



**2025  
EDITION**

**MARCH  
08-09, 2025**

**Swissotel Ratchada  
Bangkok, Thailand**

## *Proceedings of*

World Critical Care & Anesthesiology Conference 2025

World Radiology & Medical Imaging Conference 2025

World Neuroscience & Psychiatry Conference 2025



**WRMI  
BANGKOK**  
World Radiology and Medical  
Imaging Conference (WRMI)  
Bangkok, Thailand



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**eshnr**  
european society of  
head and neck radiology



**Neuro and Biofeedback Society**  
Rewiring Minds



**Royal College of  
Emergency Medicine**



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# EPISIRUS SCIENTIFICA

Presents

# 2025

## Edition Conferences

Bookmark the Dates

**October  
10th & 11th , 2025  
Singapore**

**2025  
World Radiology and Medical  
Imaging Conference**  
[radiology.episirus.org](http://radiology.episirus.org)



**2025  
World Critical Care &  
Anesthesiology Conference**  
[criticalcongress.episirus.org](http://criticalcongress.episirus.org)



**2025  
World Neuroscience &  
Psychiatry Conference**  
[neuroscience.episirus.org](http://neuroscience.episirus.org)



**2025  
World Pediatrics Conference**  
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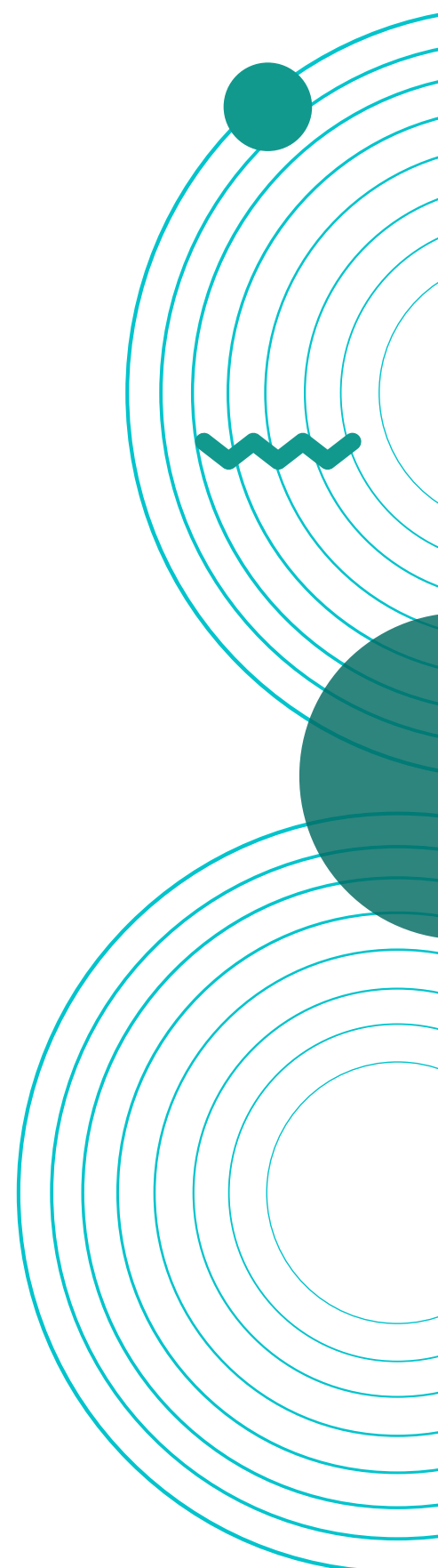
<b>2-6</b>	<b>Welcome message from OCMs</b>
<b>7</b>	<b>Meet our faculty</b>
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<b>19-28</b>	<b>Scientific Sessions &amp; Abstracts - Day 1</b>
<b>29-30</b>	<b>Keynote Forum - Day 2</b>
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# From the desk of our Organizing Committee Members

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JOINT MEETING ON  
WCAC25 | WNPC25  
WRMI25  
MARCH 08-09, 2025

[www.episirus.org](http://www.episirus.org)



# DR. TERRANCE KHASTGIR

Consultant Electrophysiologist, Integris Baptist Medical Centre, USA

Dear Colleagues,

Following major success in 2024, the World Critical Care & Anesthesiology Conference (WCAC25) and World Neuroscience & Psychiatry Conference (WNPC25) are set to return bigger for their upcoming 8th & 9th Edition, respectively, in Bangkok, the capital of Thailand.

Hosted by the Episirus Scientifica, the WCAC25 & WNPC25 will be held from March 08-09, 2025 in Swisshotel Ratchada, Bangkok, Thailand.

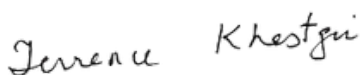
Driven by the legacy and expertise to promote regional and international collaborations and enhance scientific collaborations around the world, the renowned congress has set the bar for the promotion and development of clinical cardiology and cardiothoracic surgery around the globe.

The conference aims to provide participants with unparalleled insights into the latest research, developments, and treatments in the field of critical care, ICU, cardiothoracic surgery etc through its comprehensive scientific program led by international cardiologists and cardiac surgeons. The holistic suite of programs include high-level plenaries, interactive sessions, poster presentation opportunities, and workshops to catalyze and advance scientific knowledge in various cardiac fields.

Additionally, delegates will be given an opportunity to discover the latest industry innovations and networks while they build new contacts with like-minded professionals.

Join us now for an enriching experience and expert insights on the practice and future of critical care. We look forward to welcoming you to WCAC25 & WNPC25.

Sincerely yours



Dr. Terrance Khastgir, MD  
Organizing Committee Member  
Congress WCAC25 & WNPC25 | ESE



# DR. AHMED FOUAD

Cardiothoracic Surgeon, Ain Shams University, Cairo, Egypt

Dear Friends and Colleagues,

It has been a pleasure for me to be an Organizing Committee Member since 2018 and after the major success in the last 7 years, the 2025 World Medical Conferences will certainly be better for its upcoming 8th & 9th Editions to be held in Bangkok, Thailand.

The Conference will be held from March 08-09, 2025 in a hybrid model and will be organized by the Episirus Scientifica and collaborating societies.

Many participants from all over the world will gather to share knowledge, experience, and new techniques in the field of cardiology and cardiothoracic surgery. The conference will provide excellent opportunities for experts, consultants, physicians, surgeons and medical students to present the latest research developments through interactive sessions, poster presentations, workshops, and case reports.

Moreover, there will be a chance to follow the latest industry innovations and new research updates. Looking forward to seeing you all in Bangkok to enjoy the scientific program and at the same time explore the Asian taste of beautiful Bangkok.

Sincerely yours,



**Dr. Ahmed Fouad**  
**Organizing Committee Member &**  
**Permanent Member | ESE**



# DR VIKAS RAGHOVE

Assistant Professor, Clinical Anesthesia Ball Memorial Hospital,  
IU university, Indiana, USA

Dear Friends and Colleagues,

It is an honor to be part of the Organizing Committee for the 2025 World Critical Care & Anesthesiology Conference (WCAC25 Bangkok). As this is my first time serving on the committee, I am excited to contribute to the success of this prestigious event. With 10 years of anesthesia experience in India and current experience in the United States, I bring a diverse perspective to the conference.

The WCAC25 will take place on March 08-09, 2025, in Bangkok, Thailand organized by Episirus Scientifica. This year's theme, "Global Health Perspectives in Critical Care and Anesthesiology" aligns perfectly with my keen interest in innovation. I have a granted patent, another applied for, and three medical products with prototypes ready, along with several more in the works.

WCAC25 will offer excellent opportunities for experts, consultants, physicians, surgeons, and medical students to present their latest research developments through interactive sessions, poster presentations, workshops, and case reports. Additionally, attendees will have the chance to explore the latest industry innovations and research updates.

I look forward to welcoming you all to Bangkok, where we can enjoy a rich scientific program and experience one of the most vibrant cities in the world.

Sincerely,

*vikas raghove*

Dr Vikas Raghove  
Organizing Committee Member  
Congress WCAC25 | ESE



# DR. LAXMIKANT RATHI

President, Indian Psychiatric Society (IPS), India

Dear Delegates,

It is my privilege to extend warm greetings to all participants of the World Neuroscience & Psychiatry Conference 2025, to be held in the dynamic and culturally vibrant city of Bangkok, Thailand, on March 8-9, 2025. This global event, centered on the theme “Discovering the Science of Brain and Mental Health,” promises to be a remarkable confluence of knowledge, innovation, and collaboration.

As we navigate the complexities of brain science and mental health in an ever-evolving world, this conference offers an unparalleled platform to exchange ideas, discuss groundbreaking research, and explore novel therapeutic approaches. The integration of neuroscience and psychiatry is essential for advancing our understanding of mental health disorders and paving the way for more effective, personalized interventions.

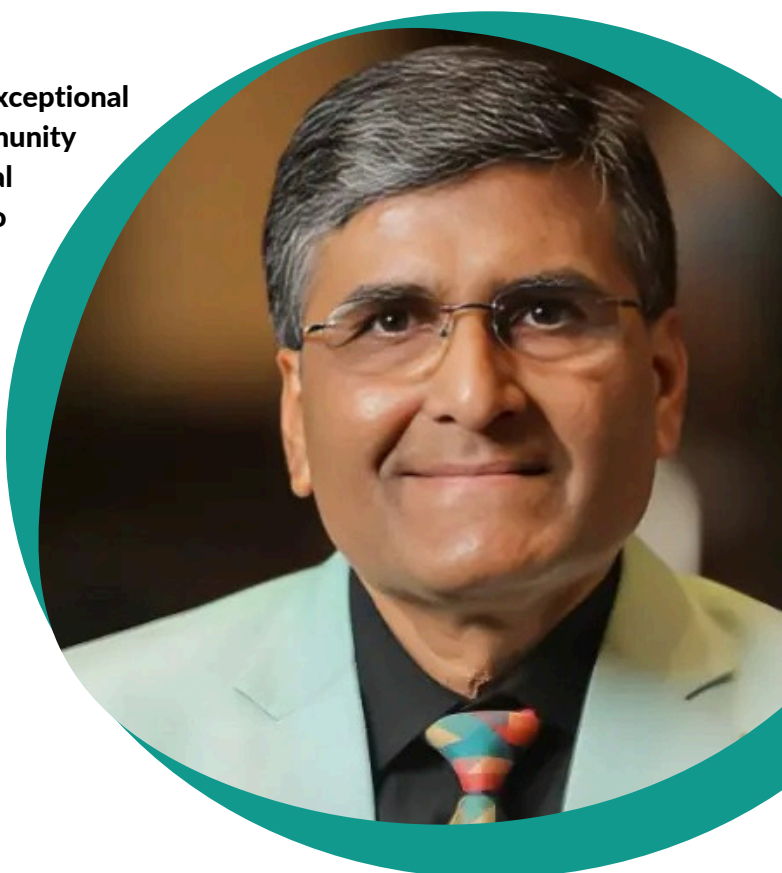
Bangkok, with its rich history, modern dynamism, and welcoming spirit, provides the perfect setting for this intellectual and cultural exchange. I encourage all participants to immerse themselves in the scientific discussions while taking the opportunity to experience the unique heritage of this beautiful city.

I congratulate the organizers for curating an exceptional program and bringing together a diverse community of professionals dedicated to advancing mental health globally. Let us seize this opportunity to foster partnerships, share our expertise, and contribute to shaping the future of neuroscience and psychiatry.

Looking forward to seeing you in Bangkok in WNPC25!

Warm regards,

Dr. Laxmikant Rathi  
President,  
Indian Psychiatric Society  
WNPC25 OCM | ESE



# Meet our Faculty

Dr. Ahmed Fouad, Egypt  
Dr. Salvatore Di Somman, Italy  
Dr. Laxmikanth Rath, India  
Dr. Ryan M. Cobb, USA  
Dr. Susana Gonzalez Suarez, Spain  
Dr. Vidya Vijay Nair, USA  
Dr. Prateek Koolwal, India  
Dr. Hanjun Wang, USA  
Dr. Vamsidhar Amburu, India  
Dr. Richard Andre Lucero, Philippines  
Dr. Madhuri Priyadarshi, India  
Dr. Nidhi Bidyut Panda, India  
Dr. Ali Albweady, Saudi Arabia  
Dr. Natesan Chidambaranathan, India  
Dr. Gulchekhra Khamraeva, Uzbekistan  
Dr. Joel Vincent, Australia  
Dr. Pankaj Goyal, India  
Dr. Surbhi Gupta Aggarwal, India  
Dr. Anand P Singh, India  
Dr. Amit P Chauhan, India  
Dr. Abhinav Dileep Wankar, India  
Dr. Amrit Pattojoshi, India  
Dr. Sheelaj Sharma, UAE  
Dr. Sudhir Bhawe, India  
Dr. Grace Kujur, India  
Dr. Lazar Veparala, India  
Dr. Sam Vaknin, UK  
Dr. Sergey V. Suchkov, México  
Dr. A V Srinivasan, India  
Dr. Rezaul Hamid, India  
Dr. Vishad Tripathi, India  
Dr. Nidhi Trivedi, Australia  
Dr. Pavneet Kochar, India  
Dr. Sandhya Gujar, India

Dr. Wael Ahmed, Egypt  
Dr. Shekhar Suman Saxena, India  
Dr. Prateek Verma, UK  
Dr. Deeksha Sharma, India  
Dr. Salahuddin Mohammad, Sweden  
Dr. Parin Sangoi, India  
Dr. Newfight Seth, India  
Dr. Ismail Jainulnadin Namaji, India  
Dr. Shikhar Gupta, India  
Dr. Aswani Kumar Balakrishna Pillai, India  
Dr. Daniel Steinberger, USA  
Dr. Hadi Zomorrodian, Germany  
Dr. Sweta Mohanty, India  
Dr. Lydia Justi, Germany  
Dr. Jinsung Wang, USA  
Dr. Alma Devina Puspita Sari, Indonesia  
Dr. Sebastian Evers, Germany  
Dr. Yusuf Kirana Raksawardana, Indonesia  
Dr. Pragati Jena, India  
Dr. Mohammed Taghi Beigmohammed, Iran  
Dr. Mohammad Reza Farnia, Iran  
Dr. Vamsidhar Amburu, India  
Dr. M V Sravani, India  
Dr. Anusha Devi Yogiswaran, Malaysia  
Dr. Kevin Anton, USA  
Dr. Virendra R. Mishra, USA  
Dr. Sanjeev Chawla, USA  
Dr. Aws Hamid, USA  
Dr. Alean Al-Krenawi, Canada  
Dr. Vikas Raghoe, USA  
Dr. B Gayathri Priyadharshinee, India  
Dr. Mayur Sukhdas Ganvir, India  
Dr. T. Rajini Samuel, India  
Dr. Pooja Baliga, India



# SCIENTIFIC PROGRAM

**Day 1 : Mar 08, 2025**

**Hall: Le Lotus 1**

**08:00 - 08:30**

**Registrations**

**08:30 - 08:40**

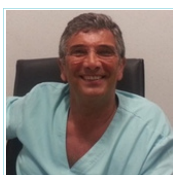
**Opening Ceremony**

**08:40 - 09:00**

**Introduction**

**09:00 - 10:30**

**Keynote Forum**



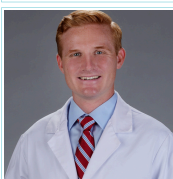
**Title: Biomarkers Update in the Management of Sepsis in ICU**

**Salvatore Di Somma**, Professor, Emergency Medicine, la Sapienza UNIVERSITY, Rome, Italy



**Title: Navigating the Mind: The Intersection of Technology and Mental Health in the 21st Century**

**Laxmikanth Rathi**, President, Indian Psychiatric Society (IPS), India



**Title: Developing a Comprehensive Venous Practice**

**Ryan M. Cobb, MD**, Academic Clinician, Assistant Professor, Venous Interventions at Penn Interventional Radiology (VIPIR), Penn Interventional Radiology, The Hospital of the University of Pennsylvania, Philadelphia, USA

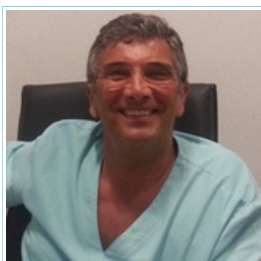
**10:30 - 10:40**

**Group Photo Session**

**10:40 - 11:00**

**Networking and Refreshment Break - Foyer Area**

**Sessions (S):** Critical Care, Pain and Emergency Medicine | Trauma and Anesthesiology | Regional Anesthesia | Thoracic Surgery and Cardiology | ICU Management and Practice | Cardiac and Neuro Anesthesia and Critical care | Anesthetic and ICU Management and Practice | Infectious Diseases Primary Care and Nursing | Pediatric Anesthesiology | ECMO



**Session Chair:** Salvatore Di Somma,  
Professor, Emergency Medicine, la  
Sapienza UNIVERSITY, Rome, Italy

**Session Co-Chair:** Madhuri Priyadarshi,  
Professor, Department of "Cardiac  
Anaesthesia" & Head of Department in LPS  
Institute of Cardiology, Kanpur, UP, India



**11:00 - 11:15**

**Title: The Role of Transesophageal Echocardiography as a Monitoring System in Patients undergoing major Surgery**

**Susana Gonzalez Suarez**, Universty Hospital Vall d'Hebron, Associate Professor Universitat Autònoma de Barcelona, Barcelona. Spain

**11:15 - 11:30**

**Title: A Brief Overview of the Use of Extracorporeal Membrane Oxygenation (ECMO) in COVID-19 Patients with Severe Acute Respiratory Distress Syndrome (ARDS)**

**Vidya Vijay Nair**, Keck Medical Center of the University of Southern California, USA

11:30 - 11:45	<b>Title: Calibrated Sedation for Thyroplasties, with intra-operative phonation</b> <b>John Ekpa</b> , University Hospitals of Northamptonshire, England, United Kingdom
11:45 - 12:00	<b>Title: Spatial Changes in Cardiac Gene Profiles post-Acute Lung Injury</b> <b>HANJUN WANG</b> , Department of Anesthesiology, University of Nebraska Medical Center, Omaha, NE 68198, USA
12:00 - 12:15	<b>Title: Plasma Exchange in ICU</b> <b>Vamsidhar Amburu</b> , Critical Care Medicine, Consultant Intensivist , Division of Critical Care Medicine, Ivy Hospital, Mohali, India
12:15 - 12:30	<b>Title: Sedation Outside the Operating Room</b> <b>Richard Andre Lucero</b> , Division of Pediatric Anesthesiology, Philippine Children's Medical Center, Quezon City-1101, Philippines
12:30 - 12:45	<b>Title: Annulaoortic Ectasia: A rare case: Anaesthetic Consideration</b> <b>Madhuri Priyadarshi</b> , Professor, Department of "Cardiac Anaesthesia" and Head of Department in LPS Institute of Cardiology, Kanpur, Uttar Pradesh, India
12:45 - 13:00	<b>Title: Predictors Of Unfavorable Neurological Outcome in Patients with Moderate To Severe Isolated Traumatic Brain Injury Undergoing Decompressive Craniectomy: A Prospective Observational Study</b> <b>Nidhi Bidyut Panda</b> , Professor Neuroanaesthesia, Department of Anesthesia, Post Graduate Institute of Medical Education and Research (PGIMER) Chandigarh, India
13:00 - 13:15	Questions & Answers
13:15 - 14:00	Lunch
14:00- 14:20	<b>Special Session : Neuro Cognitive Plasticity Therapy in Psychiatric Conditions</b> <b>Anand P Singh</b> , Prof & Head, Department of Psychology and Mental Health, Gautam Buddha University, New Delhi India ; President, Neuro and Biofeedback Society, (NABS), India

**Sessions (S):** Radiology and Imaging | Critical Care Medicine | Anesthesiology | Neurology and Psychiatry | Neuroscience | Psychology and Mental Health | Cardiac Anaesthesia



**Session Chair:** Laxmikanth Rathi, President, Indian Psychiatric Society (IPS), India

**Session Co-Chair:** Natesan Chidambaranathan, Head of the Department, Radiology and Imaging Sciences, Apollo Hospitals in Chennai, India



