Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – August 2019

Human placenta has no microbiome but can contain potential pathogens de Goffau MC, Lager S, Sovio U, et al. *Nature*.

The authors chose to determine if pre-eclampsia, preterm birth or the delivery of an SGA infant are associated with bacterial DNA in the human placenta. They found no evidence of bacteria in the large majority of placentas. Most signals were related to the acquisition of bacteria during labor and delivery, or to contamination. For GBS, however, non-contaminant signals were detected in 5% of samples collected before labor. They conclude that bacterial infection of the placenta is not a common cause of adverse pregnancy outcome, but it does represent a potential site of perinatal acquisition of GBS.

Intact cord resuscitation versus early cord clamping in the treatment of depressed newborn infants during the first 10 minutes of birth (Nepcord III) – a randomized clinical trial (PDF)

Andersson O, Rana N, Ewald U, et al. *Matern Health Neonatol Perinatol*.

This is a randomized control trial including late preterm and term infants (n=231) at a tertiary hospital in Nepal evaluating differences in clinical outcomes in non-breathing infants with an intact umbilical cord (intervention group) compared to clamped umbilical cord (control). Study showed that spO2 and Apgar scores were significantly higher in the intervention group at one, five and ten minutes. The authors conclude that in term infants, intact cord resuscitation did not raise any safety concerns and had a better recovery than routine resuscitation, and suggest further studies to confirm their findings.

Antenatal sildenafil treatment improves neonatal pulmonary hemodynamics and gas exchange in lambs with diaphragmatic hernia

Kashyap AJ, DeKoninck PLJ, Rodgers KA, et al. Ultrasound Obstet Gynecol.

The authors elected to study the effect of antenatal sildenafil on neonatal pulmonary hemodynamics and lung function in lambs with a diaphragmatic hernia (DH). They found that pulmonary vascular resistance decreased following lung aeration to a greater degree in DH-sildenafil lambs and that pulmonary arterial pressure was lower and pulmonary blood flow higher in DH-sildenafil lambs. These findings support the rationale for a clinical trial of antenatal sildenafil in fetuses with CDH.

Association of thyroid function test abnormalities and thyroid autoimmunity with preterm birth: a systematic review and meta-analysis

Korevaar TIM, Derakhshan A, Taylor PN, et al. JAMA.

The authors sought to determine if maternal thyroid function test abnormalities and thyroid autoimmunity are risk factors for preterm birth. Their study group consisted of 47045 women with thyroid function test abnormalities and thyroid autoimmunity of whom 2357 (5.0%) had a preterm birth. Among pregnant women without overt thyroid disease, subclinical hypothyroidism, isolated hypothyroxinemia, and TPO antibody positivity were significantly associated with higher risk of preterm birth.

Therapeutic hypothermia initiated within 6 hours of birth is associated with reduced brain injury on MR biomarkers in mild hypoxic-ischaemic encephalopathy: a non-randomised cohort study (PDF) Montaldo P, Lally PJ, Oliveira V, et al. *Arch Dis Child Fetal Neonatal Ed.*

In this non randomized cohort study, the authors compared the effect of whole body cooling on MRI and neurological outcomes in 47 infants with mild HIE. The cooled infants (n=32) had a lower 10 min APGAR score, but higher MRS features (thalamic NAA/Cr and NAA/Cho ratios) and lower white matter injury scores. They also had a lower incidence of seizures and a trend towards improved neurodevelopmental outcomes. The authors concluded that therapeutic hypothermia may have a neuroprotective effect in babies with mild HIE which needs to be explored with RCTs.

Abdominal ultrasound should become part of standard care for early diagnosis and management of necrotising enterocolitis: a narrative review

van Druten J, Khashu M, Chan SS, et al. Arch Dis Child Fetal Neonatal Ed.

In this article, the authors review the latest evidence for use of abdominal ultrasound (AUS) in diagnosing NEC. They conclude that while incorporating AUS could lead to earlier diagnosis of preterm NEC and hence improve outcomes, this would involve a significant collaborative effort to devise standard imaging protocols and reporting criteria. The barriers to widespread adoption of AUS identified here are lack of widespread knowledge about the procedure, lack of availability of qualified personnel to perform the procedure reliably and lack of data directly relating AUS to improved patient outcomes. Expanding the availability of AUS to allow bedside use and development of standard training for bedside AUS use under guidance of radiologists would help overcome these issues. Finally, the authors advocate for aggregation of international neonatal network data to form large data sets using standardized definitions and use of artificial intelligence to form accurate predictive models for NEC from this data set.

