Evidence-Based Neonatal Medicine (Session I):
Point-of-Care Resources in Neonatal-Perinatal Medicine

Presented by:
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UCI Science Library
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Learning Objectives:

- Introduce the neonatologists to the concept of Evidence-Based Practice (EBP) and to demonstrate simple methods to find and use the best evidence to answer their clinical questions.

- Become competent self-directed, lifelong learners with skills to effectively and efficiently keep up to date.

- Develop EBP skills to solve problems encountered in daily practice.

- Learn to identify problems/questions encountered in practice and seek solutions by rapidly answering clinical questions with best evidence.

- Take the skill you learn today and apply it to your medical education, clinical research and practice.
Session I: Agenda

- Overview of GML All Core Resources

- Demonstrate online resources:
  - Antpac searches
  - UCI Online Books (AccessMedicine, MDConsult, Stat!Ref…)
  - Micromedex 2.0 | mobileMicromedex
  - VisualDx
  - Jove
  - Cochrane Neonatal Group
  - Demonstrate Google and Google Scholar Advanced Search

- Handheld and remote access
- Reading assignments
Evidence-Based Point-of-Care Resources in Neonatology
Online Medical Textbooks

Online Books
- AccessMedicine
- MDConsult
- Stat!Ref

Use Antpac to locate all the Books that are in print and online: http://antpac.lib.uci.edu/
- e.g., (Neonat* OR Perinat* OR Pediatric*) AND examinations (select books, ebooks to execute the search).
endotracheal intubation AND (neonate OR newborn)

Search only displays content that you own, as long as you are signed in.

Textbooks

Chapter 28. The Newborn Infant > Endotracheal Intubation
Williams Obstetrics, 23e

Chapter 29. Pediatric Airway Management > Endotracheal Tubes
Tintinalli’s Emergency Medicine

Chapter 22. Neonatal Resuscitation > Transient Tachypnea of the Newborn
CURRENT Diagnosis & Treatment: Obstetrics & Gynecology, 11e

Chapter 42. Pediatric Anesthesia > Tracheal Intubation
Morgan & Mikhail’s Clinical Anesthesia, 5e
Search: endotracheal intubation AND neonates

1. **48:36 Pulmonary Surfactants**
   In: AHFS DRUG INFORMATION® (2014) > 48:00 Respiratory Tract Agents
   - The recommended intratracheal (administered via a catheter inserted into an endotracheal tube) dosage of beractant for prevention of RDS in premature neonates with low birthweight or in those with evidence of an endogenous surfactant deficiency is 100 mg of phospholipids (4 m...)
   ![View References](#) [View in New Window](#)

2. **Magnesium Sulfate (Systemic)**
   In: ACP Smart Medicine & AHFS DI® Essentials™ > AHFS DI® ESSENTIALS™ (2014) > "M" Monographs
   - ... delivery (especially for >24 hours); IM use does not usually compromise neonate. 76, 87, a ... Neonatal hypomagnesemia management may require resuscitation and assisted ventilation via endotracheal intubation and/or intermittent positive-pressure ventilation, as well as IV calcium. a... If administered for ... ![View References](#) [View in New Window](#)

3. **Magnesium Sulfate**
   In: AHFS DRUG INFORMATION® (2014) > 28:00 Central Nervous System Agents > 28:12 Anticonvulsants > 28:12.92 Anticonvulsants, Miscellaneous
   - ... 85, 86 IV magnesium should not be given during the 2 hours preceding delivery. Management of the neonate with hypermagnesemia may require resuscitation and assisted ventilation via endotracheal intubation and/or intermittent positive-pressure ventilation, as well as IV calcium. For additional ... ![View References](#) [View in New Window](#)

4. **Resuscitation**
   In: TABER'S® CYCLOPEDIA MEDICAL DICTIONARY - 22Ed. (2013) > "R" Vocabulary > rest — reticulocytosis
   - ... with breaths supplied via a bag mask device, effectively resuscitates most infants at risk for neonatal asphyxia. Those who have meconium in the upper airways (evidenced by meconium staining of the ... ![View References](#) [View in New Window](#)
Endotracheal Intubation

During neonatal resuscitation, endotracheal intubation may be indicated in the following circumstances: extremely low birth weight infants. Intubation of the newborn requires preparation that can be performed while...

Transition from Fetus to Newborn

From: Rakel: Textbook of Family Medicine, 8th ed., Chapter 22 - Care of the Newborn

Transition from Fetus to Newborn Key Points: A separate provider assigns an Apgar score. Routine endotracheal intubation and tracheal suction do not prevent...first hours after delivery; the newborn must adapt to extraterine life...