14:20 - 14:35	<b>Title: Impact of COVID-19 Pandemic on Radiology Department Employees and Trainees in Al-Qassim, 2021</b> <b>Ali Albweady</b> , Saudi Arabia
14:35 - 14:50	<b>Title: Insights into Amide Proton Transfer weighted Imaging in Evaluation of Intracranial Tumours</b> <b>Natesan Chidambaranathan</b> , Head of the Department, Radiology and Imaging Sciences, Apollo Hospitals in Chennai, India
14:50 - 15:05	<b>Title: ACARA-As Close As Reasonably Achievable: A New Paradigm in Radiography</b> <b>Joel Vincent</b> , Department of Medical Imaging Bundaberg Base Hospital Queensland, Australia
15:05 - 15:20	<b>Title: Role of Intervention Radiology in OGY and Fetal Medicine</b> <b>Pankaj Goyal</b> , Intervention radiologist, India
15:20 - 15:35	<b>Title: Advanced Fetal Neurosonogram</b> <b>Surbhi Gupta Aggarwal</b> , Senior Consultant and Specialist, Radiology, ESI Hospital New Delhi, India
15:35 - 15:50	<b>Title: Communication in the ICU: A Critical Component</b> <b>Abhinav Dileep Wankar</b> , MBBS,DNB (Hospital Admin) MNAMS,MISQUA, Advanced Healthcare Management Program(ISB), Fellowship in International Society in Quality(Ireland), Post Graduate Diploma in Medico Legal System, Post Graduate Diploma in Hospital Planning and Designing, Former SR, AIIMS(New Delhi), India
15:50 - 16:05	<b>Title: Awake Craniotomy and Minimally Invasive Neurosurgery: Advancing Patient-Centered Care and Institutional experience</b> <b>Shiv Lal Soni</b> , Associate Professor, Division of Neuroanaesthesia, Department of Anaesthesia and Intensive Care, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

16:05 - 16:20

Networking and Refreshment Break - Foyer Area

16:20 - 16:35

**Title: Erector spinae block - Anatomy and distribution dynamics**  
**Sheelaj Sharma**, Consultant Anaesthetist, Mediclinic Hospital - Airport Road. Abu-Dhabi, UAE

16:35 - 16:50

**Title: Evolutionary Psychiatry: A Paradigm Shift**  
**Sudhir Bhawe**, NKP Salve Institute of Medical Sciences, Nagpur, India

16:50 - 17:05

**Title: Wellbeing and Death Anxiety Among Covid-19 Recovered Individuals in Relation to Demographic Variables**  
**Grace Kujur**, GK Psychotherapy and Rehabilitation Centre, Chhattisgarh, India ; **Lazar Veparala**, Associate Professor, Dept. of Psychology, Yogi Vemana University, Kadapa, A.P., India

17:05 - 17:20

**Title: A Cross-Sectional Study on Nightmare Experiences and Perceived Ethnic Discrimination Among Female University Students in the United Arab Emirates**  
**Gabriel Andrade**, College of Medicine, Ajman University, UAE

17:20- 17:35

Questions & Answers

END OF DAY 1

**Day 2: March 09, 2025**

**Hall: Le Lotus 1**

09:00 - 10:00

**Keynote Talk**



**Title: Personalized and Precision Medicine (PPM) as a Unique Healthcare Model through Biodesign-driven and Inspired Biotech, Translational Applications and Neurology-related Biomarketing to Secure the Human Healthcare and Biosafety**  
**Sergey V. Suchkov**, Professor in Medicine & Immunology, R&D Director of the National Center for Human Photosynthesis Aguascalientes, México



**Title: Cerebellar Cognitive Affective Syndrome (CCAS ) – A New Look**  
**A V Srinivasan**, Emeritus Professor, The Tamilnadu Dr.MGR Medical University, Former head and Professor of Neurology, Madras Medical College , Former President-Indian Academy of Neurology, India

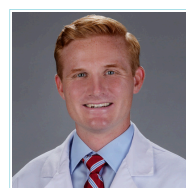
**Sessions (S):** Psychiatry | Critical Care Medicine | Hypertension & Stroke | Radiology | Anaesthesiology | Pharmacology | Neuroscience | Psychology and Adolescent Medicine | Neurology | Emergency Radiology | Psychology | Pediatric and Adolescent Mental Health | Anesthesiology | Case Reports



**Session Chair:** Sergey V. Suchkov, Professor in Medicine & Immunology, R&D Director of the National Center for Human Photosynthesis Aguascalientes, México



**Session Co-Chair:** Vikas Raghove, Assistant Professor, Clinical Anesthesiology, Ball Memorial Hospital, IU University, Indiana, USA



**Session Co-Chair:** Ryan M. Cobb, MD, Academic Clinician, Assistant Professor, Venous Interventions, Penn Interventional Radiology (VIPIR), The Hospital of the University of Pennsylvania, USA

10:00 - 10:15	<p><b>Title: Migraine and Epilepsy: Do They Share Common Neurobiology</b>  <b>Rezaul Hamid</b>, Psychiatrist, Entrepreneur, Researcher and Founder &amp; Proprietor, Mindcare Neuro Psychiatry Research Centre, Barpeta, India</p>
10:15 - 10:30	<p><b>Title: Child &amp; Adolescent Mental Health</b>  <b>Vishad Tripathi</b>, Ph.D (Vedic Science- Quantum Consciousness), India ; <b>Nidhi Trivedi</b>, CEO of Nidhi Perception , Pty Ltd, registered counselor, and a certified CBT therapist, Australia</p>
10:30 - 10:45	Networking and Refreshment Break - Foyer Area
10:45 - 11:00	<p><b>Title: ECMO Retrieval— Transport And Challenges</b>  <b>Pavneet Kochar</b>, Attending Consultant, Critical Care Medicine, Fortis Memorial Research Institute, Gurgaon, India</p>
11:00 - 11:15	<p><b>Title: 7 Steps Integrative Approach In ABG Interpretation Using Novel Acid Base Balance Theory</b>  <b>T. Rajini Samuel</b>, Professor of Biochemistry, Shri Sathya Sai, Medical College and Research Institute, SBV Chennai Campus, Sri Balaji Vidyapeeth Deemed to be University, India</p>
11:15 - 11:30	<p><b>Special Session: "Aha! I Have An Idea, What Next"</b>  <b>Vikas Raghove</b>, Assistant Professor, Clinical Anesthesia, Ball Memorial Hospital, IU University, Indiana, USA</p>
11:30 - 11:45	<p><b>Title: Emergency Radiology: Bridging the Gap Between Life and Diagnosis</b>  <b>B Gayathri Priyadharshinee</b>, Radiologist, India</p>
11:45 - 12:00	<p><b>Title: Recent Advancements in Critical Care Medicine</b>  <b>Mayur Sukhdas Ganvir</b>, Consultant Intensivist, Critical Care, Department, Dr. D Y Patil Medical College, Navi Mumbai, India</p>
12:00 - 12:15	<p><b>Title: Comparative Study Between Morphine and Dexmedetomidine For Postoperative Analgesia In Patients Undergoing Cancer Surgeries</b>  <b>Wael Ahmed</b>, Anesthesia Consultant, Cairo University, KAMC, Egypt</p>
12:15 - 12:30	<p><b>Title: Diastolic Dysfunction – Clinical Impact in Perioperative Management</b>  <b>Shekhar Suman Saxena</b>, Department of Cardiac Anesthesia, The Madras Medical Mission hospital, Chennai, India</p>
12:30 - 12:45	<p><b>Title: Innovation in Ambulatory Anesthesiology Cancer Care</b>  <b>Geema Masson</b>, Memorial Sloan Kettering Cancer Center, USA</p>
12:45 - 13:00	Questions & Answers
13:00 - 13:45	Lunch Break
13:45 - 14:00	<p><b>Title: Beyond the Art, Towards the Possible - Innovation and Research in Critical Care Medicine and Anaesthesia</b>  <b>Prateek Verma</b>, ST8 Dual Intensive Care Medicine and Anaesthetics, Sheffield Teaching Hospitals, Yorkshire and Humber Deanery, Retrieval and Transfer Fellow, Adult Critical Care Transfer Service (ACCTS) Wales, Honorary Senior Lecturer, Bangor University, UK</p>
14:00 - 14:15	<p><b>Title: Difficult Airway Management</b>  <b>Sandhya Gujar</b>, Dean and Professor, Dept of Anesthesiology, MGM Medical College Vashi, Navi Mumbai, India</p>
14:15 - 14:30	<p><b>Title: Role of Color Doppler USG in AV fistula assessment in CKD patients</b>  <b>Shikhar Gupta</b>, Department of Radiology, Jawaharlal Nehru Medical College, Aligarh, Uttar Pradesh, India</p>
14:30 - 14:45	<p><b>Title: Enhanced Recovery After Cesarean</b>  <b>Aswani Kumar Balakrishna Pillai</b>, Consultant Anaesthesiologist and Intensivist Nahas Hospital, Kerala, India</p>
14:45 - 15:00	<p><b>Title: Well-being Spectrum Traits are associated with Polygenic Scores for Autism</b>  <b>Salahuddin Mohammad</b>, Department of Surgical Sciences, Functional Pharmacology and Neuroscience, Uppsala University, Uppsala, Sweden</p>
15:00 - 15:15	<p><b>Title: Effect of Antidepressants on Neurodegeneration and Neuroplasticity in Patients with Depression: A comparison between SSRI and SNRI</b>  <b>Deeksha Sharma</b>, Department of Pharmacology, All India Institute of Medical Sciences, New Delhi, India</p>
15:15 - 15:30	<p><b>Title: Neuroendocrine Tumor PET imaging - Combining Dotatate and FDG</b>  <b>Daniel Steinberger</b>, Associate Professor, Nuclear Medicine and Body Imaging, Department of Radiology, University of Minnesota, USA</p>
15:30 - 15:45	<p><b>Title: Tracheal Intubation in Prone Position</b>  <b>Ismail Jainulnadin Namaji</b>, Professor (Emeritus), Department of Anaesthesia, Dr. D. Y. Patil Medical College and Hospital, Kolhapur, India</p>

15:45 - 16:00

**Title: Clozapine Induces Perineuronal Net Remodelling in a Developmental Mouse Model of Schizophrenia**  
**Susana García-Cerro**, Translational Psychiatry Group, Seville Biomedical Research Institute (IBiS)-CSIC, Seville, Spain

16:00 - 16:15

**Title: Patient Preferences for Long-Term Treatment For Opioid Use Disorders: Findings From A Healthcare Setting In India**

**Newficht Seth**, National Drug Dependence Treatment Centre, AIIMS, New Delhi, India

16:15 - 16:30

**Title: The Aggressive Narcissist**

**Sam Vaknin**, Professor of Clinical Psychology and Management Studies in CIAPS (Commonwealth Institute of Advanced Professional Studies), Cambridge and Birmingham, UK; Ontario, Canada; and Lagos, Nigeria and in South East European University (SEEU), North Macedonia

16:30 - 16:45

**Questions & Answers**

16:45 - 17:00

**Networking and Refreshment Break - Foyer Area**

17:00: 17:30

## E-Poster SESSION

### Poster Judges



**Madhuri Priyadarshi**, Professor, Department of "Cardiac Anaesthesia" & Head of Department in LPS Institute of Cardiology, Kanpur, UP, India



**Anand P Singh**, Prof & Head, Department of Psychology & Mental Health, Gautam Buddha University; President, Neuro and Biofeedback Society, (NABS), India

EP001

**Title: A Case of Aortic Sinotubular Shelf Disguising as Aortic Dissection**

**Sweta Mohanty**, Resident, Department of Cardiac Anaesthesiology, Care Hospital, Bhubaneswar, Odisha, India

EP002

**Title: AI-Driven Analysis of Language Patterns in Parkinson's Disease**

**Lydia Justi**, Department of Neurology, Friedrich-Schiller-University, Jena, Germany

EP003

**Title: Investigation of Visuomotor Learning Deficits in Individuals with high Obsessive-compulsive Tendencies**

**Jinsung Wang**, Kinesiology Programs, Zilber College of Public Health, University of Wisconsin-Milwaukee, USA

EP004

**Title: The Possibility of Using Cost-Effective AI to Make Early Sepsis Detection More Accessible**

**Alma Devina Puspita Sari**, Faculty of Medicine, Universitas Jember, Jember, Indonesia

EP005

**Title: Examination and evaluation of neuropsychological processes and behavioural characteristics of migraineurs in response to an indirect migraine trigger confrontation**

**Sebastian Evers**, Department of Neurology, University Hospital Würzburg (UKW), Würzburg D 97080, Germany

EP006

**Title: Managing A Sudden Intra-operative Unstable Atrial Fibrillation**

**Yusuf Kirana Raksawardana**, Department of Anesthesiology and Intensive Therapy, Universitas Gadjah Mada – Sardjito General Hospital, Indonesia

EP007

**Title: General Anesthesia in Morbidly Obese Patients Undergoing Upper Airway Surgery: Total versus Lean Body Weight Drug Dosing Calculation? Lessons Learned**

**Shianita Stanie**, Department of Anesthesiology and Intensive Therapy, Universitas Gadjah Mada, Yogyakarta, Indonesia

EP008

**Title: Obesity Deleteriously Affects Anesthetic and Surgical Outcome in Body Mass Index-Dependent Fashion**

**Wael Ahmed**, Anesthesia Consultant, Cairo University, KAMC, Egypt

EP009

**Title: Venous Priming with Tourniquet applied using Metoclopramide Alleviated Propofol Injection Pain: A comparative Study versus Xylocaine**

**Wael Ahmed**, Anesthesia Consultant, Cairo University, KAMC, Egypt

EP010

**Title: Early Disruption of NMDA Receptors During Neurodevelopment Induces Autism-Related Phenotypes**

**Ana Gómez-Garrido**, Translational Psychiatry Group, Seville Biomedical Research Institute (IBiS), Seville, Spain

EP011

**Title: A Case Of Intrahepatic Cholangiocarcinoma Presenting as a Liver Abscess: Diagnostic Dilemmas and Clinical Implications**

**Vidhina Khade**, MBBS, Junior resident, Department of Radiology, GMCH Nagpur, Maharashtra, India-440003

EP012

**Title: A baby diagnosed with epidermolysis bullosa associated with antral web**

**Adel Ahmed Alfayez**, Pediatric Surgery Department, Prince Sultan Military Medical City, Riyadh, Saudi Arabia

## CLOSING CEREMONY

**END OF DAY 2**

# COLLABORATORS



British Anaesthesia Pain Academy or BAPA is founded by a group of Consultant Anaesthetists and Regional anaesthesia professionals. The academy's core mission is to promote learning in Regional Anaesthesia. BAPA is blessed to have a resource pool from around the world and is committed to improving education in Ultrasound Guided Regional Anaesthesia (UGRA) for interventional acute pain management.



The ESHNR was founded in January 1987 by a small group of radiologists interested in Head and Neck Radiology, Jacqueline Vignaud, Hermann Wilbrand, Brigitte Appel, Klaus Reisner and Peter Phelps were among them.

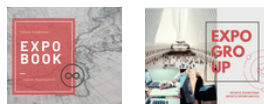


The Indian Psychiatric Society (IPS) began in 1947 with 15 founder members and has now grown to a membership of above 7000 specialists. The IPS currently represents the largest society of mental health professionals in India & works on health advocacy, social activism, policy formulation & medical research in the field of mental health.

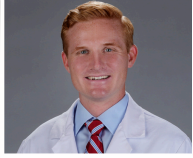


The Neuro and Biofeedback Society comprises of a diverse group of professionals, researchers, educators, and enthusiasts dedicated to the advancement of neurofeedback and biofeedback methodologies. Our members include psychologists, clinical psychologists, medical professionals, neuroscientists, clinicians, educators, and individuals passionate about harnessing the power of neuroplasticity and self-regulation for optimal health and performance.

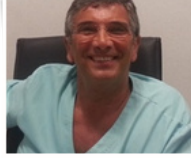
# MEDIA PARTNERS



# ORGANIZING COMMITTEE MEMBERS



**Dr. Ryan Cobb**  
MD, Academic Clinician, Assistant Professor, Venous Interventions at Penn Interventional Radiology (VIPR), Penn Interventional Radiology, The Hospital of the University of Pennsylvania, Philadelphia, USA



**Prof. Salvatore Di Somma**  
Professor, Emergency Medicine, la Sapienza UNIVERSITY, Rome, Italy



**Dr. Laxmikanth Rathi,**  
President, Indian Psychiatric Society (IPS), India



**Dr. Prateek Koolwal**  
Consultant and Incharge, Critical Care Medicine, Bombay Hospital Jaipur, India



**Dr. Natesan Chidambaranathan**  
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**Dr. Surbhi Gupta Aggarwal**  
Senior Consultant and Specialist, Radiology, ESI Hospital New Delhi, India



**Dr. Madhuri Priyadarshi**  
Professor, Department of "Cardiac Anaesthesia" and Head of Department in LPS Institute of Cardiology, Kanpur, Uttar Pradesh, India



**Dr. Vamsidhar Amburu**  
Critical Care Medicine Consultant, Livasa Hospital, India



**Dr. Sam Vaknin**  
Professor of Clinical Psychology and Management Studies in CIAPS (Commonwealth Institute of Advanced Professional Studies), Cambridge and Birmingham, UK



**Dr. Anand Pratap Singh**  
Prof & Head, Department of Psychology and Mental Health, Gautam Buddha University, New Delhi India; President, Neuro and Biofeedback Society, (NABS), India



**Dr. Alean Al-Krenawi**  
Full Professor at Algoma University in Ontario, Canada



**Ms. Nidhi Trivedi**  
CEO of Nidhi Perception Pty Ltd, Australia



**Dr. Pragati Jena**  
Assistant professor, Critical Care department, IMS and SUM Medical college and hospital, Bhubaneswar, India



**Dr. Kevin Anton**  
Assistant professor of radiology in the division of IR at Thomas Jefferson University in Philadelphia, Pennsylvania, USA



**Dr. Aws Hamid**  
Site Director for the Division of Cardiothoracic Imaging, Emory Saint Joseph's Hospital, USA



**Dr. Sanjeev Chawla**  
Research Associate Professor of Radiology at Perelman School of Medicine at the University of Pennsylvania, USA



**Dr. Virendra R. Mishra**  
Associate Professor in the Department of Radiology at the University of Alabama at Birmingham, UK



**Dr. Balasaheb Bande**  
Senior Consultant, Critical care, Anaesthesiology, & Medicine, Noble Hospital, Pune, India



**Dr. Gulchehra Khamraeva**  
Department of Anesthesiology and Intensive Care in Pediatrics, Center for the development of professional skills of medical staff under the Ministry of Health of the RUZ, Uzbekistan



**Dr. Anusha Devi Yogiswaran**  
Research coordinator, Pediatrics ICU in University Malaya Medical Center, Malaysia



**Dr. Mohammed Taghi Beigomhammedi**  
Professor, Anesthesiologist, Fellowship of Critical Care, Department of Anesthesia and Intensive Care, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran



**Dr. Sheelaj Sharma**  
Mediclinic Hospital - Airport Road, Abu-Dhabi, UAE



**Dr. Pooja Baliga**  
Consultant, Liver transplant unit at Medanta, The Medicity and Lead, Anaesthesia services for Intervention Radiology, India

# Day 1

March 08, 2025

# KEYNOTE FORUM





## **Salvatore Di Somma**

*Professor, Emergency Medicine, la Sapienza  
UNIVERSITY, Rome, Italy*

### **Biomarkers Update in the Management of Sepsis in ICU**

Salvatore Di Somma

*Professor, Emergency Medicine, la Sapienza UNIVERSITY, Rome, Italy*

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#### **Biography:**

He is the professor of Emergency Medicine at la Sapienza UNIVERSITY in Rome.

Graduate in Medicine “cum laude” (University of Naples) Italy , 1978.

Post Graduate “cum Laude” in Internal Medicine (University of Naples) Italy, 1983.