<u>Suppression of pulmonary group B streptococcal proliferation and translocation by surfactants in ventilated near-term newborn rabbits</u>

Xu Y, Dong Y, Guo X, et al. Pediatr Res.

This study evaluated a rabbit model where GBS was instilled intratracheally immediately at birth. One hour after birth, a porcine surfactant was given intratracheally at 100 or 200 mg/kg. The authors found that surfactants significantly suppressed pulmonary bacterial proliferation, systemic translocation, alleviated lung injury, and improved alveolar expansion morphometry. In addition, surfactants significantly suppressed mRNA expression of proinflammatory mediators.

Continuous positive airway pressure (CPAP) vs noninvasive positive pressure ventilation (NIPPV) vs noninvasive high frequency oscillation ventilation (NHFOV) as post-extubation support in preterm neonates: protocol for an assessor-blinded, multicenter, randomized controlled trial (PDF) Shi Y, De Luca D, et al. *BMC Pediatr*.

This article describes a design for a multicenter, randomized superiority trial which will investigate the use of CPAP, NIPPV, and NHFOV following extubation in NICUs in China. At least 1440 neonates are planned to be enrolled and safety data will be evaluated. This study will consist of three parallel arms with subgroup analyses based on prespecified criteria.

A randomized controlled study of low-dose hydrocortisone versus placebo in dopamine-treated hypotensive neonates undergoing hypothermia treatment for hypoxic-ischemic encephalopathy Kovacs K, Szakmar E, Meder U, et al. *J Pediatr*.

This is a single-center double-blind, randomized, placebo-controlled trial of hydrocortisone for hypotension in neonates with neonatal encephalopathy. 35 patients in a referral NICU were recruited. Infants receiving therapeutic hypothermia were enrolled if the MAP remained less than the gestational age in weeks after volume resuscitation. Infants were randomized to hydrocortisone 0.5mg/kg every 6 hours or placebo until rewarming. Both arms received dopamine. The primary outcome was at least 5 mmHg increase in MAP within 2 hours. The hydrocortisone group had increased MAP, shorter duration of inotropes, and lower dose of inotropes. Other outcomes were similar. Baseline cortisol levels were low in both groups, and the placebo group had decreased cortisol levels over time.

Randomized trial of 42-day compared with 9-day courses of dexamethasone for the treatment of evolving bronchopulmonary dysplasia in extremely preterm infants

Marr BL, Mettelman BB, Bode MM, et al. *J Pediatr*.

This is a single-center prospective, randomized study that compared two dosing strategies for dexamethasone for prevention of BPD. Infants \leq 27 weeks who remained on mechanical ventilation at 10-21 days with mean airway pressure \geq 8 cm H2O and FiO2 \geq 60% were randomized to receive a 42-day or a 9-day of tapering course of low-dose dexamethasone. Primary outcome was survival with normal neurologic exam at 7 years of age. 59 infants were enrolled with mean gestational age of 25 weeks. Randomization occurred at approximately 2 weeks. All 30 42-day patients were alive at 7 years; 3 9-day patients had died of respiratory failure. 34% of 9-day patients required multiple courses of dexamethasone. The 42-day patients had higher steroid exposure but had better short-term respiratory outcomes. At 7 year follow-up, the 42-day group had increased survival with normal neurologic examination compared to the 9-day group (93% vs 66%, p<0.5).

Management of infants at risk for Group B Streptococcal disease

Puopolo KM, Lynfield R, Cummings JJ, et al. *Pediatrics*.

This update on GBS, endorsed by AAP, provides updated recommendations for the evaluation and management of newborn infants at risk for and with confirmed GBS infection. AAP and ACOG jointly reaffirm the use of universal antenatal GBS testing for maternal colonization. This update includes a discussion on epidemiology of GBS, current definitions of early and late onset GBS disease, options for risk assessment as well as recommended and alternate antibiotic choices.

