



Virtual Training
via
zoom



Children's
of Alabama

UAB MEDICINE

1.5 Day Course

CURRICULUM AGENDA

ALL TIMES LISTED ARE CENTRAL (CST)

Monday, February 1, 2021

7:30-7:45	Log-In/Zoom Admittance All participants will enter Waiting Room until start of meeting.
7:45-8:00	Roll Call/Introductions
8:00-8:15	Welcome: ~ Mitch Cohen, MD Professor & Chairman, UAB Dept. of Pediatrics ~ David Askenazi, MD, MSPH • Pre-Test, Goals & Rules of Course • Housekeeping Items
8:15-8:45	Acute Kidney Injury and Fluid Overload in Small Children ~ Francisco Flores, MD
8:45-9:15	End-Stage Kidney Failure in Neonates ~ Sahar Fathallah, MD
9:15-10:00	Principles of Neonatal Kidney Support Therapy, Part 1 ~ Theresa Mottes, MSN, APRN, CPNP-AC, CDN
10:00-10:15	Break
10:15-11:00	Principles of Neonatal Kidney Support Therapy, Part 2 ~ Kara Short, MSN, CRNP
11:00-11:45	Principles of Neonatal Kidney Support Therapy, Part 3 ~ David Askenazi, MD, MSPH
11:45-12:15	Caring for the Neonate on Kidney Support Therapy: A Parent's Perspective ~ Kara Short, MSN, CRNP, with the Wilson family
12:15-1:00	Break
1:00-1:30	Caring for the Neonate on Kidney Support Therapy: The Neonatologist's Perspective ~ Christine Stoops, DO, MPH

1:30-1:45	Nutrition During Kidney Support Therapy ~ Katelyn Stinson, RDN, LD
1:45-2:00	Medications During Kidney Support Therapy ~ Traci Henderson, RPh
2:00-2:15	Access for Kidney Support Therapy in Infants ~ Vince Mortellaro, MD
2:15-2:30	Break
2:30-4:15	Hands-On Nursing Specific Tasks ~ Suzanne Gurosky, BSN, RN ~ Daryl Ingram, BSN, RN, CDN ~ Kara Short, MSN, CRNP ~ Francisco Flores, MD
4:15-4:25	Educating Your Team ~ Theresa Mottes, MSN, APRN, CPNP-AC, CDN
4:25-4:45	Caring for Your Program ~ David Askenazi, MD, MSPH
4:45-5:00	Concluding Remarks: Bringing It All Together ~ David Askenazi, MD, MSPH
5:00	Dismissal

Tuesday, February 2, 2021

8:15-12:00	Morning Groups ~ Simulation Team and NICKS Faculty
1:15-5:00	Afternoon Groups ~ Simulation Team and NICKS Faculty
Participants will be divided into either morning or afternoon groups. All participants will be actively engaged in four separate simulations. NICKS and Simulation Center faculty will be supervising simulations and readily available to answer questions. All simulations will include a post debriefing.	

Continuing Education

Children's of Alabama designates this live activity for a maximum of 11.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Children's of Alabama is accredited by the Medical Association of the State of Alabama to provide continuing medical education for physicians.

This program has been approved for:
Alabama Board of Nursing (ABN): 13.2 hours
Pharmacy Contact Hours: ABN 3 hours
American Nurses Credentialing Center (ANCC): 11 hours

The Children's Hospital of Alabama/Children's of Alabama is approved as a provider for nursing continuing professional development by the Alabama State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.



At the end of the course, the learner will:

1. Recognize the epidemiology of neonatal acute kidney injury and neonatal end-stage kidney failure.
2. Recognize the indications and optimal timing of Kidney Support Therapy in neonates and infants.
3. Identify the principles central to the provision of safe and effective treatment using different forms of neonatal kidney support therapy.
4. Develop strategies to optimize the kidney support program at each participant's home institution through educational, administrative, personnel and quality improvement initiatives.

OVERALL LEARNING OBJECTIVES

SESSION-SPECIFIC LEARNING OBJECTIVES

Acute Kidney Injury and Fluid Overload in Small Children

- Review the epidemiology of Neonatal and Pediatric AKI
- Review data on fluid overload in critically ill neonates and children
- Describe the common indications for Kidney Support Therapy (KST) in patients with AKI/FO

End-Stage Kidney Failure in Neonates

- Review the epidemiology of neonatal end-stage kidney failure
- Describe the common indications for KST in neonates and infants with end-stage kidney failure

Principles of Neonatal Kidney Support Therapy Part 1

- Discuss the epidemiology of KST in newborns
- Discuss the goals of KST in neonates
- Review timing of initiation of KST in neonates
- Describe different modalities of KST in neonates:
 - * Clearance mode (diffusion, hemofiltration, and ultrafiltration)
 - * Peritoneal versus veno-venous
 - * Continuous versus intermittent versus prolonged intermittent