Post Graduate “cum Laude” in Cardiology (University of Naples) Italy, 1987

Current Position:

- Visiting Professor World Class Professor Programme at Brawijaya University Malang (Indonesia)
  - Academic Affiliation University of Lund (Expert Professor in Cardiovascular Prevention);Malmoe (Sweden)
  - Academic Affiliation (Visiting Professor–Scholar Researcher) UCSD University California San Diego (USA)
- 



## **Ryan Cobb**

*MD, Academic Clinician, Assistant Professor, Venous Interventions at Penn Interventional Radiology (VIPiR),  
Penn Interventional Radiology, The Hospital of the  
University of Pennsylvania, Philadelphia, USA*

### **Developing a Comprehensive Venous Practice**

Ryan Cobb

*MD, Academic Clinician, Assistant Professor, Venous Interventions at Penn Interventional Radiology (VIPiR), Penn Interventional Radiology, The Hospital of the University of Pennsylvania, Philadelphia, USA*

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**Biography:** Dr. Ryan Cobb is Assistant Professor of Clinical Radiology at Penn Interventional Radiology at the Hospital of the University of Pennsylvania in Philadelphia, Pennsylvania, USA. His practice focuses on Complex Venous Disease and Vascular Anomalies at an urban tertiary care academic health system, which includes acute/chronic DVT, post-thrombotic syndrome, chronic venous insufficiency, pelvic venous disease, congenital venous disorders, and complex venous reconstruction. He concentrates on patient-centered longitudinal care. He has a passion for exploring new therapeutic options for patients suffering from acute and chronic venous disorders and vascular anomalies.



## **Laxmikant Rathie**

*President, Indian Psychiatric Society (IPS), India*

### **Navigating the Mind: The Intersection of Technology and Mental Health in the 21st Century**

Laxmikant Rathie

*President, Indian Psychiatric Society (IPS), India*

The rapid advancements in technology have profoundly transformed the landscape of mental health care in the 21st century. From telemedicine to wearable health trackers, artificial intelligence, and virtual reality-based therapies, technology is redefining how mental health is understood, accessed, and managed. While these innovations offer immense opportunities for early diagnosis, personalized care, and the destigmatization of mental health issues, they also present unique challenges.

This explores the evolving relationship between technology and mental health, emphasizing both its potential and pitfalls. Key areas of focus include:

1. **Digital Diagnostics and Artificial Intelligence:** How algorithms and big data are improving mental health assessments and enabling predictive interventions.
2. **Telehealth and Accessibility:** The role of telepsychiatry in breaking geographical and socioeconomic barriers to care, especially in underserved regions.
3. **Tech-Driven Therapeutics:** Innovations such as mobile applications, virtual reality exposure therapy, and chatbots for mental health support.
4. **Ethical Considerations and Digital Overload:** Addressing privacy concerns, the impact of constant connectivity, and the mental health risks of technology overuse.

By critically analyzing these aspects, the paper advocates for a balanced integration of technology into mental health care. It highlights the need for evidence-based practices, ethical guidelines, and a human-centered approach to ensure technology serves as an enabler rather than a deterrent to mental well-being.

As society stands at the crossroads of a digital and mental health revolution, the convergence of innovation and empathy will be pivotal in shaping the future of holistic mental health care.

**Biography:** Dr. Laxmikant Rathie is a distinguished consulting psychiatrist based in Amravati, Maharashtra, with over 42 years of extensive experience in the field of mental health. He is currently practicing at his privately owned 25-bedded Govardhan Hospital, located near Rajkamal Bridge in Ambapeth, Amravati. Throughout his career, Dr. Rathie has made significant contributions to the psychiatric field, both nationally and internationally. He is currently serving as the President of the Indian Psychiatric Society (IPS) for the term 2024-2025 and holds a prominent position as an Executive Council Member of the SAARC Psychiatric Federation. He has also served as the Past President of the IPS West Zone and Maharashtra Chapter. Notably, Dr. Rathie is the Founder President of both the Vidarbha Psychiatrist Association and the Amravati Psychiatrists Association. He has been an international and national speaker at numerous conferences, sharing his knowledge on various aspects of psychiatric care.

# Scientific Sessions & Abstracts

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**Day 1: March 08, 2025**



**World Critical Care and Anesthesiology Conference 2025**  
**World Radiology & Medical Imaging Conference 2025**  
**World Neuroscience and Psychiatry Conference 2025**

## Session 1

### Session Chair: Salvatore Di Somma

Professor, Emergency Medicine, la Sapienza UNIVERSITY, Rome, Italy

### Session Co-Chair: Prateek Koolwal

Consultant and Incharge, Critical Care Medicine, Bombay Hospital Jaipur, India

Sessions: Critical Care, Pain and Emergency Medicine | Trauma and Anesthesiology | Regional Anesthesia | Thoracic Surgery and Cardiology | ICU Management and Practice | Cardiac and Neuro Anesthesia and Critical care Anesthetic and ICU Management and Practice | Infectious Diseases Primary Care and Nursing | Pediatric Anesthesiology | ECMO

## Hall: Le Lotus 1

### Title: The role of transesophageal echocardiography as a monitoring system in patients undergoing major surgery

*Susana Gonzalez Suarez, Universty Hospital Vall d'Hebron, Associate Professor Universitat Autònoma de Barcelona, Barcelona. Spain*

### Title: A Brief Overview of the Use of Extracorporeal Membrane Oxygenation (ECMO) in COVID-19 Patients with Severe Acute Respiratory Distress Syndrome (ARDS)

*Vidya Vijay Nair, Keck Medical Center of the University of Southern California, USA*

### Title: Spatial Changes in Cardiac Gene Profiles post-Acute Lung Injury

*HANJUN WANG, Department of Anesthesiology, University of Nebraska Medical Center, Omaha, NE 68198, USA*

### Title: Sedation Outside the Operating Room

*Richard Andre Lucero, Division of Pediatric Anesthesiology, Philippine Children's Medical Center, Quezon City-1101, Philippines*

### Title: Annuloaortic Ectasia: A rare case: Anaesthetic Consideration

*Madhuri Priyadarshi, Professor, Department of "Cardiac Anaesthesia" and Head of Department in LPS Institute of Cardiology, Kanpur, Uttar Pradesh, India*

### Title: Predictors Of Unfavorable Neurological Outcome in Patients with Moderate To Severe Isolated Traumatic Brain Injury Undergoing Decompressive Craniectomy: A Prospective Observational Study

*Nidhi Bidyut Panda, Professor Neuroanaesthesia, Department of Anesthesia, Post Graduate Institute of Medical Education and Research (PGIMER) Chandigarh, India*

### The Role of Transesophageal Echocardiography as A Monitoring System in Patients Undergoing Major Surgery

#### Susana Gonzalez Suarez

*Universty Hospital Vall d'Hebron, Associate Professor Universitat Autònoma de Barcelona, Barcelona, Spain*

The use of transesophageal echocardiography (TEE) can be useful in the diagnosis and monitoring of various clinical situations during major surgery (cardiac, vascular, renal, transplant). In liver transplant surgery there may be different hemodynamic situations that produce clinical instability and in which TEE can be useful for the follow-up and therapy of these patients. Likewise, these hemodynamic situations can be extrapolated to clinical scenarios other than liver transplant surgery. We present the results of a study to evaluate cardiac repercussions in patients after liver graft reperfusion. This observational study included 34 patients who underwent orthotopic liver transplantation and were monitored with TEE. The right ventricular/left ventricular (RV/LV) end diastolic area, tricuspid annular plane systolic excursion (TAPSE), left ventricular ejection fraction (LVEF) by Simpson method, pulsed Doppler of the mitral valve, and tissue Doppler motion of the mitral annulus were determined. Echocardiographic measurements were registered at the beginning of surgery and at 1 and 30 min after vascular unclamping. No patient presented systolic/diastolic dysfunction on the basal echocardiogram. Liver graft reperfusion may alter cardiac function. Cardiac dysfunction was more frequent in patients with reperfusion syndrome. These patients exhibited temporary dysfunction of the RV associated with a varying degree of LV diastolic-systolic dysfunction.

**Biography:** Dr. Susana González Suárez, specialist in Anesthesiology and Resuscitation since 2002 at the Hospital Universitari Vall d'Hebron (HUVH), cardiovascular anesthesiology and liver and lung transplant; Associate Professor at the Universitat Autònoma Barcelona (UAB) since 2011; Tutor of residents in anesthesiology and resuscitation; Instructor in basic-immediate-advanced life support by the European Resuscitation Council (ERC); European Accreditation in Transesophageal Echocardiography by EACVI/EACTAIC (European Association of Cardiovascular Imaging/Association of Cardiothoracic Anaesthesiology and Intensive Care); Tutor Coordinator of the Critical Care Area, since May 2007.

Author of several research papers in the area of cardiac surgery, liver transplant surgery, cardiac and pulmonary echocardiography, as well as co-author in different multicenter papers and trials, signed, among others, by: Covid19Surg, Global Surgery, PeriOperative ISchemic Evaluation (POISE); Study of the use of postoperative vasopressors (SQUEEZE); Study of colchicine for the prevention of atrial fibrillation after thoracic surgery (CO-PAF); Study of the effects of anesthesia in colorectal cancer outcome trial (ENCORE). Member of different Scientific Societies: Spanish Society of Anesthesiology and Resuscitation (SEDAR), European Society of Anesthesiology and Intensive Care (ESAIC), Spanish Society of Cardiology (SEC), EACVI/EACTAIC. Member of the "Cardiovascular Diseases" Research Group of the Vall d'Hebron Research Institute (VHIR), and member of different Committees-Commissions of HUVH: Heart Failure Committee, Subcommittee of pulmonary thromboembolism, Member of the Subcommittee of Critical Care on behalf of the Teaching Committee of HUVH.

## **A Brief Overview of the Use of Extracorporeal Membrane Oxygenation (ECMO) in COVID-19 Patients with Severe Acute Respiratory Distress Syndrome (ARDS)**

**Vidya Vijay Nair,<sup>2</sup> Antony Macido<sup>2</sup>**

<sup>1</sup>Verdugo Hills Hospital, University of Southern California, Los Angeles, CA, USA

<sup>2</sup>Keck Medical Center of the University of Southern California, Los Angeles, CA, USA

A serious complication of coronavirus disease 2019 (COVID-19) is acute respiratory distress syndrome (ARDS). Hypoxemia refractory to traditional management, including invasive positive pressure ventilation, is not uncommon with COVID-19.

It can lead to circulatory failure necessitating the use of mechanical circulatory support devices, specifically extracorporeal membrane oxygenation (ECMO). This presentation provides a brief update on the use and indications of ECMO for adult patients with COVID-19 around the world. We conducted a rapid umbrella review on the use of ECMO in treating COVID-19-related ARDS (CARDS), as well as current indications and contraindications for the initiation of ECMO. We reviewed the use of venovenous (V-V) ECMO and veno-arterial (V-A) ECMO in CARDS. The review found that V-V ECMO is the primary ECMO mode employed in the majority of the patients who required ECMO support for CARDS. Although the duration of V-V ECMO in COVID-19 was longer than the V-V ECMO in non-COVID-19 patients with ARDS, the mortality rate appears similar (ELSO, 2020). Meta-analyses reviewed reported an in-hospital mortality rate ranging from 37% to 49% for COVID-19 patients who required V-V ECMO. Conclusively, the survival benefit of ECMO in COVID-19 patients with severe cardiopulmonary failure is not clearly established, but V-V ECMO may be considered in adults with COVID-19 and severe cardiopulmonary compromise when resources are available. V-A ECMO may be considered in COVID-19 patients with severe cardiac failure, but limited data are available on survival benefits.

**Biography:** Vidya Vijay Nair is a Critical Care Nurse Practitioner with 10 years of NP experience in Critical Care. She holds an Acute Care NP licensure from California State University Los Angeles and have completed NP residency/internships at Cedars Sinai and USC hospital (2013-2015). She currently works as a Critical Care NP in Keck Medical Center of USC main campus at Los Angeles (2020-current). She is trained to do central lines, A-lines, intubations, diagnosing and treating interstitial lung diseases, pleural diseases, chronic obstructive lung diseases, severe ARDS with different ventilator strategies, pulmonary HTN, complex ICU patients post and pre-lung transplants, VV ECMOs, and so on. She is also a preceptor for NP fellowship program at Keck USC and Graduate Student Mentor for California State University, Los Angeles. She is also the project leader for Advanced Practice Provider Led Round in USC Keck Step-Down Unit.

## **Spatial Changes in Cardiac Gene Profiles post-Acute Lung Injury**

**Han-Jun Wang, Mohanad Shukry**

Department of Anesthesiology, University of Nebraska Medical Center, Omaha, NE 68198, USA

Patients suffering from acute lung injury (ALI) are at high risk of developing cardiac arrhythmias. Furthermore, ALI and acute respiratory distress syndrome (ARDS) can also cause right ventricular (RV) dysfunction. RV dysfunction in the context of ALI or ARDS is associated with worse outcomes, including increased mortality. In the current study, we aimed to utilize non-biased RNA-Seq analysis to discover any potential change in cardiac left ventricle (LV) and RV gene profiles post ALI. We created an ALI rat model using a single tracheal instillation of bleomycin (2.5 mg/kg) with saline as a vehicle (Veh) control. RNA-seq analysis of the LV revealed 85 downregulated and 147 upregulated genes at 1 week post-ALI compared to Veh-controls. In contrast, RNA-seq analysis of the RV showed a more extensive gene expression change, with 147 downregulated and 551 upregulated genes at 1 week post-ALI compared to Veh-controls. Gene Ontology (GO) enrichment analysis revealed similar gene expression changes in both the LV and RV, particularly related to extracellular region, extracellular space, and inflammatory and immune responses. Kyoto Encyclopedia of Genes and Genomes (KEGG) enrichment analysis further highlighted shared gene changes between the LV and RV, including those related to neuroactive ligand-receptor interaction, Staphylococcus aureus infection, and complement and coagulation cascades pathways. However, there were notable differences in gene expression between the LV and RV. For example, genes involved in oxygen carrier activity, oxygen binding, and oxygen transport were significantly altered in the LV but not in the RV. Conversely, the RV exhibited unique gene changes associated with membrane components and signaling pathways, including Coronavirus disease (COVID-19), PI3K-AKT, JAK-STAT, and PKG-cGMP signaling pathways. These findings suggest spatial differences in cardiac gene expression profiles following ALI.

**Biography:** Dr. Hanjun Wang is a Tenured Professor from University of Nebraska Medical Center (UNMC), USA. He is the Margaret R. Larson Endowed Professor in Anesthesiology at UNMC, USA. He has over 60 publications and has been serving as an editorial board member of reputed Journals. Dr. Mohanad Shukry is the Chair of Department of Anesthesiology at UNMC.

## Sedation Outside the Operating Room

**Richard Andre Lucero, MD, DPBA, FPSA, MBA, MMHoA<sup>1,2</sup>**

<sup>1</sup>*Division of Pediatric Anesthesiology, Philippine Children's Medical Center, Quezon City-1101, Philippines*

<sup>2</sup>*Department of Anesthesiology, Veterans Memorial Medical Center, Quezon City-1101, Philippines*

Sedation outside the operating room (OR) in critical care environments—such as intensive care units (ICUs), emergency departments (EDs), and imaging suites—has become increasingly necessary due to the complexity of procedures and interventions conducted in these settings. Providing sedation in non-OR areas pose unique challenges, including variations in available personnel, monitoring capabilities, and emergency response resources compared to the controlled OR environment. This review examines key aspects of sedation management for critically ill patients outside the OR, focusing on safety protocols, appropriate drug selection, and monitoring standards that can minimize adverse events.

The choice of sedative agents, such as benzodiazepines, propofol, dexmedetomidine, and opioids, is discussed in relation to patient condition, procedure type, and sedation depth requirements. Strategies to achieve effective sedation while maintaining hemodynamic stability and minimizing respiratory depression are emphasized, especially in patients with multi-organ involvement or compromised physiology. Additionally, this review explores the importance of individualized sedation plans that incorporate continuous monitoring and titration to maintain patient safety, reduce delirium, and promote early recovery.

Emerging technologies, including advanced monitoring tools and protocols for early detection of sedation-related complications, are also considered. Finally, we highlight the need for standardized guidelines and interdisciplinary collaboration among critical care teams to optimize sedation practices in non-OR settings. By addressing these challenges, critical care teams can enhance patient comfort, improve procedural success, and reduce complications, ultimately advancing the quality of care for patients undergoing sedation outside the OR.

**Biography:** Richard has completed his MD, MBA, and MHA in Saint Louis University, Far Eastern University, and Philippine Christian University respectively. He is presently a Medical Specialist in the Division of Pediatric Anesthesiology of Philippine Children's Medical Center and in the Department of Anesthesiology of Veterans Memorial Medical Center, Philippines.

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## Annuloaortic Ectasia: A Rare Case: Anaesthetic Consideration

**Madhuri Priyadarshi**

*Professor, Department of "Cardiac Anaesthesia" and Head of Department, LPS Institute of Cardiology, Kanpur, Uttar Pradesh, India*

- Annuloaortic ectasia (AAE) represents an entity of dilatation of proximal ascending aorta, sinuses of Valsalva and aortic annulus with poor coaptation of the valvular leaflets and aortic regurgitation. Critical point of rupture is at 6 cm for ascending aorta and 7 cm for descending aorta rupture. Generally causes no symptom till size exceeds the normal limit where chances of dissection or rupture increase. When rupture occurs, massive internal bleeding results and, unless treated immediately, shock and death can occur. We present management of a case of AAE with huge dilatation of ascending aorta (9.15 cm) with sinus venosus type ASD and abnormal coronary artery morphology. Annuloaortic ectasia may occur as an isolated condition or as part of a connective tissue disease. It can also occur with aging and hypertension. Echocardiography, CT aortogram is main investigation of choice. Our case was 46 years old male presented with chief complaints of worsening dyspnoea, chest pain and palpitation for 2 weeks. Positive findings clinically showed AF and pansystolic murmur. Blood investigations were normal. X-ray showed Cardiomegaly with prominent aortic knob. ECG showed LVH with ST elevation and AF.

- Annuloaortic ectasia associated with severe aortic AR is usually managed by implanting a composite graft that comprises both valve and conduit. After preoperative evaluation, surgical and anaesthesia should be planned.

- Aortic surgery is complex, and therefore, it requires an anesthetic tailored to the specific goals for hemodynamics, neurologic monitoring, and cerebral/spinal cord perfusion. Deliberate hypothermia is the most important for preventing cerebral ischemia. In postoperative period thromboembolism and hemorrhage are the main complications. So early detection and surgical intervention of annuloaortic ectasia is very important to prevent complications and reduce mortality.

**Biography:** Dr. Madhuri Priyadarshi is currently working as a Professor and Head of the department of "Cardiac Anaesthesia" in LPS Institute of Cardiology, Kanpur, Uttar Pradesh, India. She did her MBBS in 1999 from G.S.V.M Medical College, Kanpur and took her MD degree from BRD medical College, Gorakhpur in 2005. She then did her PDCC from the same Institute in 2008. She did her fellowship in Echocardiography during 2023. In her 17 years of career she has organized workshops on mechanical ventilation, Echocardiography, Hemodynamic monitoring and organized conference RSACP National 2024, presented seminars and actively participated in many conferences. She also did many publications in both national and international journals in recent years. The main area of interest are Cardiac surgery and Echocardiography.

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# **Predictors Of Unfavorable Neurological Outcome in Patients with Moderate To Severe Isolated Traumatic Brain Injury Undergoing Decompressive Craniectomy: A Prospective Observational Study**

**Nidhi Bidyut Panda<sup>1</sup>, Kirandeep Kaur<sup>2</sup>, Shalvi Mahajan<sup>3</sup>, Narender Kalaria<sup>3</sup>, Karthigeyan M<sup>4</sup>**

<sup>1</sup>Professor Neuroanaesthesia, Department of Anesthesia, Post Graduate Institute of Medical Education and Research (PGIMER) Chandigarh, India

<sup>2</sup>Assistant Professor, Department of Anesthesia MMIMSR Mullana, Ambala Haryana India

<sup>3</sup>Assistant Professor, Department of Anesthesia & Intensive Care, PGIMER Chandigarh, India

<sup>4</sup>Associate Professor, Department of Neurosurgery, PGIMER. Chandigarh India.

**Background:** It is important to triage patients with moderate to severe isolated TBI who would benefit from Decompressive craniectomy and to identify factors that have an unfavorable influence on outcome.

**Methodology:** A prospective observational study was conducted in a tertiary care center, in adult patients with moderate to severe isolated TBI who underwent DC. The study included preoperative, intraoperative, postoperative, and post-discharge factors. The outcome was defined as an unfavorable with GOSE 1-4 and favorable outcome at GOSE 5-8 at 90 days after discharge. Univariable analysis was done for all variables. The factors to prognosticate unfavorable outcomes using multivariable logistic regression was done and the sensitivity and specificity of the model was assessed using Receiver Operator Characteristic Curve.