Pediatrics

Serious bacterial infections in neonates presenting afebrile with history of fever

https://www.ncbi.nlm.nih.gov/pubmed/31345996

Thyroid-Stimulating Hormone reference ranges for preterm infants

https://pediatrics.aappublications.org/content/pediatrics/144/2/e20190290.full.pdf

Neurodevelopmental outcomes of preterm infants with retinopathy of prematurity by treatment

https://pediatrics.aappublications.org/content/pediatrics/144/2/e20183537.full.pdf

Hearing loss with congenital Cytomegalovirus infection

https://www.ncbi.nlm.nih.gov/pubmed/31266824

Neonatal abstinence syndrome and associated neonatal and maternal mortality and morbidity

https://www.ncbi.nlm.nih.gov/pubmed/31300529

Avoiding the overdiagnosis of congenital hypothyroidism in premature newborns

https://pediatrics.aappublications.org/content/pediatrics/144/2/e20191706.full.pdf

Disparities in neonatal intensive care: Context matters

https://www.ncbi.nlm.nih.gov/pubmed/31358667

Management of infants at risk for Group B Streptococcal disease

https://pediatrics.aappublications.org/content/pediatrics/144/2/e20191881.full-text.pdf

Congenital muscular torticollis: Bridging the gap between research and clinical practice

https://www.ncbi.nlm.nih.gov/pubmed/31350358

Early-Onset sepsis risk calculator integration into an electronic health record in the nursery https://www.ncbi.nlm.nih.gov/pubmed/31278210

**Using quality improvement to implement a standardized approach to neonatal Herpes simplex virus https://www.ncbi.nlm.nih.gov/pubmed/31345997

Journal of Pediatrics

A randomized controlled study of low-dose hydrocortisone versus placebo in dopamine-treated hypotensive neonates undergoing hypothermia treatment for hypoxic-ischemic encephalopathy https://www.ncbi.nlm.nih.gov/pubmed/31155392

Randomized trial of 42-day compared with 9-day courses of dexamethasone for the treatment of evolving bronchopulmonary dysplasia in extremely preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/31349916

Dosing and safety of off-label use of caffeine citrate in premature infants

https://www.ncbi.nlm.nih.gov/pubmed/31101409

Consumption of mother's own milk by infants born extremely preterm following implementation of a donor human milk program: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/31060805

Effect of umbilical cord blood sampling versus admission blood sampling on requirement of blood transfusion in extremely preterm infants: a randomized controlled trial

https://www.ncbi.nlm.nih.gov/pubmed/31113718

A mixed lipid emulsion containing fish oil and its effect on electrophysiological brain maturation in infants of extremely low birth weight: a secondary analysis of a randomized clinical trial

https://www.ncbi.nlm.nih.gov/pubmed/31030946

Diagnostic yield of an algorithm for neonatal and infantile cholestasis integrating next-generation sequencing

https://www.ncbi.nlm.nih.gov/pubmed/31160058

Factors associated with delayed transition to oral feeding in infants with single ventricle physiology https://www.ncbi.nlm.nih.gov/pubmed/30952511

The North Carolina experience with mucopolysaccharidosis type 1 newborn screening

https://www.ncbi.nlm.nih.gov/pubmed/31133280

Protecting vulnerable infants by ensuring safe infant formula use

https://www.ncbi.nlm.nih.gov/pubmed/31079854

Airway histopathology of adolescent survivors of bronchopulmonary dysplasia

Neonatal Marfan syndrome: a rare, severe, and life-threatening genetic disease (PDF) https://www.jpeds.com/article/S0022-3476(19)30389-0/pdf

Pediatric Research

Umbilical cord blood versus mesenchymal stem cells for inflammation-induced preterm brain injury in fetal sheep

https://www.ncbi.nlm.nih.gov/pubmed/30858474

Maternal inflammation exacerbates neonatal hyperoxia-induced kidney injury in rat offspring https://www.ncbi.nlm.nih.gov/pubmed/31086293

Dlk1 expression relates to visceral fat expansion and insulin resistance in male and female rats with postnatal catch-up growth

https://www.ncbi.nlm.nih.gov/pubmed/31091532

Expression of (pro)renin receptor and its effect on endothelial cell proliferation in infantile hemangioma https://www.ncbi.nlm.nih.gov/pubmed/31091531

Suppression of pulmonary group B streptococcal proliferation and translocation by surfactants in ventilated near-term newborn rabbits

https://www.ncbi.nlm.nih.gov/pubmed/31086290

The point-of-care Bilistick method has very short turn-around-time and high accuracy at lower cutoff levels to predict laboratory-measured TSB

https://www.ncbi.nlm.nih.gov/pubmed/30696987

Association between neonatal serum bilirubin and childhood obesity in preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/30995676

Encephalopathy in neonates with subgaleal hemorrhage is a key predictor of outcome

https://www.ncbi.nlm.nih.gov/pubmed/30999320

Observed and calculated cerebral critical closing pressure are highly correlated in preterm infants https://www.ncbi.nlm.nih.gov/pubmed/31003233