Newborn Resuscitation

From: Johns Hopkins: The Harriet Lane Handbook, 19th ed., Chapter 18 - Neonatology

Newborn Resuscitation A NALS Algorithm for Neonatal Resuscitation (Fig...nasopharyngeal suctioning is not recommended. If the infant is not vigorous, endotracheal intubation should be performed immediately after birth and suction should...

Disorders

From: Flint: Cummings Otolaryngology: Head & Neck Surgery, 5th ed., CHAPTER 209 - Gastroesophageal Reflux and Laryngeal Disease

GER has been shown to have an important role in the development of subglottic stenosis. Long-term endotracheal intubation leads to increased acid pharyngeal...
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A Differential Diagnostic Tool: VisualDx

Choose a Clinical Scenario

Pediatric Skin
- Neonate/Infant (< 1 year)
  - Multiple Lesions or Rash
  - Single Lesion or Growth
- Child (< 18 years)
  - Multiple Lesions or Rash
  - Single Lesion or Growth
- Specialized Content
  - Male Anogenital
  - Female Anogenital

Adult Skin
- Adult (> 18 years)
  - Multiple Lesions or Rash
  - Single Lesion or Growth
  - Dark Skin - Multiple Lesions or Rash
  - Dark Skin - Single Lesion or Growth
- Elder (> 70 years)
  - Multiple Lesions or Rash
  - Single Lesion or Growth

Specific Clinical Scenarios
- Fever & Rash
- Immune-compromised
- International Travel
- Blisters, Stings, & Infections
- Marine Exposures
  - Male Anogenital
  - Female Anogenital
  - Nail & Detai Digit
  - Hair & Scalp
  - Cellulitis DDx

Drug Reactions
- Drug Eruptions
- External Eye
- Oral
  - Oral Mucosa

Pulmonary
- Pulmonary Infections

Public Health / Education
- Pressure Ulcer Slopping
- C.A. MRSA
- Child Abuse Recognition
- Terrorism Recognition
- Smallpox Vaccination

Health news and alerts:

- Schedule a 15 Minute VisualDx demonstration
- LearnDerm Self-study Dermatology Education Resource
- VisualDx 4-minute demo
Micromedex 2.0: A Comprehensive Drug Information Tool

7 results found for: “Neonatal bradycardia”

1. SALSULATES
   Toxicology: Detailed evidence-based information (PO/IV/DX/W/Managements)
   Findings after resuscitation included tachypnea, respiratory distress, hypotonia, and metabolic...
   Document section: CLINICAL EFFECTS

2. BISMUTH
   Drug: Detailed evidence-based information (DRUG/DX/E/DX)
   Findings after resuscitation included tachypnea, respiratory distress, hypotonia, and metabolic...
   Document section: Teratogenicity/Efficacy in Pregnancy/Breastfeeding

3. Antacids
   Drug: Detailed evidence-based information (DRUG/DX/E/DX)
   Findings after resuscitation included tachypnea, respiratory distress, hypotonia, and metabolic...
   Document section: Teratogenicity/Efficacy in Pregnancy/Breastfeeding

4. PINOLOL
   Drug: Detailed evidence-based information (DRUG/DX/E/DX)
   Findings after resuscitation included tachypnea, respiratory distress, hypotonia, and metabolic...
   Document section: Teratogenicity/Efficacy in Pregnancy/Breastfeeding
Non-invasive Optical Measurement of Cerebral Metabolism and Hemodynamics in Infants

Pei-Yi Lin1, Nadège Roche-Labarbe1,2, Mathieu Dehaes3, Stefan Cant1, Angela Feroglio4, Beniamino Barbieri4, Katherine Hagan1, P. Ellen Grant3, Maria Angela Franceschini1

1Annular A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, 2ARI, RAL, Université de Caen Basse-Normandie, 3Pediatric Neuroradiology and Developmental Science Center, Boston Children’s Hospital, Harvard Medical School, 4SSS, INC.

We combined frequency-domain near-infrared spectroscopy measures of cerebral hemoglobin oxygenation with diffuse correlation spectroscopy measures of cerebral blood flow index to estimate an index of oxygen metabolism. We tested the utility of this measure as a bedside screening tool to evaluate the health and development of the newborn brain.