**Results:** A total of 238 patients were enrolled in the study, 215 patients completed the study, 44 variables were assessed, out of which 25 were found to be statistically significant ( $p \leq 0.05$ ) in univariable analysis. These variables were analyzed by multivariable analysis using Logistic regression to predict unfavorable outcome. Significant factors observed were advancing age [AOR 1.071;  $p$ -value 0.017], time to surgery since injury [AOR 81.193;  $p$ -value  $< 0.001$ ], systolic BP  $< 100$  mm Hg [AOR 0.095;  $p$  value 0.049], lower GCS [AOR 4.340;  $p$ -value 0.049], anisocoria [AOR 7.460;  $p$ -value 0.036], higher Marshall score [AOR 4.775;  $p$ -value 0.024], intraoperative hypotension [AOR 15.894;  $p$ -value 0.001], patient with tracheostomy at discharge [AOR 155.361;  $p$ -value  $< 0.001$ ]. A prognostication model with 75.3% sensitivity and 97.1% specificity was derived.

**Conclusion:** Advanced age, low GCS at presentation, anisocoria, low SBP at admission and intraoperative period, higher Marshall scores, delay in surgery since the injury and failure to decannulate from tracheostomy are recognized as predictors of unfavorable outcome in Decompressive craniectomy for moderate to severe TBI in 90 days after discharge.

Table: Predictors of unfavorable outcome after DC in Moderate to severe TBI  
[Multivariable Analysis]

S.No.	Variables	Adjusted Odds ratio (AOR)	95% C.I. for odds ratio		p-value
			Lower	Upper	
1	Age (years)	1.071	1.013	1.133	0.017*
2	Time to surgery	81.193	11.864	555.637	0.000**
3	SBP at admission	0.095	0.009	0.990	0.049*
4	GCS at admission	4.340	1.006	18.723	0.049*
5	Anisocoria	7.460	1.142	48.730	0.036*
6	tSAH	12.116	1.344	109.253	0.026*
7	Marshall score	4.775	1.232	18.503	0.024*
8	Intraoperative hypotension	15.894	3.124	80.864	0.001**
9	Post discharge airway status	155.361	11.525	2094.310	0.000**
	Constant	0.002			0.012*

## Session 2

**Session Chair:**  
**Laxmikanth Rath**

President, Indian Psychiatric Society (IPS), India

**Session Co-Chair:**  
**Natesan Chidambaranathan**

Head of the Department, Radiology and Imaging Sciences, Apollo Hospitals in Chennai, India

Sessions: Critical Care, Pain and Emergency Medicine | Trauma and Anesthesiology | Regional Anesthesia | Thoracic Surgery and Cardiology | ICU Management and Practice | Cardiac and Neuro Anesthesia and Critical care Anesthetic and ICU Management and Practice | Infectious Diseases Primary Care and Nursing | Pediatric Anesthesiology | ECMO

### Hall: Le Lotus 1

**Title: Impact of COVID-19 Pandemic on Radiology Department Employees and Trainees in Al- Qassim, 2021**  
Ali Albweady, Saudi Arabia

**Title: Insights into Amide Proton Transfer weighted Imaging in Evaluation of Intracranial Tumours**  
Natesan Chidambaranathan, Head of the Department, Radiology and Imaging Sciences, Apollo Hospitals in Chennai, India

**Title: ACARA-As Close As Reasonably Achievable: A New Paradigm in Radiography**  
Joel Vincent, Department of Medical Imaging Bundaberg Base Hospital Queensland, Australia

**Title: Advanced Fetal Neurosonogram**  
Surbhi Gupta Aggarwal, Senior Consultant and Specialist, Radiology, ESI Hospital New Delhi, India

**Title: Communication in the ICU: A Critical Component**  
Abhinav Dileep Wankar, MBBS,DNB (Hospital Admin) MNAMS,MISQUA Advanced Healthcare Management Program(ISB) Fellowship in International Society in Quality(Ireland) Post Graduate Diploma in Medico Legal System Post Graduate Diploma in Hospital Planning and Designing Former SR, AIIMS(New Delhi), India

**Title: Awake Craniotomy and Minimally Invasive Neurosurgery: Advancing Patient-Centered Care and Institutional experience**  
Shiv Lal Soni, Associate Professor, Division of Neuroanaesthesia, Department of Anaesthesia and Intensive Care, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

**Title: Evolutionary Psychiatry: A Paradigm Shift**  
Sudhir Bhawe, India

**Title: Wellbeing and Death Anxiety Among Covid-19 Recovered Individuals in Relation to Demographic Variables**  
Grace Kujur, GK Psychotherapy and Rehabilitation Centre, Chhattisgarh, India ; Lazar Veparala, Associate Professor, Dept. of Psychology, Yogivemana University, Kadapa, A.P., India

**Title: A Cross-Sectional Study on Nightmare Experiences and Perceived Ethnic Discrimination Among Female University Students in the United Arab Emirates**  
Gabriel Andrade, College of Medicine, Ajman University, UAE

#### Impact of COVID-19 Pandemic on Radiology Department Employees and Trainees in Al- Qassim, 2021

Ali Albweady

Saudi Arabia

**Objectives:** This study aimed to assess the impact of the COVID-19 pandemic on radiology department employees and trainees. It also compared the impact of COVID-19 to the pre-COVID-19 era in the Al-Qassim region.

**Methods:** This was a quantitative observational analytical cross-sectional study conducted in the largest government hospitals under the Ministry of Health (MOH) in Al-Qassim. A pre-determined questionnaire was distributed among radiology staff that included demographic characteristics, the impact of the COVID-19 pandemic among radiology staff, the behavior of staff related to COVID-19 infection, and the assessment of mental health using the patient health questionnaire (PHQ-9).

**Results:** Eighty-four radiology staff were recruited (64.3% males vs 35.7% females). Of these, 66.7% were trainees and the rest were employees (33.3%). Of the trainees, 32.1% and 42.9% thought that elective imaging, procedures, and outpatient/clinic exposures were reduced during the pandemic, and 37.5% indicated that their training had been affected negatively. The prevalence of depression among radiology staff was 36.9%. The prevalence of depression was substantially higher among radiology trainees ( $p=0.038$ ), those who were not infected with COVID-16 ( $p=0.041$ ), and those who indicated that their studying time increased at the time of the pandemic ( $p=0.047$ ). However, after conducting multivariate regression analysis, these variables did not seem to have significantly affected depression ( $p>0.05$ ).

**Conclusion:** Training and medical education have been affected negatively because of the outbreak. Studying time and research activities of employees and trainees slowed down, which could be critical to their careers. Trainees complained about the significant reduction in their exposure to clinics and imaging procedures. Therefore, a method to safeguard the well-being of employees and trainees in the radiology department is necessary to limit the impact of such pandemics.

## Insights into Amide Proton Transfer weighted Imaging in Evaluation of Intracranial Tumours

**Natesan Chidambaranathan**

*Head of the Department, Radiology and Imaging Sciences, Apollo Hospitals in Chennai, India*

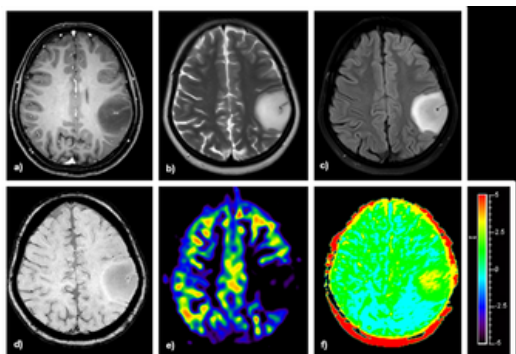
Amide Proton Transfer weighted imaging (APTw) – is a relatively novel, molecular based, contrast-free, CEST (Chemical Exchange Saturation Transfer) technique. It is fundamentally different from other advanced MRI techniques and reflects the mobile protein content within a lesion. Previous studies have consistently shown encouraging results for differentiation between Low Grade Gliomas (LGG) and High Grade Gliomas (HGG) using APTw imaging. Further research and personal experience at our center shows addition of unique perspectives with APTw by demonstration of intratumoural heterogeneity – which helps to target biopsy and also potentially disentangles neoplastic infiltration from vasogenic edema.

Numerous studies have also demonstrated its use in differentiation of radiation induced changes from tumour recurrence – which continues to remain a challenging frontier in the follow up of patients post treatment.

However, it is found to have limited value in differentiation of various tumour mimics from each other.

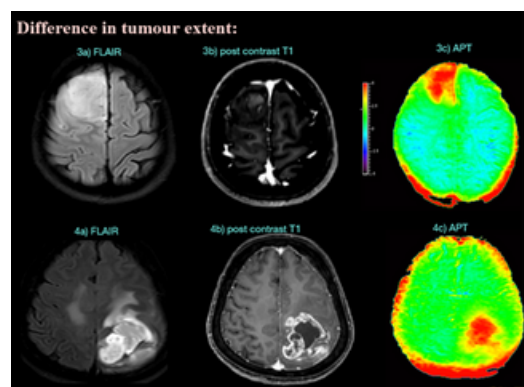
A knowledge on applications of APTw in various aspects of diagnostic neuroimaging – including where to use it and where not to; will prove to be a useful adjunct in routine practice.

Use Case Examples from Experience at Our Centre:



These images show a well demarcated left parietal lobe tumour, which shows no post contrast enhancement. A T2-FLAIR mismatch is observed. No intratumoural hemorrhages are seen on SWI and the lesion shows hypoperfusion on ASL rCBF map. Based on these features, the tumour was designated as a grade 2 glioma likely IDH mutant. However, on addition of the APTw sequence, it was seen that the mean APT of the tumour was 2.7 with a central region of more intense APT signal uptake (PLs note that the region displayed yellow corresponds to an APT value of >2.5 on the colour map). Therefore, this tumour was designated as a grade 3 tumour by the external reviewer. This was in accordance with the histopathology grading of the tumour which was a grade 3 IDH mutant astrocytoma.

Similarly, 7 out of 12 (58%) of the IDH mutant grade 3 astrocytoma were initially misclassified as grade 2 tumour in preoperative imaging – of which 5 were later appropriately classified with the help of APT, as grade 3.



Top row shows images from a patient with grade 4 glioma in right frontal lobe. They demonstrate that the extent of APT core signal abnormality is visibly smaller than the extent of FLAIR hypersignal but is larger than the enhancing area which we are seeing on the post contrast T1 image,

Similarly images of another patient with a glioblastoma in the left parietal lobe seen in 4a-c - in which we can see that the extent of APT signal abnormality is smaller than that of FLAIR signal abnormality but approximately equivalent to the area of enhancement.

We were able to document 16 such cases in which the APT cartography provided tumour extent appearances unique from the FLAIR/ post contrast T1 maps.

These observations suggest that there are differences in tumour extent as depicted on APTw compared to conventional images. But this is a subjective finding recorded by the observers and we need more objective methods such as volumetric assessments in future to validate this finding.

## ACARA-As Close as Reasonably Achievable: A New Paradigm in Radiography

**Joel Vincent**

*Department of Medical Imaging Bundaberg Base Hospital Queensland, Australia*

**Methods:** In many clinical settings, radiologists, the healthcare professionals responsible for interpreting diagnostic images, are generally unaware of the volume and reasons for rejected images. The radiographer, who oversees acquiring and evaluating the images for diagnostic quality, makes the decision to reject and re-take images based on their expertise and judgment. However, this separation of roles between radiographers and radiologists can result in the rejection of images that, despite minor technical flaws, may have been diagnostically adequate. This disconnect suggests that the current rejection process might be overly stringent or overly focused on technical perfection, without considering whether the image still serves its diagnostic purpose. This study aims to investigate the contributing factors that lead to the rejection of images and to assess whether some images, although not technically perfect, could still provide sufficient diagnostic information. The study examines the existing rejection criteria used by radiographers, the communication pathways between radiographers and radiologists, and the potential for reevaluating what constitutes an "acceptable" image in clinical practice. By doing so, the goal is to find a balance between ensuring image quality and preventing unnecessary repeat exposures

**Results:** The findings of this study led to the formulation of a new approach called ACARA (As Close As Reasonably Achievable). This philosophy recognizes that radiography is a combination of art and science, relying on a blend of patient cooperation, anatomical knowledge, and technical precision to produce images that are both diagnostically useful and compliant with safety protocols. However, in real-world clinical practice, there are numerous variables—such as patient movement, physical limitations, and time constraints—that make the acquisition of "perfect" images difficult or, in some cases, impossible. The ACARA approach emphasizes that while striving for technical perfection is important, it is equally important to recognize that some images, though technically suboptimal, may still provide enough information for a reliable diagnosis. Therefore, radiographers should consider the overall diagnostic utility of an image before opting for a retake, balancing the need for clarity with the patient's exposure to additional radiation. **Discussion/Conclusion:** ACARA does not aim to diminish the importance of high technical standards in radiography, nor does it seek to justify subpar imaging practices. Rather, it introduces a more pragmatic, context-sensitive approach to image rejection, emphasizing that the ultimate goal is to provide an accurate diagnosis with the least amount of radiation exposure necessary. By advocating for this commonsense approach, ACARA works in tandem with ALARA, reinforcing the principle that patient safety is paramount, but should not be narrowly defined by rigid adherence to technical criteria. Instead, ACARA encourages radiographers to use their professional judgment, in collaboration with radiologists, to determine whether a slightly imperfect image could still suffice for diagnostic purposes. Incorporating the ACARA philosophy into clinical practice has the potential to reduce unnecessary repeat imaging, ultimately enhancing patient safety by limiting radiation exposure and streamlining the workflow in radiology departments. This philosophy encourages ongoing dialogue between radiographers and radiologists, ensuring that imaging standards are upheld while also acknowledging the complexities and nuances of real-world clinical environments. Through ACARA, the field of radiography can evolve towards a more flexible, patient centred model of care that prioritizes both diagnostic accuracy and radiation safety, paving the way for more efficient and thoughtful use of radiologic resources.

**Biography:** Joel Vincent is a Senior Radiographer and Clinical Educator with over 36 years of experience spanning India, Oman, New Zealand, and Australia. Currently working at Bundaberg Base Hospital in Queensland, Australia, he plays a key role in educating medical imaging students from six Australian universities and medical students from two Queensland universities, with a focus on pioneering clinical education techniques. He also serves on the interview panel for the Regional Pathway to Medicine at Central Queensland University. Joel holds licenses as a Queensland Radiation Safety Officer and Work Health Safety Manager, ensuring the maintenance of the highest safety standards. Before moving to Australia, he built extensive expertise at Nelson Hospital and Auckland City Hospital in New Zealand, specializing in trauma, CT, theatre, and forensic radiography, further advancing his skills in both radiography and education. In 2024, Joel was invited to speak at national conferences in both Australia and New Zealand.

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## Advanced Fetal Neurosonogram

### Surbhi Gupta Aggarwal

*Senior Consultant and Specialist, Radiology, ESI Hospital New Delhi, India*

Central nervous system (CNS) malformations are among the most common congenital abnormalities. Neural tube defects (NTDs) are the most frequent, occurring in approximately 1–2 cases per 1,000 births. The prevalence of intracranial abnormalities with an intact neural tube is less certain, as these conditions often go undetected at birth and may only become apparent later in life. Long-term follow-up studies, however, estimate their incidence could be as high as 1 in 100 births.

Ultrasound has been the primary imaging modality for diagnosing fetal CNS anomalies for nearly 30 years, particularly during midtrimester anomaly scans. This talk aims to provide an updated overview of the technical aspects of evaluating the fetal brain during routine midtrimester ultrasound examinations.

It will also highlight the indications for targeted fetal neurosonography, a specialized diagnostic approach involving detailed imaging of the fetal brain and spine. This advanced technique requires significant expertise and high-quality ultrasound equipment.

Recent advancements have shown that certain CNS and neural tube abnormalities, particularly dorsal and rhombencephalic induction defects, can be detected as early as the end of the first trimester. Although these abnormalities are relatively rare, they are often severe and warrant early consideration. Early fetal neurosonography, performed at 12–15 weeks of gestation, benefits from the thin fetal skull, which allows for near-complete visualization of the brain using a high-frequency transvaginal transducer. However, as pregnancy progresses, ossification of the calvarium can limit intracranial visualization.

Targeted fetal neurosonography is a comprehensive, multiplanar diagnostic examination designed for high-risk pregnancies or suspected CNS or spinal abnormalities. Similar to fetal echocardiography for congenital heart disease, neurosonography offers superior diagnostic capabilities compared to standard transabdominal ultrasound, especially for evaluating complex malformations. This method requires advanced skills in both transabdominal and transvaginal ultrasound techniques, as well as access to three-dimensional imaging, which is still unavailable in many parts of the world. Alongside traditional screening planes, this examination incorporates coronal and sagittal views for a more detailed assessment.

This presentation will delve into the technical and practical aspects of targeted fetal neurosonography, emphasizing its role in improving diagnostic accuracy and outcomes in fetal CNS evaluation.

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## Communication in the ICU: A Critical Component

### Abhinav Dileep Wankar, MBBS, DNB (Hospital Admin) MNAMS, MISQUA

*Advanced Healthcare Management Program (ISB) ; Fellowship in International Society in Quality (Ireland); Post Graduate Diploma in Medico Legal System; Post Graduate Diploma in Hospital Planning and Designing; Former SR, AIIMS (New Delhi), India*

The ICU is a specialized unit where critically ill patients are admitted for intensive treatment. Given the complex nature of critical care, patients require attention from multiple specialists, including doctors, nurses, respiratory therapists, physiotherapists, and dieticians. The collaborative nature of intensive care demands seamless communication and coordination among the team members to ensure optimal patient care.

However, the high-stress environment, prolonged working hours, and frequent life-or-death decisions make the ICU a challenging place, prone to errors, lapses in care, and conflicts. These conflicts may arise between ICU staff or between staff and patients or their families, often relating to end-of-life care or communication breakdowns.

Effective communication plays a crucial role in reducing stress for both patients and their families during an ICU stay. It helps ease fear, improves emotional and psychological well-being, and supports recovery. For families, clear communication can make the process less painful and confusing. Physicians, while technical experts, also need to provide emotional support. Nurses and therapists, with more frequent patient contact, can offer valuable advice on communication. Good inter-staff communication is also essential in managing the intense environment of the ICU, reducing stress and preventing unnecessary conflict.

Teaching communication skills during medical training can prepare healthcare professionals to interact more effectively with patients and their families. Effective communication—especially during crises, disagreements, or discussions about prognosis—can enhance patient outcomes and help focus the team's efforts toward the best possible care.

In conclusion, communication is a core skill in ICU care. It requires constant practice, understanding, and improvement, benefiting not only patients and families but also the professional fulfilment of the ICU team.

## **Awake Craniotomy and Minimally Invasive Neurosurgery: Advancing Patient-Centered Care and Institutional experience**

**Shiv Lal Soni**

*Associate Professor, Division of Neuroanaesthesia, Department of Anaesthesia and Intensive Care, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India*

The field of neurosurgery has witnessed transformative advancements, particularly with techniques like awake craniotomy and minimally invasive procedures. These innovations not only improve surgical outcomes but also have significant implications for critical care teams in ensuring optimal perioperative management. Awake craniotomy, which allows for real-time brain mapping during surgery, has redefined the approach to brain tumors, epilepsy, and functional neurosurgery. Coupled with minimally invasive neurosurgical techniques, it enables safer, more precise interventions while reducing recovery times and complications. This lecture will explore the intersection of these groundbreaking approaches, focusing on their integration into critical care practices, patient safety, and post-operative management.

### **Objectives of the Lecture**

1. To define awake craniotomy and minimally invasive neurosurgery, discussing their indications, benefits, and risks.
2. To analyze how awake craniotomy enhances surgical precision and reduces the risk of neurological deficits in complex brain surgeries.
3. To explore the critical care considerations during awake craniotomy procedures, including patient management, anesthesia, & monitoring.
4. To evaluate how minimally invasive neurosurgery complements awake craniotomy techniques, providing an effective solution for various neurological conditions.
5. To discuss the multidisciplinary approach required for safe execution of awake craniotomies, with insights into collaborative care between neurosurgeons, anesthesiologists, intensivists, and nursing teams.
6. To examine future directions in neurosurgery, including technological innovations in brain mapping, intraoperative monitoring, and robotic assistance.