Changes in hemodynamics, cerebral oxygenation and cerebrovascular reactivity during the early transitional circulation in preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/31029059

The role of recombinant human CC10 in the prevention of chronic pulmonary insufficiency of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/31086287

Comparison of fetal growth by maternal prenatal acetaminophen use

https://www.ncbi.nlm.nih.gov/pubmed/30911064

Outcomes of singleton small for gestational age preterm infants exposed to maternal hypertension: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/31086284

Erythropoietin serum levels, versus anaemia as risk factors for severe retinopathy of prematurity https://www.ncbi.nlm.nih.gov/pubmed/30297879

Family reflections: Prematurity—practitioner influence on the lived experience of the parenting role https://www.ncbi.nlm.nih.gov/pubmed/30791042

Archives of Disease in Childhood - Fetal & Neonatal Edition

Incidence, impact and indicators of difficult intubations in the neonatal intensive care unit: a report from the National Emergency Airway Registry for Neonates

https://www.ncbi.nlm.nih.gov/pubmed/30796059

Cerebrovascular autoregulation in preterm fetal growth restricted neonates

https://www.ncbi.nlm.nih.gov/pubmed/30355781

Cerebral autoregulation in premature infants during the first 96 hours of life and relationship to adverse outcomes

Epidemiology and healthcare factors associated with neonatal enterococcal infections

https://www.ncbi.nlm.nih.gov/pubmed/30425112

Social gradient of birthweight in England assessed using the INTERGROWTH-21st gestational age-specific standard

https://www.ncbi.nlm.nih.gov/pubmed/30464006

Characterisation of neonatal seizures and their treatment using continuous EEG monitoring: a multicentre experience (PDF)

https://fn.bmj.com/content/fetalneonatal/104/5/F493.full.pdf

Establishing a composite neonatal adverse outcome indicator using English hospital administrative data (PDF)

https://fn.bmj.com/content/fetalneonatal/104/5/F502.full.pdf

EEG for the assessment of neurological function in newborn infants immediately after birth https://www.ncbi.nlm.nih.gov/pubmed/30478185

Therapeutic hypothermia initiated within 6 hours of birth is associated with reduced brain injury on MR biomarkers in mild hypoxic-ischaemic encephalopathy: a non-randomised cohort study (PDF)

https://fn.bmj.com/content/fetalneonatal/104/5/F515.full.pdf

Appraisal of a scoring instrument for training and testing neonatal intubation skills

https://www.ncbi.nlm.nih.gov/pubmed/30504442

Benefits of recording and reviewing neonatal resuscitation: the providers' perspective

https://www.ncbi.nlm.nih.gov/pubmed/30504441

Assessment of resistance of nasal continuous positive airway pressure interfaces

https://www.ncbi.nlm.nih.gov/pubmed/30567774

Beta blocker therapy in recipients of twin-to-twin transfusion syndrome

https://www.ncbi.nlm.nih.gov/pubmed/30355780

Point-of-care measurements of blood ketones in newborns

https://www.ncbi.nlm.nih.gov/pubmed/30385513

Randomised study comparing heart rate measurement in newly born infants using a monitor

incorporating electrocardiogram and pulse oximeter versus pulse oximeter alone

https://www.ncbi.nlm.nih.gov/pubmed/30425114

Abdominal ultrasound should become part of standard care for early diagnosis and management of necrotising enterocolitis: a narrative review

https://www.ncbi.nlm.nih.gov/pubmed/31079066

Metabolic bone disease of prematurity: causes, recognition, prevention, treatment and long-term consequences

https://www.ncbi.nlm.nih.gov/pubmed/31079069

Journal of Perinatology

Early psychosocial development of small for gestational age and intrauterine growth-restricted children: a systematic review (PDF)

https://www.nature.com/articles/s41372-019-0369-y.pdf

Recent progress in global newborn health: thinking beyond acute to strategic care?

https://www.ncbi.nlm.nih.gov/pubmed/31182774

Impact of obesity class on trial of labor after cesarean success: does pre-pregnancy or at-delivery obesity status matter?

https://www.ncbi.nlm.nih.gov/pubmed/31092887

Large-for-gestational-age fetuses have an increased risk for spontaneous preterm birth

https://www.ncbi.nlm.nih.gov/pubmed/30940928

Maternal obesity and cesarean section delivery: additional risk factors for neonatal hypoglycemia?