Principles of Neonatal Kidney Support Therapy Part 2

- Discuss elements of the PD prescription
- Discuss specifics (features, pros and cons) for different KST machines available for small children
- Discuss access for patients who need KST
- Review options for KST on Extracorporeal Membrane Oxygenation (ECMO)
- Review options for priming circuits and the rationale for blood primes
- Acquire strategies for optimizing blood prime procedures

Principles of Neonatal Kidney Support Therapy Part 3

- Discuss elements of a CVVH/CVVHD prescription (blood flow, dialysis/replacement rates, ultrafiltration rates)
- Discuss Filtration Fraction
- Compare the options, benefits, risks, set up, complications and monitoring for different anticoagulation options
- Discuss approaches to ultrafiltration rate prescription
- Troubleshoot potential ultrafiltration issues and discuss plans to address these
- Review hematocrit scenarios

Caring for the Neonate on Kidney Support Therapy: A Parent's Perspective

- Discuss a patient on KST and his clinical course from birth to now
- Consider the perspective of the parents and the responsibilities of taking care of one of our KST babies

Caring for the Neonate on Kidney Support Therapy: The Neonatologist's Perspective

- Discuss how our approach to making decision to start KST has changed in our NICU
- Discuss cardio-pulmonary disease care in neonates on KST
- Discuss strategies to have the best collaborative practices for your KST program

Nutrition During Kidney Support Therapy

- Discuss importance of nutritional goals during KST
- Review guidelines for nutrition feeding during KST

Medications During Kidney Support Therapy

- Discuss importance of medication goals during KST
- Review guidelines for medication during KST

Access for Kidney Support Therapy in Infants

- Review intravascular and peritoneal dialysis access options for KST
- Discuss the principles of PD and vascular access placement

Hands-On

- Demonstrate set-up and features of modified CVVH on Aquadex
- Demonstrate set-up and features of CARPEDIEM
- Review blood prime procedures
- Discuss options for circuit-to-circuit change
- Discuss dealing with access alarms
- Review recirculation procedures
- Set up demonstrations for peritoneal KST

Educating Your Team for Kidney Support Therapy

- Discuss frequency, documentation, training and certification of team members
- Review educational training tools

(continued)



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OVERALL LEARNING OBJECTIVES

SESSION-SPECIFIC LEARNING OBJECTIVES continued

Caring for Your Program

- Discuss the advantages and disadvantages of different types of nursing structures
- Review Roles and Responsibilities for all team members for the program — during KST initiation and during KST maintenance
- Discuss the importance of standardizing Policies and Procedures
- Review Elements of Order Sets
- Discuss potential quality improvement initiatives



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FACULTY

David Askenazi, MD, MSPH

Professor, Pediatric Nephrology
Director, Pediatric and Infant Center for Acute
Nephrology (PICAN)
University of Alabama at Birmingham
Children's of Alabama

Francisco Flores, MD

Associate Professor, Pediatric Nephrology
University of Cincinnati
Cincinnati Children's Hospital Medical Center

Sahar Fathallah, MD

Professor, Pediatric Nephrology
University of Alabama at Birmingham
Children's of Alabama

Theresa Mottes, MSN, APRN, CPNP-AC, CDN

Acute Nurse Practitioner
Lurie Children's Hospital
Chicago, IL

Kara Short, MSN, CRNP

Acute Dialysis Nurse Practitioner, Pediatric Nephrology
Children's of Alabama

Christine Stoops, DO, MPH

Assistant Professor, Pediatric Neonatology
University of Alabama at Birmingham
Children's of Alabama

Katelyn Stinson, RDN, LD

Pediatric Nephrology Dietician, Children's of Alabama

Traci Henderson, RPh

Pediatric Nephrology Pharmacist
Children's of Alabama

Vince Mortellaro, MD

Assistant Professor, Pediatric Surgery
University of Alabama at Birmingham
Children's of Alabama

Daryl Ingram, BSN, RN, CDN

Head Acute Dialysis Nurse
Children's of Alabama

Suzanne Gurosky, BSN, RN

Acute Dialysis Nurse
Children's of Alabama

Nancy Tofil, MD, MEd

Professor and Director, UAB Pediatric Critical Care
Medical Director, Pediatric Simulation Center at
Children's of Alabama

Chrystal Rutledge, MD

Assistant Professor, UAB Pediatric Critical Care
Co-Director, Pediatric Simulation Center at
Children's of Alabama

Registration Information

Register At give.childrensal.org/NICKS

(payment by credit card only)

Physicians: \$325

Nurses: \$275



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