**Introduction:** Awake craniotomy, a technique that allows patients to be conscious and responsive during surgery, has become a revolutionary tool in neurosurgery. By enabling real-time interaction with the patient's neurological functions, awake craniotomy allows surgeons to map critical brain areas responsible for motor, sensory, and speech functions, thereby minimizing the risk of post-operative deficits. The addition of minimally invasive surgical techniques, such as endoscopic procedures and robotic assistance, has further refined neurosurgical practice, making it possible to achieve greater precision with smaller incisions and less trauma to the brain and surrounding tissue.

The confluence of awake craniotomy and minimally invasive surgery not only enhances surgical precision but also poses significant implications for the management of patients before, during, and after surgery. This lecture will address the critical care aspects of these innovations, focusing on the complexities and challenges involved in patient monitoring, anesthesia management, and post-operative recovery.

### **Core Themes**

1. **Awake Craniotomy: Definition, Indications, and Benefits**
  - What is awake craniotomy? A detailed explanation of the procedure, including the use of local anesthesia and real-time brain mapping.
  - Indications: Surgical removal of brain tumors near critical areas, epilepsy surgery, and functional neurosurgery for movement disorders.
  - Benefits: Improved surgical outcomes, reduced risk of post-operative neurological deficits, and more effective resection of tumors without compromising cognitive or motor function.
2. **Minimally Invasive Neurosurgery: A Companion to Awake Craniotomy**
  - Techniques: Keyhole surgery, endoscopy, and robotic-assisted procedures in neurosurgery.
  - How minimally invasive techniques complement awake craniotomy: The integration of these methods leads to smaller incisions, faster recovery, and fewer complications.
  - Patient selection for minimally invasive surgery: Who benefits most from these approaches, and how the procedures are tailored to individual cases.
3. **Critical Care Considerations in Awake Craniotomy**
  - Anesthesia and Sedation Management: Balancing patient consciousness during surgery while ensuring comfort and safety, including the role of awake sedation protocols.
  - Neurophysiological Monitoring: Intraoperative monitoring techniques such as EEG, somatosensory evoked potentials (SSEP), and motor evoked potentials (MEP), which ensure that brain function is preserved during surgery.
  - Pre-operative Management: Assessment of patient suitability for awake surgery, including psychological preparedness and patient education.
  - Multidisciplinary Coordination: Collaboration between the surgical team, anesthesiologists, critical care specialists, and nursing staff to ensure smooth perioperative care.

#### 4. The Role of Critical Care Teams in Postoperative Care

- Postoperative Monitoring and Recovery: Continuous neurological assessment in the immediate post-operative period, with early detection of complications such as bleeding or infection.
- Managing Pain and Anxiety: Addressing both physical and emotional recovery after an awake craniotomy, including strategies for managing post-surgical discomfort and cognitive function.
- Discharge Planning and Follow-up Care: Developing an individualized discharge plan that includes physical therapy, cognitive rehabilitation, and long-term neuro-oncological care for patients undergoing brain tumor resection.

#### 5. Case Studies and Real-World Applications

- Presenting clinical examples where awake craniotomy has been successfully implemented in conjunction with minimally invasive techniques.
- Review of challenges encountered during these procedures, such as managing unexpected complications, patient distress, or difficulty in localizing brain functions.

#### 6. Technological Innovations and Future Directions

- Emerging tools in neurosurgery, such as advanced brain mapping technologies, intraoperative MRI, and robotic-assisted surgery.
- The potential for integrating artificial intelligence (AI) and machine learning in improving decision-making during awake craniotomy and minimally invasive procedures.
- Future prospects for making awake craniotomy safer and more accessible, along with its application in treating a broader range of neurosurgical conditions.

Conclusion: Awake craniotomy, when paired with minimally invasive neurosurgery, represents a paradigm shift in neurosurgical practice. These approaches allow for greater precision, improved outcomes, and reduced recovery times, significantly benefiting both patients and healthcare systems. However, these innovations come with unique challenges, particularly in the critical care setting, requiring a highly coordinated, multidisciplinary approach to ensure patient safety and optimal recovery.

### Evolutionary Psychiatry: A Paradigm Shift

**Sudhir Bhawe**, India

Evolutionary psychiatry is a relatively recent field in mental health that provides new insights into mental illness. It is about a paradigm shift in psychiatry, carrying the specialty beyond the medical model (with its emphasis on the diagnosis and treatment of dubious disease entities), towards an entirely new conceptual framework which defines the basic components of human nature in terms of their evolutionary origin.

Evolutionary psychiatry examines both the ultimate causes and the proximate causes.

Ultimate (evolutionary) causes - are the ones that have shaped the human genome over millions of years of selection pressure. Proximate (individual) causes - operate through the life experience of an individual (focused so far in psychiatry)

Basic principle - Psychopathology results when the environment fails to meet one or more archetypal needs in an individual at any stage of life. To understand psychiatric illness, we need to consider the ways in which present day society frustrates the needs of the Paleolithic man within us. Evolutionary psychiatry delves into the evolutionary origins of mental disorders like depression and schizophrenia.

The phylogenetic elements in human psychopathology have long been ignored. Understanding the dynamics of our ancestors' survival and inter-personal issues can lead to a better understanding of genesis of human psychopathology. Incorporating elements from evolutionary concepts in psychotherapy can lead to a better remission.

### Wellbeing and Death Anxiety Among Covid-19 Recovered Individuals in Relation to Demographic Variables

**Lazar Veparala , Grace Kujur**

<sup>1</sup>Associate Professor, Dept. of Psychology, Yogivemana University, Kadapa, A.P., India

<sup>2</sup>GK Psychotherapy and Rehabilitation Centre, Chhattisgarh, India

The COVID-19 pandemic has brought unprecedented challenges to global health, with profound implications for individuals' well-being. In this study, we investigate the wellbeing and death anxiety among covid-19 recovered individuals in relation to demographic variables, considering factors such as gender, age, marital status, and location. Through purposeful sampling and the utilization of Ashok K. Kalia and Anita Deswal (2011) and Death anxiety developed by Donald I Templer (1970). We employ descriptive and inferential statistics to analyze our findings. Our results reveal significant insights into how these demographic variables relate to the wellbeing and death anxiety of COVID-19 patients, shedding light on the multifaceted impact of the pandemic on individuals' mental and physical health.

Key words: COVID-19 recovered individuals, Gender Differences, Well-being, death anxiety and Demographic variables.

### A Cross-Sectional Study on Nightmare Experiences and Perceived Ethnic Discrimination Among Female University Students in the United Arab Emirates

**Gabriel Andrade**

College of Medicine, Ajman University, UAE

Perceived ethnic discrimination has been recognized as an influential factor associated with anxiety and depression. These mental health challenges, in their turn, are linked with both the frequency and the intensity of nightmares experienced by individuals. This connection provokes an intriguing question: is there a direct correlation between perceived ethnic discrimination and the frequency and distress of nightmares? To explore this, a study was conducted involving 179 female university students in the United Arab Emirates (UAE). This study aimed to provide deeper insight into the potential associations between these variables. The findings from the study revealed that, while there is a noticeable relationship between anxiety and depression with the occurrence of nightmares, perceived ethnic discrimination emerged as an even more significant predictor of nightmare experiences. This suggests that the psychological impact of perceived ethnic discrimination may be profound enough to influence the subconscious processes that lead to nightmares. To explain this phenomenon, we propose two potential theories: one draws from psychoanalytic insights, suggesting that discrimination may influence deep-seated fears and anxieties, while the other is based on the Disposition-Stress model, which incorporates neurobiological aspects to understand how stress from discrimination might biologically predispose individuals to nightmares. Interestingly, the study found no statistically significant differences across different ethnic groups in terms of either nightmare experiences or the perception of ethnic discrimination. This suggests a level of societal integration and harmony in the UAE, indicating that the experiences relating to nightmares and discrimination do not vary substantially between different ethnic communities. This outcome can be seen as a positive indicator of effective integration within the diverse social fabric of the UAE.

Key words: Perceived ethnic discrimination, United Arab Emirates, Nightmare frequency, Nightmare distress, Psychoanalysis

# Day 2

March 09, 2025

# KEYNOTE FORUM





## Sergey Suchkov

*Professor in Medicine & Immunology, R&D Director of the  
National Center for Human Photosynthesis Aguascalientes,  
México*

### Developing a Comprehensive Venous Practice

Sergey Suchkov

*Professor in Medicine & Immunology, R&D Director of the National Center for Human Photosynthesis Aguascalientes, México*

**Biography:** Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. From 2014 through 2021, was a Professor and Director (full-time job) of the Dept (since 2016 The Center) for Personalized & Precision Medicine of Sechenov University, Moscow, Russia. From 2021 through 2021, is a Professor and Chair (full-time job) of the Dept for Personalized Medicine, Precision Nutriology & Biodesign of the Institute for Biotechnology & Global Health of the RosBioTech National University, Russia. He is currently Professor in Medicine & Immunology, R&D Director of the National Center for Human Photosynthesis, Aguascalientes, México. From 2004 through the present, utilizing an experience gained whilst staying in USA, Europe and Japan, was doing a lot to implement technologies and philosophy of Personalized and Precision Healthcare services into the daily clinical practice of Russia. Have prepared and finalized a Business Plan for getting it done in a stepwise manner.



## A V Srinivasan

*Emeritus Professor, The Tamilnadu Dr.MGR Medical  
University, Former head and Professor of Neurology,  
Madras Medical College , Former President-Indian  
Academy of Neurology, India*

### Cerebellar Cognitive Affective Syndrome (CCAS ) – A New Look

A V Srinivasan,

*Emeritus Professor, The Tamilnadu Dr.MGR Medical University, Former head and Professor of Neurology, Madras Medical College , Former President-Indian Academy of Neurology, India*

Cerebellar Cognitive Affective Syndrome (CCAS; Schmahmann's Syndrome) is characterized by deficits in executive function, linguistic processing, spatial cognition and affect regulation. The causes of CCAS include cerebellar agenesis, dysplasia and hypoplasia, cerebellar stroke, tumour, cerebellitis, trauma, PSP, Multiple System Atrophy. This is also seen in children with prenatal early postnatal or developmental diseases. Clinical Impairment is seen in planning, set shifting, abstract reasoning, verbal fluency and working memory with distractibility and inattention.

CCAS challenges the traditional view of cerebellum being predominantly motor function and focuses on the non-motor function also. This is because of its connection to cerebral cortex and limbic system. One case of CCAS is discussed with video segments.

Case 1: An engineering graduate student met with an accident and was unconscious for hours. He had loss of spatial cognition with perseveration, distractibility and inattention. He had spatial disorganization with Visio-spatial memory affected. He had blunting of affect and inappropriate behaviour. He slowly recovered and still has cognitive dysfunction and cerebellar science. He developed depression and needed psychiatric help.

In conclusion, a unified paradigm for cognitive science with simplified neurodynamics and different levels of modelling or important. Recurrent neural network, reservoir computing => psychological spaces.

The open questions includes in this are high dimensional P-spaces with Finsler geometry needed for visualization of the mind events. At the end of the road, the physics – Like theory of events in mental spaces, mind as the shadow of neurodynamics can give us an absolute scientific space for this newer syndrome in neurological literature.

# Scientific Sessions & Abstracts

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Day 2: March 09, 2025



World Critical Care and Anesthesiology Conference 2025  
World Radiology & Medical Imaging Conference 2025  
World Neuroscience and Psychiatry Conference 2025

## Session 3

### Session Chair: Sergey V. Suchkov

Professor in Medicine & Immunology, R&D Director of the National Center for Human  
Photosynthesis Aguascalientes, México

### Session Co-Chair: Vikas Raghove

Assistant Professor, Clinical Anesthesia, Ball Memorial Hospital, IU University, Indiana, USA

### Session Co-Chair: Ryan M. Cobb

Academic Clinician, Assistant Professor, Venous Interventions at Penn Interventional Radiology (VIPR),  
Penn Interventional Radiology, The Hospital of the University of Pennsylvania, Philadelphia, USA

Sessions: Psychiatry | Critical Care Medicine | Hypertension & Stroke | Clinical Cardiology | Anaesthesiology |  
Pharmacology | Neuroscience | Psychology and Adolescent Medicine | Neurology | Emergency Radiology |  
Psychology | Pediatric and Adolescent Mental Health | Anesthesiology | Case Reports

## Hall: Le Lotus 1

### Title: Migraine and Epilepsy: Do They Share Common Neurobiology

Rezaul Hamid, Psychiatrist, Entrepreneur, Researcher and Founder & Proprietor, Mindcare Neuro Psychiatry Research Centre, Barpeta, India

### Title: Child & Adolescent Mental Health

Vishad Tripathi, Ph.D (Vedic Science- Quantum Consciousness), India ; Nidhi Trivedi, CEO of Nidhi Perception , Pty Ltd,  
registered counselor, and a certified CBT therapist, Australia

### Title: ECMO Retrieval— Transport And Challenges

Pavneet Kochar, Attending Consultant, Critical Care Medicine, Fortis Memorial Research Institute, Gurgaon, India

### Title: 7 Steps Integrative Approach In ABG Interpretation Using Novel Acid Base Balance Theory

T. Rajini Samuel, Professor of Biochemistry, Shri Sathya Sai, Medical College and Research Institute,, SBV Chennai Campus,  
Sri Balaji Vidyapeeth Deemed to be University, India

### Special Session: "Aha! I Have An Idea, What Next"

Vikas Raghove, Assistant Professor, Clinical Anesthesia, Ball Memorial Hospital, IU University, Indiana, USA

### Title: Emergency Radiology: Bridging the Gap Between Life and Diagnosis

B Gayathri Priyadarshinee, Radiologist, India

### Title: Recent Advancements in Critical Care Medicine

Mayur Sukhdas Ganvir, Consultant Intensivist, Critical Care, Department, Dr. D Y Patil Medical College, Navi Mumbai, India

### Title: Comparative Study Between Morphine and Dexmedetomidine For Postoperative Analgesia In Patients Undergoing Cancer Surgeries

Wael Ahmed, Anesthesia Consultant, Cairo University, KAMC, Egypt

### Title: Diastolic Dysfunction – Clinical Impact in Perioperative Management

Shekhar Suman Saxena, Department of Cardiac Anesthesia, The Madras Medical Mission hospital, Chennai, India

### Title: Difficult Airway Management

Sandhya Gujar, Dean and Professor, Dept of anesthesiology, MGM medical college Vashi Navi Mumbai, India

### Title: Role of Color Doppler USG in AV fistula assessment in CKD patients

Shikhar Gupta, Department of Radiology, Jawaharlal Nehru Medical College, Aligarh, Uttar Pradesh, India

### Title: Enhanced Recovery After Cesarean

Aswani Kumar Balakrishna Pillai, Consultant Anaesthesiologist and Intensivist Nahas Hospital, Kerala India

### Title: Well-being Spectrum Traits are associated with Polygenic Scores for Autism

Salahuddin Mohammad, Department of Surgical Sciences, Functional Pharmacology and Neuroscience, Uppsala  
University, Uppsala, Sweden

### Title: Effect of Antidepressants on Neurodegeneration and Neuroplasticity in Patients with Depression: A comparison between SSRI and SNRI

Deeksha Sharma, Department of Pharmacology, All India Institute of Medical Sciences, New Delhi, India

### Title: Neuroendocrine Tumor PET imaging - Combining Dotatate and FDG

Daniel Steinberger, Associate Professor, Nuclear Medicine and Body Imaging, Department of Radiology, University of Minnesota, USA

**Title: Neuroendocrine Tumor PET imaging - Combining Dotatate and FDG***Daniel Steinberger, Associate Professor, Nuclear Medicine and Body Imaging, Department of Radiology, University of Minnesota, USA***Title: Tracheal Intubation in Prone Position***Ismail Jainulnadin Namaji, Professor (Emeritus), Department of Anaesthesia, Dr. D. Y. Patil Medical College and Hospital, Kolhapur, India***Title: Clozapine Induces Perineuronal Net Remodelling in a Developmental Mouse Model of Schizophrenia***Susana García-Cerro, Translational Psychiatry Group, Seville Biomedical Research Institute (IBIS)-CSIC, Seville, Spain; Mental Health Biomedical Research Network Center (CIBERSAM-ISCIII)-G26, Madrid, Spain***Title: Patient Preferences for Long-Term Treatment For Opioid Use Disorders: Findings From A Healthcare Setting In India***Newficht Seth, National Drug Dependence Treatment Centre, AIIMS, New Delhi, India***Title: The Aggressive Narcissist***Sam Vaknin, Professor of Clinical Psychology and Management Studies in CIAPS (Commonwealth Institute of Advanced Professional Studies), Cambridge and Birmingham, UK; Ontario, Canada; and Lagos, Nigeria and in South East European University (SEEU), North Macedonia***Migraine and Epilepsy: Do They Share Common Neurobiology****Rezaul Hamid***Psychiatrist, Entrepreneur, Researcher and Founder & Proprietor, Mindcare Neuro Psychiatry Research Centre, Barpeta, India*

Background: British neurologist Sir William R Gowers first proposed in 1906 that Migraine and Epilepsy might be related, suggesting that Migraine could be a borderline condition to Epilepsy. He speculated that two conditions are similar in their character and nature. In recent years Migraine and Epilepsy are found to be having association and do frequently seen co existing. These two conditions are now recognized as belonging to a large family of episodic disorders.

Studies on pathophysiological mechanism underlying the generation of migraine aura and focal seizures indicate remarkable similarities. Identification of genes responsible for both the condition is perhaps the strongest evidence for shared underlying mechanism.

Overwhelming evidence from randomized controlled clinical trials on Divalproex Sodium and Topiramate being effective in migraine prophylaxis and approval by US FDA further supports the notion that there could be some common neurobiology beneath.

Aim: To gain insight on the commonalities in Pathophysiology of Epilepsy and Migraine with an attempt of suggesting new treatment approaches for the duo and simultaneously detecting challenges in future research in this area.

Methods: Here I review the understanding of association between Migraine and Epilepsy that developed over a century and organize the information chronologically.

Results: It is a review presentation

Conclusion: A hypothesis of co morbidity overweighs all speculations of commonalities following an epidemiological study. A state of brain hyper excitability either by genetic factor or acquired condition could predispose the two entities to be co existent. Further research queries could be why these two entities display variable susceptibility; some people are susceptible to both or manifest as one or the other at different occasions?

Key Words: Migraine, Epilepsy, Seizure, Headache, Cortical Spreading Depression, Occipital Seizure, Hyper excitability, Episodic Neurological Disorders, Episodic Channelopathy, Novel Therapies, Anticonvulsant

**Child & Adolescent Mental Health****Vishad Tripathi<sup>1</sup>, Nidhi Trivedi<sup>2</sup>**<sup>1</sup>*Ph.D (Vedic Science- Quantum Consciousness), India*<sup>2</sup>*CEO of Nidhi Perception, Pty Ltd, registered counselor, and a certified CBT therapist, Australia*

Hello, wonderful souls,

Child and adolescent mental health is a critical area that requires attention and care to ensure the well-being and development of young individuals. Cognitive and consciousness therapy offers a unique approach to addressing mental health concerns in this specific population. This therapeutic model focuses on enhancing self-awareness, understanding thought patterns, and promoting positive behavioral adjustments through cognitive restructuring and mindfulness techniques.

In child and adolescent mental health, cognitive and consciousness therapy aims to empower young individuals to recognize and challenge negative thought processes that may contribute to emotional distress or behavioral issues. By fostering a sense of mindfulness and self-reflection, this therapy encourages children and adolescents to develop healthier coping strategies and improve their emotional regulation skills.

Through targeted interventions and interactive exercises, cognitive and consciousness therapy assists young individuals in identifying triggers, managing stressors, and building resilience. This therapeutic approach promotes the development of adaptive coping mechanisms that can be utilized in various social and academic settings, leading to improved overall mental well-being.

By integrating cognitive and consciousness therapy into child and adolescent mental health programs, mental health professionals can support young individuals in developing essential skills for emotional regulation, problem-solving, and interpersonal communication. This holistic approach considers the unique needs and experiences of each individual, providing a safe and supportive environment for personal growth and development.