https://www.ncbi.nlm.nih.gov/pubmed/31213637

The value of serial newborn screening for congenital hypothyroidism using thyroxine (T4) in the neonatal intensive care unit

https://www.ncbi.nlm.nih.gov/pubmed/31213638

Fetal brain MRI findings and neonatal outcome of common diagnosis at a tertiary care center

https://www.ncbi.nlm.nih.gov/pubmed/31213636

Oxygen supplementation in the delivery room: T-piece resuscitator cap open or occluded?

https://www.ncbi.nlm.nih.gov/pubmed/31209277

Early predictors of continuous positive airway pressure failure in preterm neonates

https://www.nature.com/articles/s41372-019-0392-z

Outcomes after implementing restrictive blood transfusion criteria in extremely premature infants https://www.ncbi.nlm.nih.gov/pubmed/31222156

Cognitive impairment among extremely low birthweight preterm infants from 1980 to present day https://www.ncbi.nlm.nih.gov/pubmed/31235783

Delay in operation for Hirschsprung Disease is associated with decreased length of stay: a 5-Year NSQIP-Peds analysis

https://www.ncbi.nlm.nih.gov/pubmed/31209278

Prenatally diagnosed omphalocele: characteristics associated with adverse neonatal outcomes https://www.ncbi.nlm.nih.gov/pubmed/31227786

Multi-component lipid emulsion vs soy-based lipid emulsion for very low birth weight preterm neonates:

A pre-post comparative study

https://www.ncbi.nlm.nih.gov/pubmed/31235782

Hypertensive disorders during pregnancy are associated with reduced severe intraventricular hemorrhage in very-low-birth-weight infants

https://www.ncbi.nlm.nih.gov/pubmed/31263202

Adjustable feedings plus accurate serial length measurements decrease discharge weight-length disproportion in very preterm infants: quality improvement project

https://www.ncbi.nlm.nih.gov/pubmed/31263201

Quality improvement initiative to decrease time to full feeds and central line utilization among infants born less than or equal to 32 0/7 weeks through compliance with standardized feeding guidelines https://www.ncbi.nlm.nih.gov/pubmed/31197237

American Journal of Perinatology

Estimating gestational age from ultrasound: external validation of the NICHD formula with comparison to the hadlock regression

https://www.ncbi.nlm.nih.gov/pubmed/30818405

Neonatal outcomes associated with umbilical cord milking in preterm multiple gestations https://www.ncbi.nlm.nih.gov/pubmed/30822802

Disparate rates of cesarean delivery in term nulliparous women with hypertensive disorders of pregnancy

https://www.ncbi.nlm.nih.gov/pubmed/30822801

Azithromycin-based extended-spectrum antibiotic prophylaxis for cesarean: role of placental colonization with genital Ureaplasmas and Mycoplasmas

https://www.ncbi.nlm.nih.gov/pubmed/30500967

Relationship between early antibiotic exposure and short-term growth velocity in premature neonates https://www.ncbi.nlm.nih.gov/pubmed/30500965

Disparities in 17-hydroxyprogesterone caproate offer and uptake in pregnancies at a risk of preterm birth

https://www.ncbi.nlm.nih.gov/pubmed/30508869

Systemic arterial hypertension in childhood: a challenge related to the increasing survival of very low birth weight preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/30537771

Impact of time to neonatal transport on outcomes of transient tachypnea of the newborn https://www.ncbi.nlm.nih.gov/pubmed/30551233

Maternal Health, Neonatology and Perinatology

Neonatal eating assessment tool - Mixed breastfeeding and bottle-feeding (NeoEAT - mixed feeding):

factor analysis and psychometric properties

https://www.ncbi.nlm.nih.gov/pubmed/31384477

Intact cord resuscitation versus early cord clamping in the treatment of depressed newborn infants

during the first 10 minutes of birth (Nepcord III) – a randomized clinical trial (PDF)

https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-019-0110-z

Neoreviews

Spinal muscular atrophy: Past, present, and future

https://neoreviews.aappublications.org/content/20/8/e437

Reducing germinal matrix-intraventricular hemorrhage: Perinatal and delivery room factors

https://neoreviews.aappublications.org/content/20/8/e452

Case 1: Severe jaundice in a 2-day-old term neonate

https://neoreviews.aappublications.org/content/20/8/e464

Case 2: Soft tissue congenital neck mass https://neoreviews.aappublications.org/content/20/8/e468

