



INTRAOPERATIVE NEUROMONITORING FOR CARDIOVASCULAR PROCEDURES

Virtual One Day Course
March 11, 2023



Hosted Online Via “Zoom”

EVENT: Intraoperative Neuromonitoring for Cardiovascular Procedures

March 11, 2023 - 08:45 AM Eastern Time

Overview and Learning Objectives:

Intraoperative Neuromonitoring (IONM) is not currently considered a standard of care for cardiovascular surgery. This course will demonstrate compelling evidence that patients who are at elevated risk for stroke can benefit from IONM during cardiovascular procedures.

Implementing IONM for at-risk patients requires collaboration and communication between multiple healthcare professionals including (but not limited to) the surgical team, anesthesiologists, perfusionists, neurologists, stroke interventionalists, intensivists, and PM&R physicians. Systems need to be put in place for identifying at-risk patients, developing techniques to avoid intraoperative stroke, identifying intraoperative stroke, planning for treatment of intraoperative stroke, and postoperatively managing patients who have experienced intraoperative stroke.

Who Should Attend:

Intraoperative Neuromonitoring for Cardiovascular Procedures is designed for cardiac surgeons, cardiologists, neurologists, neuro interventional radiologists, neuro critical care physicians, board-certified clinical neurophysiologists, advanced surgical neurophysiologists, PM&R physicians, perfusionists, APPs that support stroke and cardiac patients, and family medicine practitioners.



Ibrahim Sultan, MD

Course Co-Director
Associate Professor of Cardiothoracic Surgery
Director, Center for Thoracic Aortic Disease
Surgical Director, Center for Heart Valve Disease

“Stroke is one of the most devastating complications associated with cardiac surgery. This course explores utilization of intraoperative neuromonitoring technology to mitigate risk of undetected intraoperative stroke. A multidisciplinary team approach to integrating neuromonitoring into day-to-day cardiac surgery is critical. We are eager to join our colleagues from around the globe to conduct a deep dive into this important and timely topic.”



Partha Thirumala, MD

Course Co-Director
Professor, Department of Neurological Surgery and Neurology
Medical Director, UPMC Center for Clinical Neurophysiology

“This unique one-day course will demonstrate the efficacy of IONM for early detection of stroke in cardiovascular procedures. It will also highlight the critical importance of timely intervention.”

FACULTY:

Katherine Anetakakis, MD – University of Pittsburgh Department of Neurological Surgery

George Arnaoutakis, MD – University of Texas Department of Cardiovascular Surgery

Jeffrey Balzer, PhD – University of Pittsburgh Department of Neurological Surgery

Donald Crammond, PhD - University of Pittsburgh Department of Neurological Surgery

Joshua Grimm, MD – University of Texas Department of Cardiovascular Surgery

Natalie Sridharan, MD - University of Pittsburgh Department of Vascular Surgery

Marion Hughes, MD - University of Pittsburgh Department of Radiology

Arminster Jassar, MD – Massachusetts General Hospital Department of Cardiothoracic Surgery

David J. Kaczorowski, MD - University of Pittsburgh Department of Cardiovascular Surgery

Dustin Kliner, MD - University of Pittsburgh Department of Cardiovascular Surgery

Brett Reece, MD – University of Colorado Department of Cardiothoracic Surgery

Ashu Jadhav, MD – Barrow Neurological Institute Department of Interventional Neurology

Katie Scollon MPAS, PA-C – UPMC Heart and Vascular Institute

Lori Shutter, MD - University of Pittsburgh Department of Neurology and Critical Care

Ibrahim Sultan, MD – University of Pittsburgh Department of Cardiovascular Surgery

Kathir Subramaniam, MD - University of Pittsburgh Department of Anesthesiology

R. Joshua Sunderlin, MS, CNIM – Procirca Center for Clinical Neurophysiology

Partha Thirumala, MD - University of Pittsburgh Department of Neurological Surgery

Melita Viegas, MD – University of Pittsburgh Department of Pediatric Cardiothoracic Surgery