Overall, cognitive and consciousness therapy offers a promising avenue for promoting positive mental health outcomes in children and adolescents, empowering them to navigate life's challenges with resilience and confidence.

## **ECMO Retrieval— Transport and Challenges**

### **Pavneet Kochar**

*Attending Consultant, Critical Care Medicine, Fortis Memorial Research Institute, Gurgaon, India*

Extracorporeal life support and extracorporeal membrane oxygenation (ECMO) are widely used for acute severe refractory cardiac and respiratory failure. An increasing number of patients are treated with ECMO worldwide. This can be attributed to technical and technologic advancements, easier access to modern equipment, and more regular and accessible training opportunities for practitioners to maintain current skills and develop new ones. A fair number of patients have to be transported to the ECMO facility. The transport phase is, however, fraught with challenges and untoward events are not uncommon during ECMO transportation, so a robust education and training program is critical to ensure patient safety and optimum outcome. In extraordinary situations, such as during the COVID-19 pandemic, the need for ECMO increased significantly, and with it the need for out-of-centre initiations and transfers of patients on ECMO. Considering necessary protective measures for patients and staff, this approach is certainly possible but should ideally be performed by teams and within structures that have been previously established and routinely used under everyday conditions. The topics that I would like to highlight are: 1. Pre ECMO assessment and family counselling 2. Equipment availability 3. Transport vehicle 4. Team composition 5. Troubleshooting

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## **7 Steps Integrative Approach in ABG Interpretation Using Novel Acid Base Balance Theory**

### **T. Rajini Samuel**

*Professor of Biochemistry, Shri Sathya Sai, Medical College and Research Institute, SBV Chennai Campus, Sri Balaji Vidyapeeth Deemed to be University, India*

**Introduction:** Blood gas analyzer has gained indispensable role in critical care medicine yet Arterial Blood Gas (ABG) interpretation remains challenging. A novel approach in ABG interpretation was proposed by Rajini Samuel (current author).

**Aim:** To formulate a 7 steps approach using novel acid base balance theory for the development of a Mobile Application to interpret ABG data.

**Materials And Methods:** A pH based newer ABG interpretation method using changes in pH (Total, Respiratory and Non-respiratory), a novel 4 quadrant graph method and a novel derived relation correlating various metabolic and respiratory components were utilized to formulate a 7 steps approach in ABG interpretation.

**Results:** These novel methods to interpret ABG data using changes in pH, a diagrammatic representation in 4 quadrant graph method and a novel relation to identify the mixed and hidden acid base disturbances were tabulated and depicted in figures.

**Conclusion:** The implementation of these 7 steps Integrative approach in ABG interpretation can be easily done by developing a mobile application or upgrading the software in the ABG analyzer. This will help the junior medical staffs in critical care medicine to immediately take an effective and appropriate decision for the management of life threatening patients.

**Key Words:** 7 steps, Integrative Approach, Novel Acid Base Balance Theory, ABG Interpretation

**Biography:** Dr. T.Rajini Samuel did MBBS (2004 -2010) in Chengalpattu Government Medical College, Tamil Nadu, India. He worked in Venkateshwara Hospitals, Chennai for two years to complete his ECG research project. He had proposed cardiac vector theory and developed a Novel approach using vector concepts to understand and interpret abnormal ECG findings. He did M.D Biochemistry (2012-2015) in Sree Balaji Medical College and Hospitals, Chennai. He then focused his research on Arterial Blood Gas (ABG) interpretation. He is presently working as the Professor of Biochemistry in Shri Sathya Sai Medical College and Research Institute, Chennai.

He had developed a novel pH based ABG interpretation method, constructed a novel four quadrant graphical tool for ABG interpretation and proposed a novel approach to identify and understand hidden and mixed acid base disorders. He had derived novel equations of motion for understanding and interpretation of the Ventilator Graphics. He had published 48 research articles, 3 books and one chapter. He had received High Flyers Global Achievers Award 2022 - The Best Medical Science Researcher, Atmanirbhar Bharath Award 2022 and Indian Achievers Award 2021 for Excellence in Innovation awarded by the Indian Achievers Forum.

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## **"Aha! I Have an Idea, What Next"**

### **Vikas Raghove**

*Assistant Professor, Clinical Anesthesia, Ball Memorial Hospital, IU University, Indiana, USA*

In the ever-evolving world of medicine, physicians often find themselves struck by sudden flashes of brilliance – “Aha! I have an idea!” But what comes next? The lecture will guide you through the rollercoaster ride of transforming that spark of genius into a commercially viable medical device. We'll start by validating your idea, ensuring it's not just a figment of your imagination but a real solution to a clinical need. Next, we'll dive into the thrilling world of intellectual property, where patents and trademarks are your best friends. Navigating the FDA's regulatory maze. Prototyping and testing will be your playground, where you'll refine your invention through trial and error. Funding? We've got you covered with tips on securing grants, angel investors, and venture capital. Collaboration is key, so we'll discuss building a dream team and partnering with industry experts. Finally, we'll tackle commercialization strategies, from manufacturing to marketing. By the end of this lecture, you'll be equipped to turn your “Aha!” moment into a groundbreaking innovation that could revolutionize patient care. So buckle up and get ready for an exciting journey!

## Emergency Radiology: Bridging the Gap Between Life and Diagnosis

### B Gayathri Priyadharshinee

*Radiologist, India*

In the critical moments of medical emergencies, radiology plays an indispensable role in ensuring swift and accurate diagnoses that save lives. My talk, "Emergency Radiology: Bridging the Gap Between Life and Diagnosis," will delve into the pivotal contributions of radiological imaging in acute scenarios including trauma, stroke, obstetric and aortic emergencies.

The presentation will highlight:

- **Advancements in Imaging Modalities:** Focusing on the rapid evolution of CT, MRI, and ultrasound in emergency settings.
- **Workflow Optimization:** Strategies for reducing turnaround time and improving communication in high-pressure situations.
- **Case Studies:** Real-world examples that underscore the transformative impact of emergency radiology.

This session will provide insights into the integration of AI in emergency diagnostics, optimizing radiologist workflows, and improving patient outcomes. Aimed at radiologists and multidisciplinary teams, the talk seeks to foster dialogue on overcoming challenges and shaping the future of acute care radiology.

**Biography:** Dr Gayathri Priyadharshinee is an accomplished radiologist with a specialized focus on emergency and trauma imaging. With over 70f experience, Dr Gayathri Priyadharshinee is the founder of Spotters, a cutting-edge radiology initiative, and a passionate advocate for integrating AI into radiology practice. Having worked extensively in critical care settings, Dr Gayathri Priyadharshinee is recognized for ensuring accurate and timely diagnoses that influence life-saving treatments.

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## Recent Advancements in Critical Care Medicine

### Mayur Sukhdas Ganvir

*Consultant Intensivist, Critical Care, Department, Dr. D Y Patil Medical College, Navi Mumbai, India*

Intensive care medicine is an evolving branch, where newer discoveries help in the early diagnosis and rapid management of critically ill patients. Earlier diagnosis and faster treatment improve the morbidity and mortality of patients in the ICU. Innovations in artificial intelligence, newer technologies in hemodynamic monitoring, point-of-care ultrasound and diagnostics enable rapid bedside evaluations and differential diagnosis. Additionally, biomarkers and molecular diagnostics support precise management strategies, disease monitoring and predictive insights. Some other key areas of development include analgosedation to mitigate post-ICU syndromes, the use of albumin in glycocalyx repair, advances in respiratory failure management including ECCOR and the development of novel antimicrobials to control resistance have dramatically changed the way of managing high-risk patients. Analgosedation is defined as either analgesia or analgesia-based sedation. With the development of drug resistance due to various mechanisms like target modification, drug inactivation, and limited uptake, the introduction of newer antimicrobial drugs is challenging. Mesenchymal stem cell (MSC) therapy is a novel approach to managing severe respiratory illnesses. The use of Centhaquine citrate in hypovolemic shock has improved increased venous return and preload increasing the survival rate. It increases cardiac output without acting on beta-one receptors so there is no risk of arrhythmias. Multi-centre trials which have good evidence have changed practice in many centres. Use of tenectaplast for ischemic stroke at 4.5 to 24 hours without thrombectomy is found to have less disability and similar survival as compared with standard medical treatment. A single dose of ceftriaxone 2 g IV in patients with traumatic brain injury who require endotracheal intubation to decrease the risk of ventilator-associated pneumonia. Overall, recent advances in ICU are considered as significant tools, empowering intensivists and anaesthesiologists to make faster decisions and achieve rapid outcomes in critically ill patients.

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## Comparative Study Between Morphine and Dexmedetomidine for Postoperative Analgesia in Patients Undergoing Cancer Surgeries

### Wael Ahmed

*Anesthesia Consultant, Cairo University, KAMC, Egypt*

**Background:** Dexmedetomidine is a selective alpha<sub>2</sub> adrenoceptor ( $\alpha_2$ -AR) agonist with evidence of an increased ratio of  $\alpha_2$ -to- $\alpha_1$  activity. Dexmedetomidine produces analgesia, minimizes opioid-induced muscle rigidity, lessens postoperative shivering, causes minimal respiratory depression, and has hemodynamic stabilizing effects.

Dexmedetomidine, when used as an adjunct, can reduce postoperative morphine consumption in various surgical settings using various routes mainly intravenous.

**Methods:** Eighty four cancer patients scheduled for cancer surgeries under general anesthesia were randomized blindly into three parallel groups in this prospective study: Low dose dexmedetomidine group (group A, n=28) received 30 minutes before the anticipated end of surgery a loading dose of dexmedetomidine 1  $\mu$ g/kg in 100 mL of normal saline over 20 minutes then an infusion of 0.5 $\mu$ g/kg/hour for 48 hours, high dose dexmedetomidine group (group B, n=28) received 30 minutes before the anticipated end of surgery a loading dose of dexmedetomidine 1  $\mu$ g/kg in 100 mL of normal saline over 20 minutes then an infusion of 1 $\mu$ g/kg/hour for 48 hours, morphine group (group C, n=28) received immediately postoperative IV morphine as 0.1 mg/kg as bolus dose and then continuous IV infusion at rate of 0.02 mg/kg/hour for 48 hours. Postoperative analgesia was assessed using visual analogue score (VAS) recorded 30 min after surgery and then every 4 hours for 48 hours. Heart rate and non-invasive arterial blood pressure were measured at 30 min, and then every four hours postoperatively for 48 hours, and their mean was compared with the intraoperative one and also was compared between all groups.

**Results:** Postoperatively pain score (VAS) from 30 minutes till 12 hours and from 24 hours till 36 were significantly lower in group C than group A and B. However VAS at 16 hours, 20 hours and from 40 hours till 48 hours postoperatively wasn't statistically significant among the three groups. During the whole postoperative 48 hours the heart rate was significantly lower in group B compared with group A and C, it also was significantly lower than the intraoperative value from 4 hours postoperatively till the end of the study. However heart rate was lower in group A than group C during 48 hours postoperatively but not statistically significant. Meanwhile it was significantly lower than the intraoperative one from 12 hours till 48 hours postoperatively in group A.

During the whole 48 hours postoperatively, mean arterial blood pressure (MABP) was significantly lower in group B compared to the intraoperative value and values in group A and C. In group A, MABP wasn't significantly lower compared to group B and meanwhile it was significantly lower than the intraoperative value during 12 hours till 20 hours postoperatively.

**Conclusion:** The results of this study proved that morphine has better postoperative analgesia than dexmedetomidine (low and high dose) during the first 36 hours postoperatively apart from 16 and 20 hours postoperatively; there is no difference in analgesia between the two drugs. However low dexmedetomidine is better than high dose dexmedetomidine as it has less adverse effects.

**Key words:** Morphine, dexmedetomidine, cancer surgery, postoperative analgesia.

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## Diastolic Dysfunction – Clinical Impact in perioperative Management

### Shekhar Suman Saxena

*Associate Consultant Cardiac Anesthesia, The Madras Medical Mission hospital, Chennai (Tamilnadu) India*

This presentation offers an in-depth exploration of diastolic dysfunction (DD) and its relevance in cardiac and non-cardiac surgery. It is divided into six sections: Definition and History, Pathophysiology, Diagnosis, Prognostic Impact, Therapeutic Considerations, and Conclusion.

**Definition and History:** Diastolic dysfunction, integral to heart failure with preserved ejection fraction (HFpEF), is characterized by impaired left ventricular (LV) relaxation or compliance. It has been a recognized entity for over six decades, with advancements in understanding through research on remodeling and pulmonary congestion.

**Pathophysiology:** The spectrum of DD involves progressive impairment in LV filling and compliance, leading to elevated LV end-diastolic pressure and pulmonary congestion. The phases of diastole and their disruption, especially in the elderly, are discussed.

**Diagnosis:** Diagnostic modalities include echocardiography (tissue Doppler imaging and mitral inflow profiling), biomarkers (BNP/NT-proBNP), and invasive pressure monitoring. Differentiation between grades of DD (I to III) highlights their clinical relevance.

**Prognostic Impact:** Perioperative DD is associated with postoperative complications like pulmonary edema and cardiovascular events. It is a significant predictor of mortality in conditions like sepsis and failed ventilator weaning.

**Therapeutic Considerations:** Management focuses on preserving atrial kick, normal sinus rhythm, and careful fluid balance. Strategies vary with DD severity, ranging from preload tolerance to reliance on vasopressors in restrictive physiology. Chronic management includes RAAS inhibitors, diuretics, and mechanical support if needed.

**Conclusion:** The presentation underscores the critical need for awareness, early diagnosis, and tailored management of DD to improve perioperative outcomes.

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## Difficult Airway Management

### Sandhya Gujar

*Dean and Professor, Dept of anesthesiology, MGM medical college Vashi Navi Mumbai, India*

This presentation offers an in-depth exploration of diastolic dysfunction (DD) and its relevance in cardiac and non-cardiac surgery. It is divided into six sections: Definition and History, Pathophysiology, Diagnosis, Prognostic Impact, Therapeutic Considerations, and Conclusion.

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**Conclusion:** The presentation underscores the critical need for awareness, early diagnosis, and tailored management of DD to improve perioperative outcomes.

## Role of Color Doppler USG in AV fistula assessment in CKD patients

**Shikhar Gupta**

*Department of Radiology, Jawaharlal Nehru Medical College, Aligarh, Uttar Pradesh, India*

**Introduction:** The increasing prevalence of chronic kidney disease (CKD), coupled with advancements in the diagnosis and treatment of renal diseases and improvements in life expectancy, has led to a greater number of patients requiring hemodialysis. The preferred method of vascular access for hemodialysis is AV fistula formation; however, it is associated with a high rate of failure. In our prospective study, we focused on 40 CKD patients planned for initiation of maintenance hemodialysis.

**Methods:** We employed preoperative ultrasound mapping to assess cephalic vein diameter, compressibility, and colour flow, as well as radial and brachial artery diameter, peak systolic velocity, and intimal wall calcification. Postoperatively, ultrasound examinations were conducted on day 7 and at 6 weeks to evaluate fistula blood volume and detect any complications.

**Results:** A significant association between fistula failure and cephalic vein diameter, brachial artery diameter, intimal vessel wall calcification, and comorbid conditions like diabetes mellitus was observed.

Furthermore, blood flow at day 7 was notably lower in the failure group compared to those with a functioning fistula and any fistula with blood flow <154 ml/min on day 7 may be predictive of early fistula failure.

**Conclusion:** Preoperative vessel mapping and early postoperative ultrasonography is indispensable for patients who require AV fistula formation for hemodialysis and provide valuable information for selecting suitable vessels for successful fistula creation and enable early intervention to salvage a failing fistula after the surgery. By utilizing these, healthcare professionals can make informed decisions and take necessary steps to optimize the outcomes of AV fistula formation in patients undergoing hemodialysis.

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## Enhanced Recovery After Cesarean

**Aswani Kumar Balakrishna Pillai**

*Consultant Anaesthesiologist and Intensivist, Nahas Hospital, Kerala, India*

The enhanced recovery after cesarean delivery (ERAC) helps in creating an effective system to improve maternal outcome, mother and child bonding, and patient recovery. The success of ERAC lies in the multidisciplinary approach which involves the obstetricians, anesthesiologist, nursing staffs, hospital management and patients. ERAC protocol is composed of various aspects of care provided at the preoperative period, intraoperative period and the postoperative period.

The preoperative measures include optimization of comorbid conditions, to keep the preoperative fasting period as short as possible. Typically, solid food should be taken 6 hours prior to surgery and clear fluids including carbohydrate loading can be taken up to 2 hours before surgery. Preoperative education prior to the day of surgery is important to engage the patient, manage expectations, reduce anxiety and help improve patient compliance.

The intraoperative elements include preferring regional techniques like spinal anesthesia or epidural anesthesia over General Anesthesia as the former is associated with fewer incidence of blood loss, less stress response and lower incidence of nausea vomiting. To prevent and treat post neuraxial block induced hypotension by administering prophylactic vasopressors like phenylephrine is also important in the intraoperative period. Other important elements are , to maintain normothermia, prevent intraoperative nausea and vomiting by giving adequate prophylaxis, optimal uterotonic administration, and the most important element is multimodal analgesia which can be provided by various approaches such as intrathecal opioids, intravenous acetaminophen and NSAID's, gabapentanoids, magnesium, NMDA antagonists such as ketamine, and regional blocks under ultrasound guidance such as transverse abdominis plane block (TAP BLOCK), Quadratus Lumborum block, or local anesthetic infiltration of the wound. Delayed cord clamping is another important factor which is beneficial for the neonate

The postoperative measure for enhanced recovery includes early oral intake after the cesarean, early mobilization of the patient, early removal of the urinary catheter, venous thromboembolism prophylaxis, breast feeding support, promote return of bowel function, and to continue multimodal analgesia strategies to promote early mobilization and recovery. It is also important to provide adequate resting periods

Enhanced recovery after cesarean provides evidence based standardized strategies which benefits the patient in adequate pain control, early mobilization, decreased opioid consumption, and shorter length of stay. Future work in these areas can bring more and more methods to optimize the patient and assist in early recovery.

### Well-being Spectrum Traits Are Associated with Polygenic Scores for Autism

Salahuddin Mohammad,<sup>1</sup> Markus J. T. de Ruijter,<sup>1</sup> Gull Rukh,<sup>1</sup> Mathias Rask-Andersen,<sup>2</sup> Jessica Mwinyi and Helgi B. Schiöth<sup>1</sup>

<sup>1</sup>Department of Surgical Sciences, Functional Pharmacology and Neuroscience, Uppsala University, Uppsala, Sweden.

<sup>2</sup>Department of Immunology, Genetics and Pathology, Science for Life Laboratory, Uppsala University, Uppsala, Sweden

Individuals with autism spectrum disorder (ASD) often experience reduced wellbeing, a trend primarily documented in children and adolescents through epidemiological studies. Examining well-being among adults with ASD, particularly across five well-being spectrum (5-WBS) traits including neuroticism, depression, loneliness, life satisfaction, and positive affect - may enhance our understanding of their experiences and inform improvements in societal support mechanisms. This study explored the relationship between genetic predisposition to ASD and 5-WBS traits using polygenic risk score (PRS) analysis. ASD PRS were derived from the latest genome-wide association study (GWAS) by the Psychiatric Genetics Consortium (18,381 cases, 27,969 controls) and applied to the independent UK Biobank cohort (n=337,423). Regression analyses evaluated associations between ASD PRS and 5-WBS traits. Genetic predisposition for ASD was significantly associated with all 5-WBS traits, correlating positively with negative traits - neuroticism (max  $R^2 = 0.04\%$ ,  $P < 1 \times 10^{-4}$ ), depression (max  $R^2 = 0.06\%$ ,  $P < 1 \times 10^{-4}$ ), loneliness (max  $R^2 = 0.04\%$ ,  $P < 1 \times 10^{-4}$ ) and negatively with positive traits - life satisfaction (max  $R^2 = 0.08\%$ ,  $P < 1 \times 10^{-4}$ ), positive affect (max  $R^2 = 0.10\%$ ,  $P < 1 \times 10^{-4}$ ). These findings suggest adults with higher genetic susceptibility to ASD suffer from lower well-being in life, highlighting a significant link between ASD's genetic etiology and well-being outcomes.