Published March 14, 2013. Keywords: Medicine, Developmental Biology, Neurobiology, Neuroscience, Biomedical Engineering, Anatomy, Physiology, Near Infrared spectroscopy, diffuse correlation spectroscopy, cerebral hemodynamics, cerebral metabolism, brain injury screening, brain health, brain development, newborns, neonates, imaging, clinical techniques

Isolation and Quantification of Botulinum Neurotoxin From Complex Matrices Using the BoTest Matrix Assays

F. Mark Dunning1, Timothy M. Piazza2, Fuzan N. Zayd1, Ward C. Tucker1

1BioSentinel Inc., Madison, WI

The BoTest Matrix botulinum neurotoxin (BoNT) detection assays rapidly purify and quantify BoNT from a range of sample matrices. Here, we present a protocol for the detection and quantification of BoNT from both solid and liquid matrices and demonstrate the assay with BOTOX, tomatoes, and milk.
Cochrane Neonatal Group
http://neonatal.cochrane.org/

- Is one of the 50 Review Groups within the Cochrane Collaboration and is one of the most active one.
- Is an international not-for-profit and independent organization, dedicated to making up-to-date, accurate information about the effects of healthcare readily available worldwide.
- It produces and disseminates systematic reviews of healthcare interventions and promotes the search for evidence in the form of clinical trials and other studies of interventions.
- Cochrane Neonatal Group Web Seminars
  http://neonatal.cochrane.org/web-seminars
Google Advanced Search for PPT

Find pages with...
- all these words: retinopathy prematurity

To do this in the search box:
- Type the important words: retinopathy prematurity.
- Put exact words in quotes: "prematurity"
- Put a minus sign before words you don’t want: -Web
- Put 3 periods between the numbers and add a unit of measurement between 20 and 30: 30.3L, 400mL, 2000 kg

Then narrow your results by...
- language: English
- region: any region
- last update: any time
- site or domain: edu
- terms appearing: anywhere in the page
- searching: show only advanced results
- filetype: Microsoft PowerPoint (.ppt)

Results by reading level for retinopathy prematurity site:.edu filetype:.ppt - View results for all reading levels

Basic 0%
Intermediate 0%
Advanced 100%

PPT
Retinopathy of Prematurity (ROP)
www.well.ufl.edu/.../Melissa_Lipp - University of Rhode Island
Retinopathy of Prematurity (ROP) Melissa Andrews. BME 281 Sec 2. What is ROP?
Affects the retinal blood vessels of premature babies; Retina forms early in...

PPT
Retinopathy of Prematurity Learning Activity 2 By
www.faculty.staunton.edu/.../top10.ppt - Retinopathy of prematurity (ROP) is a disease that primarily occurs in premature babies. It causes abnormal blood vessels to grow in the retina, the layer of...

PPT
Retinopathy of prematurity
www.pediatrics.emory.edu/.../Retinopathy%20of%20... - Emory University
Retinopathy of prematurity: Altered development. A disorder with a uniquely American heritage. Early History: Silverman, WA. Retinoblastoma. A Modern...

PPT
COMPLICATIONS OF PREMATURETY Mona ...
www.medicalstudent.berkeley.edu/.../Retinopathy%20of%20Pret... - University of... - Prematurity < 37 completed weeks; Accounts for 1/3 of infant deaths in USA, 45% ...
Respiratory distress: 93%, Retinopathy of prematurity: 95%, Patent ductus ...

PPT
PowerPoint
course.fiu.edu/.../Functional%20Implications%20... - Texas Tech University
Retinopathy of Prematurity (ROP). Disorganized growth of blood vessels that results in scarring and retinal detachment; Attributed to oxygen therapy given in ...

PPT
PowerPoint, PPT
Medical Mobile Access via the UCI Libraries
http://libguides.lib.uci.edu/pda

Register your mobile devices for wireless access
- UCInet Mobile Access Registration
  http://www.oit.uci.edu/mobile/registration.html

Available Mobile apps for download:
- mobileMocromedex®
- Natural Medicine
- Stat!Ref
- Thieme E-Book Library for iPad
- UpdateToDate
- ViusalDx

Optimized Mobile access:
- AccessMedicine
- Gideon
- MDConsult

Free Medical Apps via NLM
- (http://www.nlm.nih.gov/mobile/)

Apple’s top 118 apps for doctors, nurses, patients
Wireless & Remote Access to Online Medical Resources

- You must activate your UCINetID: http://www.nacs.uci.edu/ucinetid/index.html#activate

- Web VPN: Web-based; compatible with all browsers & computer platforms. Some of our online databases and journals do not work well with this option. http://www.nacs.uci.edu/security/vpn/webvpn.html


Required:


Suggested:

1. 23 Weeks 6 days via RadioLab Podcasts: http://www.radiolab.org/story/288733-23-weeks-6-days/
