

PROGRAMME

Paediatric Anaesthesia

Sunday, March 03, 2024

Session Date/Time: Sunday, March 3, 2024 - 13:15 - 14:45

MR 323 (Level 3)

Paediatric Anaesthesia Workshop: Paediatric Airway Workshop

Workshop Fee: 90 USD

Basic principles and advanced techniques negotiating simulated difficult Paediatric airways will be demonstrated. Comparing blades for direct laryngoscopy, channelled and non-channelled & pros and cons in paediatric population. Unique features and techniques for intubation in children will be demonstrated.

Paediatric Airway Workshop

Nicola Disma, Italy

Paediatric Airway Workshop

Thomas Riva, Switzerland

Paediatric Airway Workshop

Narasimhan Jagannathan, United States

Paediatric Airway Workshop

Clyde Matava, Canada

Paediatric Airway Workshop

Paul Baker, New Zealand

Paediatric Airway Workshop

Josephine Tan, Singapore

Session Date/Time: Sunday, March 3, 2024 - 15:30 - 17:00

MR 333 (Level 3)

Paediatric Anaesthesia Workshop: Monitoring EEG in Paediatric Anaesthesia

Workshop Fee: 10 USD

For this child, at this particular moment, how much anaesthesia should I give? Determining drug requirements in paediatric anaesthesia is challenging, as children can have a more variable response to drugs compared to adults, depending on their age, developmental stage, co-morbidities, and neurodevelopmental status. The brain is the primary site of action for sedative-hypnotic drugs, yet it is not routinely monitored during general anaesthesia or sedation in children. This is likely due to the fact that until recently, physiologically principled approaches for anaesthetic brain monitoring have not been well articulated. Our knowledge of anaesthetic brain mechanisms has developed rapidly in recent years. We now know that anaesthetic drug effects that are clearly visible in the electroencephalogram (EEG) reflect underlying anaesthetic pharmacology and brain mechanisms, in both adults and children. Recent clinical data have shown that anaesthesia-induced isoelectric events are prevalent in children receiving general anaesthesia. Anaesthesia-induced isoelectricity is a state of oversedation beyond what is required to maintain unconsciousness, suggesting that current models of anaesthetic management often predispose children to oversedation.

In this workshop, we will illustrate how EEG monitoring can be used to guide anaesthetic management in paediatric

PROGRAMME

patients and improve patient safety. We will begin by reviewing how drug-specific and dose-dependent EEG signatures seen in adults are visible in children and infants, including those with neurodevelopmental disorders. We then discuss the clinical evidence that the existing model of anaesthetic dosing in children, which does not use the EEG, leads to unnecessarily deep anaesthesia. We will discuss the practical aspects of EEG monitoring in paediatric anaesthesia, including its applications and limitations, as well as how to troubleshoot problems during monitoring. Finally, we review detailed case studies which illustrate how the EEG can be used to guide anaesthetic management and enhance patient safety.

1. Understand age-dependent changes in anaesthesia-induced brain activity in infants and children, and how this activity relates to development of underlying brain circuits.
2. Understand the prevalence of isoelectric events in infants and young children undergoing general anaesthesia and how to identify and prevent these.
3. Understand the practical applications and limitations of EEG monitoring.
4. Understand how EEG monitoring can be used to guide anaesthesia care in infants and children.

Monitoring EEG in Paediatric Anaesthesia

Patrick Purdon, United States

Monitoring EEG in Paediatric Anaesthesia

Choon Looi Bong, Singapore

PROGRAMME

Monday, March 04, 2024

Session Date/Time: Monday, March 4, 2024 - 08:00 - 09:00

Nicoll 1 (Level 3)

Paediatric Anaesthesia: Managing the Child with Congenital Heart Disease

Teaching peculiarities of cardiac diseases in children.

08:00 **Chair: Session Introduction**

Walid Habre, Switzerland

08:02 **Education and Training for Paediatric Cardiac Anaesthesia at a Global Scale**

Viviane Nasr, United States

08:22 **Update on Management of Patients Undergoing Cardiac Surgery**

Ken Brady, United States

08:42 **Questions and Answers**

Session Date/Time: Monday, March 4, 2024 - 09:00 - 10:00

Nicoll 1 (Level 3)

Paediatric Anaesthesia: Sedation in Special Conditions

Sedation around the world.