### Effect of Antidepressants on Neurodegeneration And Neuroplasticity In Patients With Depression: A Comparison between SSRI and SNRI

Deeksha Sharma,<sup>1</sup> Sudhir Chandra Sarangi,<sup>1</sup> Shashikant Bhargava,<sup>1</sup> Bichitra Nanda Patra,<sup>2</sup> Rajesh Sagar,<sup>2</sup> Pankaj Kumar,<sup>3</sup> Senthil Kumaran<sup>3</sup>

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<sup>3</sup>Department of N.M.R., All India Institute of Medical Sciences, New Delhi

Depression affects 57 million people in India and is often linked to neurodegeneration (10-90% of cases). However, there's insufficient evidence comparing the effectiveness of SSRIs and SNRIs in managing neurodegeneration symptoms.

This prospective observational study aims to compare the effects of SSRI and SNRI monotherapy on neurodegeneration, neuroplasticity, and social cognition.

Treatment-naïve patients with unipolar depression were evaluated for treatment response using the Hamilton Depression Rating Scale (HDRS) and neurodegeneration parameters at enrollment and after six weeks of antidepressant treatment. Neurodegenerative serum biomarkers [indoleamine-2,3-dioxygenase (IDO), neurofilament light chain protein (NLCP), brain derived neurotrophic factor (BDNF)] were assessed using ELISA. Social cognition was assessed using Social Cognition Rating tools in Indian setting (SOCRATIS). Neuroplasticity was assessed by resting state MRI.

A total of 150 patients of unipolar depression were enrolled, out of these n=126 patients were prescribed SSRI and 24 patients were prescribed SNRI. Both SSRI and SNRI group have significant reduction in HDRS score at 6-week compared to baseline (both  $p < 0.001$ ), but no intergroup difference. Overall treatment responder rate (HDRS score reduction  $>50\%$ ) was 11.33%, but SSRI group has more responder (12.69%) compared to SNRI (4.16%). After 6 weeks of follow-up, serum IDO in SSRI group and NLCP levels in both groups were significantly decreased when compared to baseline ( $p < 0.001$ ) and BDNF levels were significantly increased in SSRI group when compared to baseline ( $p < 0.01$ ). As per SOCRATIS, after 6 weeks treatment, SSRI and SNRI didn't show any significant difference. fMRI assessment of depression patients showed significant decrease in cortical thickness of inferior temporal, pars opercularis and precuneus regions of brain ( $p < 0.05$ ) in comparison with healthy controls. But there was no significant difference/increase in cortical thickness after 6 weeks of followup when compared to baseline. Hence, SSRIs showed better results compared to SNRIs, outperforming them in both social cognition and neurodegeneration biomarker assessments.

### Neuroendocrine Tumor PET imaging - Combining Dotatate and FDG

Daniel Steinberger

Associate Professor, Nuclear Medicine and Body Imaging, Department of Radiology, University of Minnesota, USA

This serves as an overview of PET imaging of neuroendocrine tumors. The first part reviews the basics of Dotatate Imaging. The second part reviews the power of combining FDG and Dotatate which can be more predictive of outcome than pathology.

**Biography:** Dr. Steinberger, MD, BS EE is an Associate Professor in Nuclear Medicine and Body Imaging in the Department of Radiology at the University of Minnesota. His training includes a bachelors in electrical engineering from Columbia University and at the University of Minnesota a doctorate in medicine, a radiology residency and a fellowship in nuclear medicine.

He has a CAQ in Nuclear Radiology. Dr. Steinberger has served as an attending physician at the University of Minnesota since 2011. He was awarded teacher of the year in radiology in 2021. His research includes work on dietary preparation for PET Cardiac Sarcoidosis studies. He has been a guest speaker for North American Neuroendocrine Tumor Society. He also has a background in informatics having founded ProVation Medical.

## Tracheal Intubation in Prone Position

### Ismail Jainulnadin Namaji

Professor (Emeritus), Department of Anaesthesia, Dr. D. Y. Patil Medical College and Hospital, Kolhapur, Maharashtra, India

**Aim:** To encourage anesthesiologist to learn skill & technique of tracheal intubation in prone position (TIPP)

#### **Objectives:**

Anesthesiologist should master TIPP

- 1) Able to intubate in prone position when accidental extubation occurs during surgery
- 2) Enable to intubate patient of stabbed posterolateral thoracic, cervical injuries where patient cannot assume supine position
- 3) Try to establish TIPP technique in Routine surgery

Material & Methods

#### **Technique:**

- 1) Patient in prone with all multipara monitors, induction with inj propofol done.
- 2) ILMA pass through mouth & secured & connected through Bains circuit to workstation.
- 3) Ventilation checked and confirmed with ET Co<sub>2</sub>.
- 4) Succinylcholine 1-2 mg/kg given.
- 5) Bronchoflex/FOB preloaded with ETT and with continuous oxygen insufflation through its oxygen port, is passed through ventilating port of LMA while visualizing vocal cords and carina.
- 6) ETT is then pushed inside to the level of carina & connected to Bains circuit. Ventilation checked and bilateral air entry confirmed.

Strategies Followed in Technique Of TIPP

- 1) Learn Insertion/ Removal technique of ILMA in supine position on manikin /patient
- 2) Then acquire Skill of inserting LMA in prone position on Manikin followed by LMA Insertion in patient in prone for minor surgery
- 3) Manikin study PASS ILMA IN PRONE POSITION FIG NO 1
- 4) pass Broncho flex cable preloaded with ETT Through ILMA
- 5) Identify vocal cords, carina on vision
- 6) Push ETT to carina the connect ETT to Bain circuit

#### INDICATIONS OF TIPP

##### RELATIVE INDICATIONS

- SPINE:** 1. MICRODISSECTOMY  
2. LAMINECTOMY  
3. EXCISIONAL SPINAL TUMOURS

##### **STAB INJURIES:**

1. CERVICAL
2. THORACIC
3. LUMBAR

#### **CONTRAINDICATIONS:**

GERD & FULL STOMACH PATIENTS.

TIPP (inclusion criteria): Selection of patient for elective \ surgery plays an important role

- 1) No cervical pathology
- 2) No difficult airway /ANTICIPATED DIFFICULT AIRWAY.
- 3) BMI <30
- 4) Mouth opening >3cm
- 5) Thyromental distance >6 cm
- 6) No respiratory CVS problems

Direct TIPP has following advantages

- 1) Induction Incision time is Less
- 2) Less cervical movements
- 3) Less man power required for changing position
- 4) No interruption in monitoring of patient as it does not require to change chest leads, NIBP cuff, SPO<sub>2</sub>, ETCO<sub>2</sub> probe

#### TIPP IF FAILS

Trolley should always be kept ready for all TIPP,

- In event of failure of TIPP, reinsertion and proper placement of SAD (SUPRAGLOTTIC AIRWAY DEVICES) may be tried.
- ATTEMPT OF TIPP SHOULD BE ABANDONED IF SPO<sub>2</sub> FALLS BELOW 95%.
- PATIENT SHOULD BE TURNED SUPINE, OXYGENATED & FOLLOW CONVENTIONAL METHOD OF INTUBATION

**Conclusion:** TIPP is more safer and easier compared to routine method, but requires extensive training, good team work and surgeons cooperation. reversal and extubation is easier in prone as there are no airway obstruction due to forward fall of tongue and secretions being drained due to prone position. intubating LMA replaces the conventional method of intubation (direct laryngoscopy) as it avoids bringing all three axes in one line.

#### **PLASTIC:**

1. BURNS DEBRIDEMENT
  2. BACK TUMOUR EXCISION
- ORTHOPEDIC: 1. SURGERIES AROUND ELBOW  
GENERAL: 1. EXCISION OF PILONIDAL SINUS  
2. GLUTEAL SURGERIES
- ABSOLUTE INDICATIONS  
OCCIPITAL BONE FRACTURE



### **Clozapine Induces Perineuronal Net Remodelling in a Developmental Mouse Model of Schizophrenia**

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Schizophrenia (SCZ) is a multifaceted neurodevelopmental disorder frequently associated with extensive dysregulation of extracellular matrix (ECM) components, both in cortical and subcortical regions, strongly linked to cognitive deficits. Among these ECM components, perineuronal nets (PNNs) are particularly affected, with significant changes observed in the prefrontal cortex (PFC). Although it has been proposed that antipsychotic (AP) treatments impact on PNNs and ECM integrity in SCZ patients, these effects have not been confirmed yet. In this study, we employed a neurodevelopmental model of SCZ in mice, which involves perinatal NMDA receptor hypofunction induced by ketamine administration. This model effectively mimics long-term alterations in the PFC associated with SCZ, providing insights into the impact on PNNs and interneuron populations, particularly parvalbumin (PV) neurons. While ketamine increased PNN compactness, VGLUT excitatory inputs, and c-Fos expression, clozapine (CLZ), an atypical AP, mitigated these changes, particularly restoring the structure of PNNs in the medial PFC. Moreover, CLZ treatment was associated with improved cognitive flexibility and social memory, functions strongly linked to PFC integrity. These findings support the role of CLZ in modulating ECM structure in the SCZ brain and highlight the need for further research on the effects of AP medications on PNN dynamics and ECM integrity.

### **Patient Preferences for Long-Term Treatment for Opioid Use Disorders: Findings from A Healthcare Setting in India**

**Newficht Seth, Manmeet Kaur Brar, Adit Verma, Shalini Singh, Siddharth Sarkar, Anju Dhawan**

National Drug Dependence Treatment Centre, AIIMS, New Delhi, India

**Background and aims:** Patients preferences for treatment can help to guide and tailor treatment approaches for patients. In this study, we aimed to understand the treatment preferences for treatment-seeking patients with opioid use disorders.

**Methods:** This was a cross sectional study that included consenting adult patients with opioid use disorder. Information about different treatment approaches was presented using a standardized video in local language. Participants were asked about their preferences for treatment, which would be most suitable for them, and how much they would be willing to pay monthly for this.

**Results:** A total of 150 participants were included, 149 of them were males and a median age of 31 years with a median duration of opioid use of 8 years. It was seen that acceptability for sublingual buprenorphine was highest followed by oral tramadol and oral naltrexone, when provided free. Psychotherapy and peer self-help groups (Narcotics Anonymous) were seen as viable options by a substantial proportion. The most common implementation barrier reported was the dispensing schedule being too frequent (the necessity of sublingual buprenorphine to be administered in a supervised manner in the treatment center), followed by unavailability of the medication near the residence. About 80% of the sample were willing to pay less than 1000 INR monthly for the treatment. About half of the participants opined that treatment should last less than a year. A substantial proportion (about 90%) reported that concurrent medication and counseling or psychotherapy would be more beneficial than medications alone.

**Conclusions:** Patients preferences may guide how treatment is viewed by them. Psychoeducation may clarify misconceptions, though cognizance of the patient's preferences may help in deciding the suitable treatment option for a particular patient.

### **The Aggressive Narcissist**

**Sam Vaknin**

Ph.D. Professor of Clinical Psychology in CIAPS (Commonwealth Institute of Advanced and Professional Studies), Cambridge, UK.

Aggression can be viewed as narcissistic investment in (attempt to fix via delusional fantasy) a dysfunctional maladaptive Self (aggression is grandiose) - or an attempt to destroy tormenting objects together with the Self. Aggression is correlated strongly with narcissistic injury or mortification ("narcissistic rage") and with discrepancies between explicit and implicit self-esteem (not with absolute and congruent measures like low or high). Aggression is also a form of extreme symbiotic identification and internalization of external objects ("consuming them" or becoming one with them, negating their existence): defense against envy, frustration, separateness, and against awareness of aggression (Rosenfeld). Aggression is socially handicapping and may underpin schizoid grandiosity. Aggression is a manifestation of entitlement and haughtiness (superiority).

# E-POSTER SESSIONS & ABSTRACTS

MARCH 09, 2025

# DAY 2



WORLD CRITICAL CARE AND ANESTHESIOLOGY CONFERENCE 2025  
WORLD NEUROSCIENCE AND PSYCHIATRY CONFERENCE 2025  
WORLD RADIOLOGY & MEDICAL IMAGING CONFERENCE 2025

# E-Poster Session

## Poster Judge:

**Madhuri Priyadarshi**

Professor, Department of "Cardiac Anaesthesia" & Head of Department in LPS Institute of Cardiology, Kanpur, UP, India

## Poster Judge:

**Anand P Singh**

Prof & Head, Department of Psychology & Mental Health, Gautam Buddha University;  
President, Neuro and Biofeedback Society, (NABS), India

## Hall: Le Lotus 1

### Title: A Case of Aortic Sinotubular Shelf Disguising as Aortic Dissection

Sweta Mohanty, Resident, Department of Cardiac Anaesthesiology, Care Hospital, Bhubaneswar, Odisha, India

### Title: AI-Driven Analysis of Language Patterns in Parkinson's Disease

Lydia Just, Department of Neurology, Friedrich-Schiller-University, Jena, Germany

### Title: Investigation of Visuomotor Learning Deficits in Individuals with high Obsessive-compulsive Tendencies

Jinsung Wang, Kinesiology Programs, Zilber College of Public Health, University of Wisconsin-Milwaukee, USA

### Title: The Possibility of Using Cost-Effective AI to Make Early Sepsis Detection More Accessible

Alma Devina Puspita Sari, Faculty of Medicine, Universitas Jember, Jember, Indonesia

### Title: Examination and evaluation of neuropsychological processes and behavioural characteristics of migraineurs in response to an indirect migraine trigger confrontation

Sebastian Evers, Department of Neurology, University Hospital Würzburg (UKW), Würzburg D 97080, Germany

### Title: Managing A Sudden Intra-operative Unstable Atrial Fibrillation

Yusuf Kirana Raksawardana, Department of Anesthesiology and Intensive Therapy, Universitas Gadjah Mada – Sardjito General Hospital, Indonesia

### Title: General Anesthesia in Morbidly Obese Patients Undergoing Upper Airway Surgery: Total versus Lean Body Weight Drug Dosing Calculation? Lessons Learned

Shianita Stanie, Department of Anesthesiology and Intensive Therapy, Universitas Gadjah Mada, Yogyakarta, Indonesia

### Title: Obesity Deleteriously Affects Anesthetic and Surgical Outcome in Body Mass Index-Dependent Fashion

Wael Ahmed, Anesthesia Consultant, Cairo University, KAMC, Egypt

### Title: Venous Priming with Tourniquet applied using Metoclopramide Alleviated Propofol Injection Pain: A comparative Study versus Xylocaine

Wael Ahmed, Anesthesia Consultant, Cairo University, KAMC, Egypt

### Title: Early Disruption of NMDA Receptors During Neurodevelopment Induces Autism-Related Phenotypes

Ana Gómez-Garrido, Translational Psychiatry Group, Seville Biomedical Research Institute (IBiS), Seville, Spain

### Title: A Case Of Intrahepatic Cholangiocarcinoma Presenting as a Liver Abscess: Diagnostic Dilemmas and Clinical Implications

Vidhina Khade, MBBS, Junior resident, Department of Radiology, GMCH Nagpur, Maharashtra, India-440003

### Title: A baby diagnosed with epidermolysis bullosa associated with antral web

Adel Ahmed Alfayez, Pediatric Surgery Department, Prince Sultan Military Medical City, Riyadh, Saudi Arabia

### A Case of Aortic Sinotubular Shelf Disguising as Aortic Dissection

Manoranjan Padhi<sup>1</sup>, Dharmajivan Samantaray<sup>1</sup>, Manmaya Padhy<sup>2</sup>, Kirti Chandran Biswanath<sup>3</sup>, Sweta Mohanty<sup>4</sup>

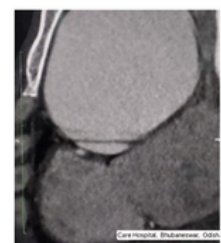
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Acute aortic syndrome is a life threatening condition which is very commonly misdiagnosed. When evaluating a patient with acute aortic syndrome, it's crucial to consider various aortic pathologies. Apart from aortic dissection, other entities include intramural hematoma, penetrating aortic ulcer, and localized intimal tear without dissection. These conditions require early diagnosis and management, but pose challenges in accurate identification and diagnosis. In our case presentation, we highlight a case of shelf like projection at the aortic Sino-tubular junction which mimicked as aortic dissection in CT angiography and echocardiography leading to emergency surgery.



## AI-Driven Analysis of Language Patterns in Parkinson's Disease

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*Department of Neurology, Friedrich-Schiller-University, Jena, Germany*

**Introduction:** Parkinson's disease (PD) is the world's second most common neurodegenerative disorder, with an increasing prevalence globally. Beyond its characteristic motor symptoms—tremors, rigidity, and bradykinesia—studies indicate that more than 90% of PD patients experience some degree of language impairment, which is often among the earliest signs. The linguistic and semantic deficits can impact speech rate, syntax, conceptualization, or language processing, as well as verb generation.

**Objectives:** Our study aims to leverage advanced algorithms and machine learning to explore the potential of AI-driven language analysis for the early detection of cognitive decline in Parkinson's disease.

**Methods:** This study employs natural language processing (NLP) and automated language analysis to assess spontaneous speech in standardized language tests, such as the Boston Cookie-Theft Picture, in 40 patients with primary Parkinson's disease, aged 50 to 80. We first perform a Speech-to-Text transcription using WhisperAI, followed by an analysis of the semantic and linguistic features of the transcribed text using a large language model (LLM). The extracted features are then parameterized and used as input for a machine learning approach, specifically a Support Vector Classifier (SVC), to differentiate between two groups of PD patients: one group with cognitive decline (MoCA < 24) and another without (MoCA ≥ 24).

**Results:** Transcribing speech with WhisperAI and analyzing the texts using a large language model (LLM) has shown results comparable to human analysis. Consequently, we proceeded with classification using the parameterized data.

**Conclusions:** Our preliminary results support automated language analysis as a promising, non invasive, and cost-effective tool for the early detection and monitoring of language-related symptoms in Parkinson's disease.

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## Investigation of Visuomotor Learning Deficits in Individuals with High Obsessive-Compulsive Tendencies

**Jinsung Wang**

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Individuals with obsessive-compulsive (OC) disorders are known to have cognitive deficits in areas such as cognitive flexibility, visuospatial memory, response inhibition, and goal-directed behavior. These deficits are linked to neural circuits and structures that are important for not only cognitive, but also sensorimotor functions. Despite this, previous research has primarily focused on cognitive aspects of these disorders, which highlight the need for further investigation into sensorimotor aspects of these disorders. In this study, we employed a visuomotor adaptation task to sensorimotor adaptation deficits in individuals with high vs. low OC tendencies. Participants adapted to a rotated visual display condition during targeted reaching movements in two different conditions: one in which the visuomotor rotation was introduced gradually, and the other in which the rotation was presented abruptly from the beginning of the adaptation session. Preliminary data indicate that both participants with high OC tendencies and those with low OC tendencies adapt similarly to the visuomotor rotation in the gradual adaptation condition. In the abrupt adaptation condition, however, those with high OC tendencies show larger direction errors and adapt much more slowly than those with low OC tendencies. These results indicate difficulties in adapting to novel sensorimotor conditions that require a rapid integration of visual and motor information in individuals with high OC tendencies, which is likely to be highly associated with their cognitive deficits in terms of cognitive flexibility and response inhibition.

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## The Possibility of Using Cost-Effective AI to Make Early Sepsis Detection More Accessible

**Alma Devina Puspita Sari,<sup>1</sup> Anya Amadea Perlita Sari<sup>2</sup>**

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Sepsis is a life-threatening condition that causes organ dysfunction due to the host's inability to respond to infection and is commonly associated with nosocomial infection, which makes intensive care unit (ICU) patients more vulnerable. Through a meta-analysis by Markwart et al, it is found that 24.4% cases of sepsis with organ dysfunction were acquired during ICU stay. With the widespread use of artificial intelligence (AI), it is inevitable that its implementation in health care is important. Several studies found that AI monitored patients may be prevented from having sepsis with a prediction of nearly 90% accuracy with a significantly faster time. However, the main challenge with AI is its high cost, which can make it inaccessible for some organisations. Through a literature review, this research aims to demonstrate that AI may not be as expensive as commonly perceived, particularly when considering its functionalities and the potential benefits it offers. It is because AI is expected to become more affordable, accessible, and higher performing in time to come due to the advancements in hardware, software, and cloud services. The benefits of AI in early sepsis detection are shown in various studies that showed a deduction in the length of stay of ICU patients, a reduction in hospital mortality rate, and healthcare cost savings by using AI. Therefore, the use of AI in the diagnosis of sepsis might be a dose of booster to diagnostic precision, healing efficacy, and a patient's prognostic, and the cost to establish will not be as challenging as before

## Examination and evaluation of neuropsychological processes and behavioural characteristics of migraineurs in response to an indirect migraine trigger confrontation.

