 15:20-15:30 Understanding the natural history of idiopathic normal pressure hydrocephalus through long-term comprehensive outcomes
Giovanni Grasso

GRAND BALLROOM I - II

15:30-16:30 CLOSING OF THE CONGRESS

Chairs: **Giorgio Palandri & Fernando Gomes Pinto**

- 15:30-15:40 Young investigators awards results
Carolyn Harris
- 15:40-15:55 Highlights of the Hydrocephalus 2026 World Congress
Laurence Watkins
- 15:55-16:05 Closing address by the Hydrocephalus 2026 World Congress President
Fernando Gomes Pinto
- 16:05-16:15 Welcome address by the Hydrocephalus 2027 World Congress Organizing Team
Mark Luciano & Sevil Yasar
- 16:15-16:25 Closing Address by the Hydrocephalus Society President
Giorgio Palandri
- 16:25-16:30 Closing Photo

E-POSTERS - ALL DAYS

Available through the Mobile App & Screens

- P.01** Auditory electrophysiological evaluation of patients with suspected idiopathic normal pressure hydrocephalus who underwent the tap test
Sandro Matas Liliane Aparecida Fagundes Silva
- P.02** Bobble-head doll syndrome after a vp shunt in a dandy walker syndrome
Eduardo Samir Cipriano Hanna
- P.03** Cerebral edema secondary to pediatric hydrocephalus in Uganda - Provenance, diagnosis and prognosis
Yasmin Sa Cerqueira
- P.04** Changes in CSF dynamics and regional brain activation following CSF drainage in NPH
Eungseok Oh
- P.05** Characterization of intracranial compliance dynamics in older adults using a non-invasive monitoring method – Study protocol
Gustavo Frigieri
- P.06** Choroid plexus remodeling associated with inflammatory CSF exposure in preterm acquired hydrocephalus
Noah Ramos
- P.07** Chronic post-traumatic hydrocephalus: Pathophysiological mechanisms involving inflammation, cerebrospinal fluid dynamics, and glymphatic dysfunction
Maria Alice Simões Silva
- P.08** Clinical profile, frailty, and comorbidity burden in shunted idiopathic normal pressure hydrocephalus: A real-world cohort
Maria Clara Junqueira Teles De Menezes, Caio Arruda Maciel
- P.09** Cognitive changes after the tap test in normal pressure hydrocephalus: Comparison between ACE and MMSE
Rodolfo Casimiro Reis
- P.10** Comparative outcomes of classical ventricular access trajectories for ventricular catheterization in adults: A systematic review and meta-analysis
Maurício Mathews Faria Monti Lopes Oliveira
- P.11** Defining shunt overdrainage by ICP measurements and waveform morphology: A systematic review
Jassim Araim
- P.12** Delayed ventriculoperitoneal shunt migration presenting as pericardial effusion: A case report
Fernando Cotrim Gomes
- P.13** Endoscopic fenestration of a temporal arachnoid cyst causing hydrocephalus in an adult: A case report and literature review
João Pedro Techelsk Fasanaro
- P.14** Epidemiological trends, hospital mortality, and economic burden of hydrocephalus complications: An 11-year ecological study
Maria Alice Simões Silva

- P.15** Expanded MMSE-2 may enhance detection of cognitive changes after the tap test in normal pressure hydrocephalus: A pilot study
Kim Wouters
- P.16** Family and caregiver guidance in the management of idiopathic normal pressure hydrocephalus: A systematic review
Paula Cristina Gomes, Kim Wouters
- P.17** Feasibility of an ai-assisted symptom tracking tool for adults with hydrocephalus: A pilot patient-led initiative
Kevin Flynn
- P.18** Is ptosis an immediate post - endoscopic third ventriculostomy complication?
Athanasia Athanasaki
- P.19** Long-term technical reliability and survival of telemetric ICP sensors: A 2-year experience from a tertiary uk center
Hannah Eskender
- P.20** Magnetic resonance imaging characterization in an experimental rat model of neurocysticercosis-induced hydrocephalus
João Pedro Craco Lorentz
- P.21** Management strategies and neurodevelopmental outcomes in infantile occlusive hydrocephalus: A single-center cohort study
Vasilii E. Danilin
- P.22** Memory impairment in idiopathic normal pressure hydrocephalus: Primary deficit or secondary to attentional dysfunction? A systematic review
Kim Wouters
- P.23** Morphological and behavioral analysis with 3D brain reconstruction in an experimental model of chronic hydrocephalus
Higor Hernany Dias
- P.24** Morphological and radiological analysis of sexual dimorphism in extraparenchymal neurocysticercosis-induced hydrocephalus in rats
João Pedro Craco Lorentz
- P.25** Neuropsychological instruments used before and after the tap test in patients with idiopathic normal pressure hydrocephalus: A systematic review
Daniela Gama, Kim Wouters
- P.26** Normal pressure hydrocephalus within national dementia policies in aging societies: A comparative systematic review
Laura Miranda
- P.27** Post-traumatic external hydrocephalus in severe traumatic brain injury after decompressive craniectomy: Case report
Alexis Condolo Lara
- P.28** Predictive value of preoperative gait tests for postoperative improvement in idiopathic normal pressure hydrocephalus
Emilia Fromm
- P.29** Progress in biomarkers for early diagnosis of hydrocephalus: Challenges and future perspectives
Laura Miranda

- P.30** Relationship between neurofeedback electrophysiological patterns and neuropsychological assessment in normal pressure hydrocephalus
Kim Wouters
- P.31** Sphera pro/sphera grav programmable shunt system for hydrocephalus: Safety, efficacy and clinical performance in a singlecenter study
Michelle Rüedi De Paiva
- P.32** Subdural fluid collection in adults: Differential diagnosis and management - A case report
Stephannie Mônaco
- P.33** Surgical management of tumor-related pediatric hydrocephalus: A systematic review and meta-analysis of reoperation and revision after VPS versus ETV
Letícia Saraiva
- P.34** The benefits of intrauterine myelomeningocele closure (IUMC) in the treatment of hydrocephalus
Igor Vasconcelos Costa De Sousa
- P.35** Three-dimensional reconstruction and behavioral analysis of the ventricular system and hypothalamus in a rat model of acute hydrocephalus
Higor H. Dias, Pedro T. Hamamoto-Filho
- P.36** Time-stamp MRI for rapid, contrast-free evaluation of CSF flow in ventriculoperitoneal shunts
Clio Gonzalez-Zacarias
- P.37** Valve technology and risk of subdural hematoma in adult hydrocephalus: A systematic review with narrative synthesis
Rafael Zorzo
- P.38** Wearable-derived heart rate as an indicator of post-operative delirium in idiopathic normal pressure hydrocephalus patients undergoing VP shunt surgery
Katria Edwards



Hydrocephalus Society

International Society for Hydrocephalus
and Cerebrospinal Fluid Disorders



hydrocephalus-meeting.com