09:00 **Chair: Session Introduction**

Nicola Disma, Italy

09:02 **Adverse Events. How to Mitigate the Risk**

Keira Mason, United States

09:14 **TCI: Is It the Future Standard for Sedation?**

Pablo Sepulveda, Chile

09:26 **Intravenous Alternatives for Sedation**

Vivian YUEN, Hong Kong, China

09:38 **Sedation in Patients with Obesity and Obstructive Sleep Apnea**

Mohamed Mahmoud, United States

09:50 **Questions and Answers**

Session Date/Time: Monday, March 4, 2024 - 11:40 - 12:40

Nicoll 1 (Level 3)

Paediatric Anaesthesia: Paediatric Critical Care Medicine: Are We There Yet?

PICU around the world.

PROGRAMME

- 11:40 **Chair: Session Introduction**
Santhanam Suresh, United States
- 11:42 **Genesis of Paediatric Critical Care Medicine in North America**
Ken Brady, United States
- 11:57 **India Is Racing to Be a Leader in Paediatric Critical Care Medicine**
Mahesh Vakamudi, India
- 12:12 **Questions and Answers**

Session Date/Time: Monday, March 4, 2024 - 14:00 - 15:00

406 (Level 4)

Paediatric Anaesthesia: Challenges and Lessons in Paediatric Airway Management around the World

Providing evidence of correct airway management.

- 14:00 **Chair: Session Introduction**
Nicola Disma, Italy
- 14:02 **Practical Guidelines for the Difficult Airway in Children**
Clyde Matava, Canada
- 14:17 **Training for First Attempt Success in the Paediatric Airway**
Thomas Riva, Switzerland
- 14:32 **New Visual Aids for Airway Management**
Vinicius Quintao, Brazil
- 14:47 **Questions and Answers**

Session Date/Time: Monday, March 4, 2024 - 15:00 - 16:00

406 (Level 4)

Paediatric Anaesthesia: My Worst Nightmare in the Operating Room

Learning from errors.

- 15:00 **Chair: Session Introduction**
Santhanam Suresh, United States
- 15:02 **Difficult Airway**
Nicola Disma, Italy
- 15:17 **Massive Bleeding**
Aruna Parameswari Sundaram, India
- 15:32 **Low Blood Pressure**
Thomas Engelhardt, Canada
- 15:47 **Questions and Answers**

Session Date/Time: Monday, March 4, 2024 - 16:30 - 17:30

PROGRAMME

Nicoll 1 (Level 3)

Paediatric Anaesthesia: Can Safe Anaesthesia Be Achieved Globally?

Safety in anaesthesia. The Safetots.org initiative around the world.

- 16:30 **Chair: Session Introduction**
Viviane Nasr, United States
- 16:32 **Rights of Children in Hospital**
Karin Becke-Jakob, Germany
- 16:47 **Managing Crisis in Operating Room**
Wangui Thang'a, Kenya
- 17:02 **Achieving a Curriculum in Paediatric Anaesthesia**
Marisol Zuluaga Giraldo, Colombia
- 17:17 **Questions and Answers**

PROGRAMME

Tuesday, March 05, 2024

Session Date/Time: Tuesday, March 5, 2024 - 08:15 - 09:45

MR 325 (Level 3)

Paediatric Anaesthesia Workshop: POCUS and US Guided Regional Anaesthesia Workshop

Workshop Fee: 150 USD

1. Learn US guided POCUS exam including but not limited to cardiac, lung, gastric and venous access.
2. Transthoracic ECHO for quick cardiac examination.
3. Common US guided fascial plane blocks and blocks to use in paediatric practice everyday.
4. Expert guidance for ensuring success in all blocks.

Chair: POCUS and Regional Anaesthesia

Santhanam Suresh, United States

POCUS and Regional Anaesthesia

Ban Tsui, United States

POCUS and Regional Anaesthesia

Manoj Karmakar, Hong Kong, China

POCUS and Regional Anaesthesia

Aruna Parameswari Sundaram, India

POCUS and Regional Anaesthesia

Mahesh Vakamudi, India

POCUS and Regional Anaesthesia

Viviane Nasr, United States

POCUS and Regional Anaesthesia

Josephine Tan, Singapore

Session Date/Time: Tuesday, March 5, 2024 - 08:30 - 09:30

MR 336 (Level 3)

Paediatric Anaesthesia PBLD: Emergency Laparoscopy in Pierre Robin Syndrome

PBLD Fee: 20 USD

2 month old male , 4.5 kg, scheduled for emergency laparoscopy for potential bowel obstruction. Diagnosis of Pierre Robin sequence at birth. Child was fed formula about 1 hour ago, and appears to be slightly diaphoretic.