Sarah Yousef, MD - University of Pittsburgh Department of Cardiovascular Surgery

SATURDAY, MARCH 11, 2022

8:45 - 9:00am: Welcome Address
Ibrahim Sultan, MD; Partha Thirumala, MD

Section I:

9:00—9:20am: Last electrically well
Katherine Anetakis, MD

9:20—9:40am: Cerebral perfusion and IONM alerts
Jeffrey Balzer, PhD

9:40—10:00am: Anesthetic management in cardiac procedures with IONM
Kathir Subramaniam, MD

10:00—10:20am: Intraoperative neuromonitoring – your ally against intraoperative stroke
R. Joshua Sunderlin, MS, CNIM

10:20—10:35am: Panel Discussion (15 min) – Jeffrey Balzer, PhD

10:35—10:50am: Break – Virtual Exhibits

Section II:

10:50—11:10am: Monitoring during open aortic arch procedures
Brett Reece, MD

11:10—11:30am: Cerebral protection devices in transcatheter aortic valve replacement
Dustin Kliner, MD

11:30—11:50am: IONM during endovascular cardio-aortic procedures
George Arnaoutakis, MD

11:50—12:10pm: Stroke risk in carotid procedures
Natalie Sridharan, MD

12:10—12:30pm: Intraoperative Maneuvers in response to IONM alerts
Arminder Jassar, MD

12:30—12:45pm: Panel Discussion (15 min) – Ibrahim Sultan, MD

12:45—1:20pm: Lunch/Exhibits

Section III:

- 1:20—1:40pm: Stroke risk in pediatric cardiovascular procedures
Melita Viegas, MD
- 1:40 – 2:00pm: Options when Intraoperative Neuromonitoring is not available
Joshua Grimm, MD
- 2:00—2:20pm: Heart transplant and LVAD procedures – Role of IONM
David J. Kaczorowski, MD
- 2:20—2:40pm: Quality improvement in cardiac neuromonitoring: Opportunities and challenges
Partha Thirumala, MD
- 2:40—3:00pm: Imaging of acute infarcts
Marion Hughes, MD
- 3:00—3:20pm: Endovascular Management of perioperative stroke
Ashu Jadhav, MD
- 3:20—3:35pm: *Panel Discussion (35 min) – Partha Thirumala, MD*
- 3:35—3:50pm: Break/Exhibits**

Section IV:

- 3:50—4:10pm: Neurocritical care: Communication is the key
Lori Shutter, MD
- 4:10—4:30pm: Perioperative stroke risk: Building a plan for who gets IONM at an institutional level
Partha Thirumala, MD
- 4:30—5:15pm: Complex Case Presentations:
Jeffrey Balzer, PhD
Partha Thirumala, MD
Katherine Anetakis, MD
Donald Crammond, PhD
Sarah Yousef, MD
Katie Scollon, MPAS, PA-C
R. Joshua Sunderlin, MS, CNIM
- 5:15pm: Course Adjournment

Faculty Disclosure

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All of the relevant financial relationships for the individuals listed below have been mitigated:

George Arnaoutakis, MD: Consultant – Terumo Aortic

David Kaczorowski, MD: Consultant – Abiomed & Medtronic. CE Speaker's Bureau – Abiomed & Medtronic

Ibrahim Sultan, MD: Grant Research Support – Abbott, Artivion, Boston Scientific, Medtronic, Edwards

Brett Reece, MD: Consultant – GORE, Terumo

Arminder Jassar, MD: Consultant – Terumo Aortic

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Physician (CME)

The University of Pittsburgh designates this live activity for a maximum of 7.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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The maximum number of hours awarded for this Continuing Nursing Education activity is 7.25 contact hours.

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Other Healthcare Professionals

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.

Perfusionists

The American Board of Cardiovascular Perfusion (ABCP) has approved this activity for 8.3 Category I CEUs for Perfusionists.

ASET CEUs

ASET – The Neurodiagnostic Society has granted 7.0 Continuing Education Units [ASET-CEUs] for this program. Such crediting, however, should not be construed by program participants as an endorsement of any type of instruments or supplies mentioned or involved in these presentations.

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