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

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 anesthetic 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
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

08:17 Preoperative Evaluation of a Cardiac Patient Coming for a Noncardiac Procedure
Rosenberg Albores, Mexico

08:32 Update on Management of Patients Undergoing Cardiac Surgery
Ken Brady, United States

08:47 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

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.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker &amp; Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:40</td>
<td>Chair: Session Introduction</td>
<td>Thomas Shanley, United States</td>
</tr>
<tr>
<td>11:42</td>
<td>Genesis of Paediatric Critical Care Medicine in North America</td>
<td>Ken Brady, United States</td>
</tr>
<tr>
<td>11:57</td>
<td>India Is Racing to Be a Leader in Paediatric Critical Care Medicine</td>
<td>Mahesh Vakamudi, India</td>
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<tr>
<td>12:12</td>
<td>Measures of Quality to Apply Universally</td>
<td>Thomas Shanley, United States</td>
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<tr>
<td>12:27</td>
<td>Questions and Answers</td>
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</tbody>
</table>

Session Date/Time: Monday, March 4, 2024 - 14:00 - 15:00
Hall 406C (Level 4)

Paediatric Anaesthesia: Challenges and Lessons in Paediatric Airway Management around the World
Providing evidence of correct airway management.

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker &amp; Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Chair: Session Introduction</td>
<td>Nicola Disma, Italy</td>
</tr>
<tr>
<td>14:02</td>
<td>Practical Guidelines for the Difficult Airway in Children</td>
<td>Clyde Matava, Canada</td>
</tr>
<tr>
<td>14:17</td>
<td>Training for First Attempt Success in the Paediatric Airway</td>
<td>Thomas Riva, Switzerland</td>
</tr>
<tr>
<td>14:32</td>
<td>New Visual Aids for Airway Management</td>
<td>Vinicius Quintao, Brazil</td>
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<tr>
<td>14:47</td>
<td>Questions and Answers</td>
<td></td>
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</tbody>
</table>

Session Date/Time: Monday, March 4, 2024 - 15:00 - 16:00
Hall 406C (Level 4)

Paediatric Anaesthesia: My Worst Nightmare in the Operating Room
Learning from errors.

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker &amp; Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>Chair: Session Introduction</td>
<td>Santhanam Suresh, United States</td>
</tr>
<tr>
<td>15:02</td>
<td>Difficult Airway</td>
<td>Nicola Disma, Italy</td>
</tr>
<tr>
<td>15:17</td>
<td>Massive Bleeding</td>
<td>Aruna Parameswari Sundaram, India</td>
</tr>
</tbody>
</table>
15:32  Low Blood Pressure  
  Thomas Engelhardt, Canada  

15:47  Questions and Answers  

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

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

POCUS and Regional Anaesthesia
Aruna Parameswari Sundaram, India

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

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 Appendctomy 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

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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 craniosynostosis. Strategies for blood management and transfusion strategies will be discussed.

Paediatric Massive Haemorrhage Management
Susan Goobie, United States

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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*

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**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**
*Thomas Shanley, United States*

**ICU/ECPR Initiation**
*Ken Brady, United States*

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**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*

**Pain Control in Difficult Situations**
*Manoj Karmakar, Hong Kong*
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 Vutkits, Switzerland

15:32 Can Nociception Management Improve Outcome?
Souhayl Dahmani, France

15:47 Regional Anaesthesia for ERAS
Manoj Karmakar, Hong Kong

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

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 Individualized Blood Management. What Should I Monitor
Laszlo Vutkits, Switzerland

16:47 PBM in Low to Middle Income Countries
Marisol Zuluaga Giraldo, Colombia

17:02 PBM as a New Global Standard of Care for Paediatric Blood Health
Susan Goobie, United States

17:17 Questions and Answers
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  
James Rathmell, 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

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 Vutkits, Switzerland