1. How will you induce anaesthesia?
2. Is RSI Indicated?
3. What equipment is needed for the safe delivery of anaesthesia?
4. Can you do this under regional anaesthesia?

Emergency Laparoscopy in Pierre Robin Syndrome

Thomas Engelhardt, Canada

PROGRAMME

Session Date/Time: Tuesday, March 5, 2024 - 08:30 - 09:30

MR 336 (Level 3)

Paediatric Anaesthesia PBLD: Laparoscopy for a Child with Fontan Circulation

PBLD Fee: 20 USD

8 year old with Fontan Circulation for single ventricle,, presents for emergency laparoscopic Appendectomy under general anaesthesia.

1. What hemodynamics is needed to be monitored for the child before induction of anaesthesia?
2. Technique for induction and maintenance of anaesthesia
3. What monitoring is needed intraoperatively?
4. Does the child need to be transferred to the ICU for postoperative care?

Laparoscopy for a Child with Fontan Circulation

Walid Habre, Switzerland

Session Date/Time: Tuesday, March 5, 2024 - 08:30 - 09:30

MR 335 (Level 3)

Paediatric Anaesthesia PBLD: Paediatric Massive Haemorrhage Management

PBLD Fee: 20 USD

6 months old child undergoing cranyosynostosis. Strategies for blood management and transfusion strategies will be discussed.

Paediatric Massive Haemorrhage Management

Susan Goobie, United States

Paediatric Massive Haemorrhage Management

Heidi Meyer, South Africa

Session Date/Time: Tuesday, March 5, 2024 - 08:30 - 09:30

MR 335 (Level 3)

Paediatric Anaesthesia PBLD: The Foreign Body at Midnight: Should I Sleep, or Should I Go?

PBLD Fee: 20 USD

2 year old with severe wheezing and coughing presents at 10 PM to the ED, history of choking while eating peanuts in the evening. Suspect a FB in the airway. Chest X-Ray shows diffuse atelectasis.

1. Should we proceed with a bronchoscopy now or wait for the morning?
2. Can a RSI be performed on this child?
3. If mask induction, does NPO status matter?

The Foreign Body at Midnight: Should I Sleep, or Should I Go?

Laszlo Vutskits, Switzerland

PROGRAMME

Session Date/Time: Tuesday, March 5, 2024 - 13:00 - 14:00

MR 335 (Level 3)

Paediatric Anaesthesia PBLD: Chronic Pain Management

17 year male s/p right below elbow amputation presents to your pain clinic with severe refractory complex regional pain syndrome. Current medications include high dose opioids, gabapentin, amitriptyline, and acetaminophen.

1. What other modalities can be provided for pain control?
2. If neuromodulation is an option, is peripheral neuromodulation or central neuromodulation a better option?
3. Could this have been prevented at the time of surgery?

Chronic Pain Management

James Rathmell, United States

Chronic Pain Management

Santhanam Suresh, United States

Session Date/Time: Tuesday, March 5, 2024 - 13:00 - 14:00

MR 335 (Level 3)

Paediatric Anaesthesia PBLD: ICU/ECPR Initiation

6-year-old s/p major bowel resection and small bowel transplantation, in step down ICU has severe hypotension, and is now in severe sinus bradycardia, CPR is initiated. After several doses of epinephrine, patient is now in refractory ventricular tachycardia.

1. When do we initiate ECPR in these children? What criteria is needed for ECPR?
2. What equipment is needed and how do we proceed?
3. What protocol needs to be set up for ECMO initiation in hospitals?

ICU/ECPR Initiation

Ken Brady, United States

Session Date/Time: Tuesday, March 5, 2024 - 13:00 - 14:00

MR 336 (Level 3)

Paediatric Anaesthesia PBLD: Pain Control in Difficult Situations

14 year with end stage osteosarcoma of right femur now scheduled for above knee amputation. Patient on methadone 10 mg bid, Oxycontin every 6 hrs, gabapentin 400 mg qid, acetaminophen 600 mg every 6 hrs.

1. How do we manage his perioperative pain?
2. What opportunities do we have for regional anaesthesia?
3. Can we prevent phantom pain in this patient?
4. Do we need to scale down his pain meds before surgery?