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Migraine is a common and widespread primary headache disorder that remains the most disabling non-fatal disorder worldwide. One of the most common recommendations given to people diagnosed with migraine is to recognize and avoid "triggers", specific and highly individualized stimuli that are most likely to trigger a migraine attack. However, several studies have reported a risk of long-term sensitization due to high avoidance behaviour toward these "triggers". Here, we aimed at finding possible differences in neurophysiological processes that could lead to a better understanding of behavioural changes related to migraine triggers and serve as potential targets for future intervention. We recruited participants (N=68) for a behavioural high-density-EEG-study: patients with episodic and chronic migraine (n=34) and headache free persons (n=34) persons as controls. In a single session we recorded behavioural responses and corresponding brain activity in a virtual approach and avoidance T-Maze and adapted the paradigm by visually confronting the participants before each trial with trigger associated words and imaginary tasks. We measured decision time, occurrence of avoidance behaviour and frontal alpha-asymmetry as well as changes in brain connectivity. We hypothesized that the confrontation with trigger-associated words and tasks would lead to a shorter decision time and stronger avoidance behaviour in patients with migraine. Our preliminary results show that although migraine patients reported a significantly stronger subjective influence of the trigger-associated triggers on their behaviour compared to controls, these triggers had no measurable influence on decision time or avoidance behaviour. Yet, migraine patients needed significantly more time to decide in ambiguous and avoidance related situations and showed differences in the frontal alpha asymmetry score in the decision-making phases. Overall, our preliminary results indicate differences in neurophysiological processing and general stronger avoidance behaviour in migraine patients. Further research will be conducted to provide a basis for future intervention.

## Managing A Sudden Intra-operative Unstable Atrial Fibrillation

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Peri-operative Atrial Fibrillation (POAF) is a new onset of atrial fibrillation within the peri-operative period, which could be caused by several risk factors arising from the patient and from the surgical management itself. Managing intra-operative atrial fibrillation depends on clinical presentation. Cardioversion is the first treatment choice for unstable atrial fibrillation with starting dose of 120 until 200 J. In stable patients, the choice is usually rate control using  $\beta$ -blocker or  $Ca^{2+}$  channel blocker. This case report is aiming to explore the risk factors of POAF and the challenges in managing POAF. We present a successful management of intra-operative unstable atrial fibrillation case in 60 years old male who was scheduled for elective control bleeding cystoscopy due to gross hematuria due to complications of transurethral resection of prostate procedure, with spinal anesthesia. The patient has no co-morbidities, no known history of arrhythmia. We did find anemic conjunctivas from physical examination. Pre-operative laboratory results showed hemoglobin of 10.3 g/dL, hyponatremia of 130 mmol/L and hypoalbuminemia of 2.45 g/dL. The patient was known to have fasted 8 hours before surgery without fluid replacement. There is an episode of hypotension and the use of 20 mg of Ephedrine before the patient develops unstable atrial fibrillation. After cardioversion and stabilization, the patient was transported to intensive care and found with hemoglobin of 5.8 g/dL. In this patient, we concluded that the potential causes of atrial fibrillation include, hypovolemia, anemia, hypotension, and the use of vasopressor(ephedrine) with increasing age as a risk factor.

## General Anesthesia in Morbidly Obese Patients Undergoing Upper Airway Surgery: Total versus Lean Body Weight Drug Dosing Calculation? Lessons Learned

Shianita Stanie, Yusuf 'Alim Mustofa Anwar, Anisa Fadhila Farid, Ratih Kumala Fajar Apsari

Department of Anesthesiology and Intensive Therapy, Universitas Gadjah Mada, Yogyakarta, Indonesia

Background: The global obesity prevalence is projected to increase from 13% in 2016 to 23-27% by 2035, accompanied by a rise in surgical interventions. A significantly higher risk of complications related to general anesthesia faced by this population necessitates meticulous perioperative management to promote swift recovery and mitigate adverse effects, particularly those affecting cardiorespiratory function.

**Case Description:** A 35-year-old male (height: 173 cm, weight: 153 kg; BMI = 51.12) presented with chronic rhinosinusitis and nasal septal deviation, indicated for Functional Endoscopic Sinus Surgery (FESS) and septoplasty. His history included loud snoring with a neck circumference of 54.3 cm, and well-controlled hypertension, yielding a STOP-BANG score of 5/8, though obstructive sleep apnea was not clinically diagnosed. No restriction on mouth opening or Mallampati class were observed. Laboratory, including blood gas analysis, and chest x-ray test revealed no abnormalities. Anesthesia was managed with standard monitoring and the patient was positioned in ramp orientation. Preemptive analgesia of 175 mcg Fentanyl, 160 mg Propofol for induction, and 50 mg Rocuronium administered intravenously, all dosed per lean body weight. Manual ventilation was established using a size 5 anatomical mask before performing successful intubation with a size 8 endotracheal tube under video laryngoscope. There was no increase in hemodynamic profile upon the insertion. The ventilator parameters were set as follows: peak inspiratory pressure 22 mmHg, peak end-expiratory pressure 6 mmHg, fresh gas flow rate 3 L/minute, respiratory rate 16 breaths/minute, and fraction of inspired oxygen 50%. The 75-minutes surgery maintained with Isoflurane, showed stable hemodynamic parameters with a mean arterial pressure of 70-90 mmHg, heart rate of 67-84 beats/minute, measured tidal volume of 429-467 ml, and 99-100% oxygen saturation. The endotracheal tube was removed post patient full-awakening, and following 40 minutes in the postanesthesia care unit, the patient was transferred to the ward and discharged on the next day.

**Conclusion:** The successful apnoeic intubation and volatile anesthesia maintenance in morbid obese patient underwent upper respiratory tract surgery was reported in this paper. This approach can be referred in patients with similar conditions.

**Keywords:** Morbid obesity, anesthesia, airway surgery, obstructive sleep apnea, apnoeic intubation

## Venous Priming with Tourniquet applied using Metoclopramide Alleviated Propofol Injection Pain: A comparative Study versus Xylocaine

**Wael Ahmed**

*Anesthesia Consultant, Cairo University, KAMC, Egypt*

**Objectives:** To evaluate the outcome of priming by varying-doses of metoclopramide on propofol injection pain in comparison to xylocaine as a standard control.

**Patients & Methods:** 160 patients were randomly allocated into 4 equal groups: Group C received 50 mg xylocaine and Groups M1-3 received metoclopramide 2.5, 5 and 10 mg, respectively. An elastic tourniquet was applied to the mid of left arm, the priming solution was injected over 10s and 1-minute later, tourniquet was removed and one fourth of the total calculated dose of propofol was injected over 30s and pain assessment was made, during initial and at end of injection of propofol trial dose, using the 4-point verbal analogue scale: no, mild, moderate or severe pain. Then, the reminder of the full calculated induction dose of propofol was completed.

**Results:** Xylocaine and metoclopramide mostly alleviated pain of initiation of propofol injection; 54.4% of patients had no pain, 29.4% had mild pain and only 16.2% had moderate pain. At the end of injection of the total trial dose, 40% had no pain totally, 31.3% had mild pain, 19.3% had moderate pain and 9.4% had severe pain. Xylocaine provided significantly better analgesia compared to metoclopramide (2.5 mg), while the difference was non-significantly better compared to metoclopramide, 5 and 10 mg. Metoclopramide provided dose-dependent stepwise pain relieve peaking with 10 mg dose that showed significant superiority compared to 2.5 mg dose, but non-significantly compared to 5 mg dose. Moreover, the effect of 10 mg priming dose extended till completion of injection of the trial dose with significant difference compared to both other.

**Conclusion:** venous priming with metoclopramide 10 mg with mid-arm tourniquet applied for one minute is effective, safe and cheap modality for alleviation of propofol injection pain.

**Introduction:** Propofol is advantageous drug to be used for induction of anesthesia because of being rapidly absorbed in central nerve tissue, redistributed and metabolized promptly from the central tissue to other tissues, and has a short half-life. Moreover, multiple studies evaluated propofol-based intravenous anesthesia alone or in conjunction with local blocks and approved its applicability not only for short operative time procedures but also for procedures requiring extended operative time (1, 2, 3, 4).

Propofol, used as lipid emulsion propofol (2,6-diisopropylphenol), has been associated with several drawbacks such as hypercholesterolemia, microorganism proliferation, and pulmonary embolism (5, 6) and the incidence of pain secondary to lipid emulsion propofol injection varies from 59.1% to 100%, when injection is made into a vein on the dorsum of the hand (7). Microemulsion propofol is pharmaco-dynamically and biologically equal to ingredients of lipid emulsion propofol without difference in effects or safety within dose ranges and removed or significantly reduced lipid related adverse effects, but unfortunately injection pain is more severe compared to lipid emulsion propofol (8, 9, 10).

The mechanism whereby propofol causes pain is still unclear with no evidence of any relationship between the incidence of pain on injection and the size of catheter used or speed of injection. However, an enzymatic cascade was assumed as a mechanism for propofol injection pain possibly through the plasma kallikrein-kinin system. In this cascade kallikrein converts kininogens to kinins which are chemical mediators of pain. Another mechanism for propofol injection pain is believed to involve interaction between the active component of the emulsion and the vascular endothelium (11, 12, 13).

A number of techniques have been tried to minimize propofol injection-induced pain and showed variable results; two of the most commonly accepted techniques are the administration of lidocaine immediately prior to the injection of propofol or mixing lidocaine with the propofol itself; an early study by Brooker et al., (14) found that mixing lidocaine with propofol was more efficacious than administering it immediately prior to injection. Mangar et al. (15) showed that temporary venous occlusion following premedication with lidocaine did indeed diminish the intensity of pain but did not alter the incidence of pain.

The present prospective comparative study tried to evaluate the outcome of priming by varying-doses of metoclopramide on propofol injection pain in comparison to xylocaine as a standard control.

**Patients & Methods:** The present study was conducted at Anesthesia Department, NCI, Cairo University since March 2008 till May 2009. After obtaining fully informed written patients' consent, 160 patients assigned to undergo pelvic surgeries under general anesthesia were enrolled in the study. Patients were randomly, using sealed envelopes, allocated into four equal groups: Group C included patients primed using 50 mg xylocaine (5 ml 1% solution) and Groups M1-3 included patients primed by metoclopramide in dose of 2.5, 5 and 10 mg, respectively, diluted with saline into a 5-ml solution.

A 20-G cannula was inserted into the dorsum of the left hand and an intravenous dextrose-saline infusion started. An elastic tourniquet was applied to the mid of the left arm sufficient to block the intravenous infusion and the priming solution was then administered over 10s. One minute thereafter, the tourniquet was removed and one fourth of the total calculated dose of propofol (2.5 mg/kg body weight) was administered over 30s and pain assessment was made, during initial and at end of injection of such propofol trial dose, using the 4-point verbal analogue scale (VAS): no, mild, moderate or severe pain. Then, the injection of the reminder of the full calculated induction dose of propofol was completed. Patients were monitored non-invasively during induction of anesthesia for heart rate (HR) and mean blood pressure (MAP) and then the anesthetic procedure was completed as usual.

**Statistical Analysis:** Results were presented as mean SD, ranges, numbers, percentages and ratios. Data were analyzed using Chi-square test ( $\chi^2$  test) for numbers and percentages and Wilcoxon Ranked test for unrelated data for inter-group comparisons. Statistical analyses were conducted using SPSS (Version 10, 2002) program and p value  $<0.05$  was considered significant.

**Results:** A total of 160 patients; 120 males and 40 females with mean age of 36.2  $\pm$  4.3; range: 24-44 years. One hundred forty patients were ASA I and only 20 patients were ASA II. There was non-significant difference between studied groups as regards age, sex, ASA-grade or body constitutional data, (Table 1).

All patients showed significant decrease of heart rate and MAP throughout the study period compared to baseline measures with non-significant difference between studied groups or estimates recorded throughout the operative time till recovery, (Table 2).

Priming with either xylocaine or metoclopramide mostly alleviated pain of initiation of propofol injection where 87 patients (54.4%) had no pain, 47 patients (29.4%) had mild pain and only 26 patients (16.2%) had moderate pain, while no patient had severe injection pain during initiation of trial dose injection. At the end of injection of the total trial dose, 64 patients (40%) had no pain totally, while 50 patients (31.3%) had mild pain, 31 patients (19.3%) had moderate pain and 15 patients (9.4%) had severe pain at the end of trial injection. Xylocaine priming provided significantly better analgesia compared to patients received 2.5 mg metoclopramide, while the difference was non-significantly better compared to patients received 5 and 10 mg metoclopramide. Metoclopramide provided dose-dependent stepwise pain relieve peaking with 10 mg dose that showed significant superiority compared to patients received 2.5 mg priming dose, but non-significantly compared to those received 5 mg priming dose. However, the effect of 10 mg priming dose was marvelous as it extended till completion of injection of the trial dose with significant difference compared to both other priming doses and non-significantly compared to xylocaine, (Table 3).

## Obesity Deleteriously Affects Anesthetic and Surgical Outcome in Body Mass Index-Dependent Fashion

**Wael Ahmed**, Anesthesia Consultant, Cairo University, KAMC, Egypt

**Objectives:** To evaluate the impact of obesity on anesthetic and surgical outcome of patients of varying body mass index (BMI) assigned for open abdominal surgery.

**Patients & Methods:** Sixty patients were categorized according to WHO classification of obesity into three classes: class I (n=30), class II (n=18) and class III (n=12). All patients underwent open laparotomy under combined anesthesia using continuous remifentanyl infusion and balanced sevoflurane inhalational anesthesia. Hemodynamic variables, duration of surgery, intraoperative bleeding and frequency of blood transfusion, recovery times and frequency of intraoperative anesthetic or surgical problems were recorded. The occurrence of postoperative (PO) complications, admission to ICU, duration till 1st ambulation, 1st oral intake and length of PO hospital stay and rates of morbidity and mortality were recorded.

**Results:** Induction of anesthesia significantly decreased arterial pressures and heart rate compared both to preoperative and pre-induction measures. After extubation all parameters returned to preoperative levels. Mean operative time was significantly longer and mean intraoperative blood loss was significantly more in patients of class III compared to those of class I and II. All recovery times showed BMI-dependence as all were significantly prolonged in patients of class II and III compared to those of class I with significantly shorter awakening and extubation times in patients of class II than those of class III patients. Mean time till 1st walk was significantly longer in patients of class III than those of class I and II, but time till 1st oral intake was non-significantly different. Sixteen patients developed PO complications. Mean PO hospital stay was significantly longer in patients of class III compared to patients of class I and II with significantly shorter duration in patients of class II than those of class III.

**Conclusion:** Obesity caused deleterious anesthetic and surgical effects with prolonged operative and recovery times and more need for blood transfusion, ICU admission and prolonged hospital stay duration. The used anesthetic regimen allowed controlled hypotension without compromising patients general condition.

**Keywords:** Obesity, Remifentanyl, Sevoflurane, Recovery times, Surgical Outcome

## Early Disruption of NMDA Receptors During Neurodevelopment Induces Autism-Related Phenotypes

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Autism Spectrum Disorder (ASD) and schizophrenia (SCZ) are neurodevelopmental conditions with distinct clinical features, yet they share considerable overlap in their underlying neurobiological mechanisms. A growing body of evidence suggests that an imbalance in excitation and inhibition (E/I) plays a crucial role, driven, at least partially, by NMDA receptor (NMDAR) hypofunction and dysfunction in GABAergic interneurons, particularly parvalbumin-positive (PV+) interneurons, and their associated perineuronal nets (PNNs). Although the NMDA hypofunction theory has been extensively explored in SCZ field, it has more recently gained attention in ASD research for its potential to mimic core features of the autistic phenotype, yet it remains poorly explored. This study aims to further characterize the implications of NMDAR hypofunction in a neurodevelopmental murine model characterized by ketamine administration, a non-competitive NMDAR antagonist, to mouse pups on postnatal days (PNDs). Our findings revealed significant changes consistent with ASD-like phenotypes, including impairments in social behavior, cognitive function, and sensory processing, as well as disruptions in PV+ interneurons and PNNs across key brain regions, such as the prefrontal cortex and striatum. This study emphasizes the value of ketamine-induced NMDAR hypofunction as a translational model for investigating ASD and underscores the critical role of early developmental disruptions in the pathogenesis of neurological disorders.

## A Case Of Intrahepatic Cholangiocarcinoma Presenting as a Liver Abscess: Diagnostic Dilemmas and Clinical Implications

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Intrahepatic Cholangiocarcinoma (ICC) is a rare and aggressive malignancy, representing 10–15% of primary liver cancers. It is the second most common primary hepatobiliary tumor, following hepatocellular carcinoma. ICC typically affects individuals over 50 years, with a peak incidence in those aged 60–70 years. Due to its nonspecific clinical presentation, ICC is often diagnosed at advanced stages, complicating treatment and leading to poor prognosis. Symptoms and imaging findings can resemble benign conditions like liver abscesses, which further complicates the diagnostic process. An 88-year-old male presented with right upper quadrant pain and fever for the past 8 days. Laboratory tests revealed elevated liver enzymes, elevated WBC count, and signs of inflammation. Initial imaging by ultrasound suggested a liver abscess. However, despite antibiotic treatment, the lesion did not improve. Further diagnostic workup using triple-phase CT revealed features of ICC, ultimately confirmed by biopsy. The patient was planned for surgical resection of the tumor, followed by adjuvant chemotherapy. ICC may present with symptoms overlapping those of a liver abscess, such as fever and abdominal pain, and a blood picture to suggest infective etiology, which can lead to diagnostic uncertainty. In this case, the absence of response to antibiotics raised concerns about a more serious underlying condition. Advanced imaging modalities are essential for accurate identification of ICC. A misdiagnosis on ultrasound led to a delay in the diagnosis and ultimately the treatment for the patient. Early diagnosis and surgical intervention are critical, as late-stage ICC is associated with a poor prognosis. This case emphasizes the need for a high index of suspicion for ICC when liver abscesses do not respond to standard treatment. Prompt imaging, histopathological confirmation, and a multidisciplinary approach are key to improving patient outcomes.

## A Baby Diagnosed with Epidermolysis Bullosa Associated with Antral Web

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Encountering a neonate with epidermolysis bullosa and pyloric atresia is uncommon in clinical practice. To our knowledge, a complete prepyloric antral web in association with epidermolysis bullosa has not been reported before. The main issues in this case were the prognosis of the over all condition and weighing the risks and benefits of surgery. In other cases, surgical management has had good outcomes, although the risks could include leaks, wound complications, and recurrent obstruction. Uneventful postoperative courses have been reported in many cases. We used abdominal exploration and performed Heineke-Mikulicz antro-pyloroplasty, with an intraoperative finding of a complete antral web. The patient had a smooth recovery with no immediate complications. No major small-term complications occurred, and no further operations were required. One month after the surgery, the patient began full feedings. However, his skin condition worsened with multiple attacks of sepsis; then he developed uncontrollable upper and lower gastrointestinal bleeding. Unfortunately, the patient died at 5 weeks due to sepsis. We report this case to add to the literature, and discuss the management options when facing such a challenging case.

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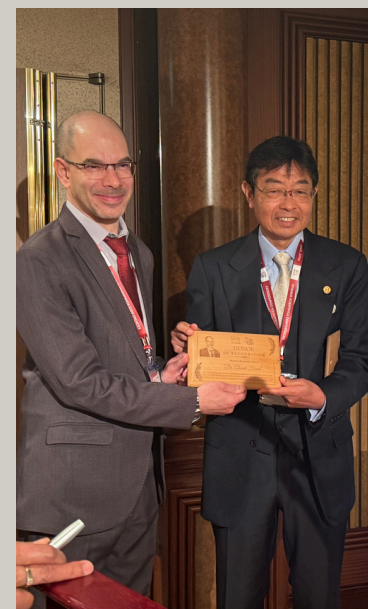




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