Pain Control in Difficult Situations

Ban Tsui, United States

PROGRAMME

Pain Control in Difficult Situations

Santhanam Suresh, United States

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Cases Management in Paediatric

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Marisol Zuluaga Giraldo, Colombia

Poster Moderator

Walid Habre, Switzerland

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Challenging Paediatric Cases

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Mahesh Vakamudi, India

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Enhancing Paediatric Research

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Paul Baker, New Zealand

Poster Moderator

Josephine Tan, Singapore

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Global Paediatric Research

PROGRAMME

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Ken Brady, United States

Poster Moderator

Heidi Meyer, South Africa

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: My Child Is Unique

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Vinicius Quintao, Brazil

Poster Moderator

Wangui Thang'a, Kenya

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Paediatric Research Knows No Frontiers

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Viviane Nasr, United States

Poster Moderator

Pablo Sepulveda, Chile

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Paediatric Research Projects

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Narasimhan Jagannathan, United States

PROGRAMME

Poster Moderator

Choon Looi Bong, Singapore

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Paediatric Research Worldwide

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Vivian YUEN, Hong Kong, China

Poster Moderator

Thomas Riva, Switzerland

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Paediatric Studies Know No Borders

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Laszlo Vutskits, Switzerland

Poster Moderator

Aruna Parameswari Sundaram, India

Session Date/Time: Tuesday, March 5, 2024 - 14:00 - 15:30

Exhibition Hall

Paediatric Anaesthesia E-Poster Presentations: Rare Paediatric Cases

All E-Posters will be showcased through a live 6-minute in-person presentation.

Poster Moderator

Karin Becke-Jakob, Germany

Poster Moderator

Santhanam Suresh, United States

Session Date/Time: Tuesday, March 5, 2024 - 15:30 - 16:30

MR 331 (Level 3)

PROGRAMME**Paediatric Anaesthesia: ERAS Protocols in Children: Developing Standards for Care Worldwide**

Improving perioperative care to provide the best possible outcome.

- 15:30 **Chair: Session Introduction**
Laszlo Vutskits, Switzerland
- 15:32 **Can Nociception Management Improve Outcome?**
Souhayl Dahmani, France
- 15:47 **Regional Anaesthesia for ERAS**
Manoj Karmakar, Hong Kong, China
- 16:02 **Novel ERAS Protocols**
Santhanam Suresh, United States
- 16:17 **Questions and Answers**

Session Date/Time: Tuesday, March 5, 2024 - 16:30 - 17:30

MR 331 (Level 3)

Paediatric Anaesthesia: Paediatric Patient Blood Management (PBM). A Global Perioperative Standard of Care

This session is aimed at presenting and discussing current strategies for PMB in the paediatric age. Through interactive clinical cases and scenarios, attendees will learn how to manage massive haemorrhage and transfusion and preventing blood loss.

- 16:30 **Chair: Session Introduction**
Susan Goobie, United States
- 16:32 **PBM as a New Global Standard of Care for Paediatric Blood Health**
Susan Goobie, United States
- 16:47 **Paediatric Patient Blood Management (PBM). South African Perspective**
Heidi Meyer, South Africa
- 17:02 **PBM in Low to Middle Income Countries**
Marisol Zuluaga Giraldo, Colombia
- 17:17 **Questions and Answers**

PROGRAMME**Wednesday, March 06, 2024****Session Date/Time: Wednesday, March 6, 2024 - 11:15 - 12:15**

MR 332 (Level 3)

Paediatric Anaesthesia: Novel Analgesics and Approaches to Pain Management in Children

- 11:15 **Chair: Session Introduction**
Wangui Thang'a, Kenya
- 11:17 **An Approach to Opioid Free Pain Management**
Santhanam Suresh, United States
- 11:32 **Pharmacogenomics: Can We Personalise Analgesia**
Senthil Sadhasivam, United States
- 11:47 **Traditional vs Novel Analgesics: What Is Best for Children**
Karin Becke-Jakob, Germany
- 12:02 **Questions and Answers**

Session Date/Time: Wednesday, March 6, 2024 - 13:45 - 15:15

MR 336 (Level 3)

Paediatric Anaesthesia Workshop: Implementing Research and Publications in Settings with Limited Resources

Workshop Fee: Complimentary

This workshop will help novice researchers understand the fundamental requirements for good quality research with a focus on understanding the impact you wish to make with your research, the importance of defining a research question which is relevant and novel, and then the basic ingredients needed to answer that question. These fundamental principles are applicable to all settings but are especially important where resources are limited.

Implementing Research and Publications in Settings with Limited Resources*Andrew Davidson, Australia***Implementing Research and Publications in Settings with Limited Resources***Susan Goobie, United States***Implementing Research and Publications in Settings with Limited Resources***Laszlo Vutskits, Switzerland***Implementing Research and Publications in Settings with Limited Resources***Vinicius Quintao, Brazil*