Case 3: An unusual case of transient neonatal encephalopathy

https://neoreviews.aappublications.org/content/20/8/e472

Strip of the month: Pseudosinusoidal pattern in labor

https://neoreviews.aappublications.org/content/20/8/e475

A newborn with "Black Spots"

https://neoreviews.aappublications.org/content/20/8/e482

Emergent neonatal abdominal paracentesis: A step-by-step video simulation

https://neoreviews.aappublications.org/content/20/8/e486

JAMA Pediatrics

Effect of early limited formula on breastfeeding duration in the first year of life a randomized clinical trial

https://www.ncbi.nlm.nih.gov/pubmed/31157878

Association of preterm birth with risk of ischemic heart disease in adulthood

https://www.ncbi.nlm.nih.gov/pubmed/31157896

Defining target vancomycin trough concentrations for treating Staphylococcus Aureus infection in infants aged 0 to 90 days

https://www.ncbi.nlm.nih.gov/pubmed/31180478

BMC Pediatrics

Increased risk of pulmonary hypertension following premature birth (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1665-6

Better care for babies: the added value of a modified reverse syphilis testing algorithm for the treatment of congenital syphilis in a maternity Hospital in Central African Republic (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1622-4

Management of late preterm and term neonates exposed to maternal chorioamnionitis (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1650-0

Neonatal mortality risk assessment using SNAPPE- II score in a neonatal intensive care unit (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1660-y

Effects of immunotherapy on mortality in neonates with suspected or proven sepsis: a systematic review and network meta-analysis (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1609-1

Positional treatment without mechanical ventilation in a very preterm infant with unilateral pulmonary interstitial emphysema: case report and review of the literature (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1640-2

Neonatal meningitis, endocarditis, and pneumonitis due to Streptococcus gallolyticus subsp.

pasteurianus: a case report (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1645-x

Successful conservative treatment of intestinal perforation in VLBW and ELBW neonates: a single center case series and review of the literature (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1641-1

Continuous positive airway pressure (CPAP) vs noninvasive positive pressure ventilation (NIPPV) vs noninvasive high frequency oscillation ventilation (NHFOV) as post-extubation support in preterm neonates: protocol for an assessor-blinded, multicenter, randomized controlled trial (PDF) https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1625-1

Development, evaluation and validation of a screening tool for late onset bacteremia in neonates – a pilot study (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1633-1

Prenatal findings in a fetus with X-linked recessive type of chondrodysplasia punctata (CDPX1): a case report with novel mutation (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1629-x

Neonatal hypothermia and associated factors within six hours of delivery in eastern part of Ethiopia: a cross-sectional study (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1632-2

HLA A*32 is associated to HIV acquisition while B*44 and B*53 are associated with protection against HIV acquisition in perinatally exposed infants (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1620-6

Trends, determinants, and newborn mortality related to thermal care and umbilical cord care practices in South Asia (PDF)

https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-019-1616-2

Pediatric Critical Care Medicine

Ventricular-arterial coupling in children and infants with congenital heart disease after cardiopulmonary bypass surgery: observational study

https://www.ncbi.nlm.nih.gov/pubmed/31169761

Lancet

Rethinking management of neonates at risk of sepsis

https://www.ncbi.nlm.nih.gov/pubmed/31354128

New England Journal of Medicine

Saving the endangered physician-scientist — a plan for accelerating medical breakthroughs

https://www.ncbi.nlm.nih.gov/pubmed/31365796

Phenotype in an Infant with SOD1 homozygous truncating mutation

https://www.ncbi.nlm.nih.gov/pubmed/31314961

Gene therapy

https://www.ncbi.nlm.nih.gov/pubmed/31365802

The "all of us" research program

https://www.ncbi.nlm.nih.gov/pubmed/31412182

Neural-tube defects and antiretroviral treatment regimens in Botswana.

https://www.ncbi.nlm.nih.gov/pubmed/31329379

JAMA

Hemoglobin A1c levels during pregnancy and risk of autism spectrum disorders in offspring

https://www.ncbi.nlm.nih.gov/pubmed/31177273

Imposter syndrome treat the cause, not the symptom

https://www.ncbi.nlm.nih.gov/pubmed/31386138

Regionalization of care and the maternal-infant dyad disconnect

Association of thyroid function test abnormalities and thyroid autoimmunity with preterm birth: a systematic review and meta-analysis

https://www.ncbi.nlm.nih.gov/pubmed/31429897

Protecting pregnant women with substance use disorders and their neonates participating in research https://www.ncbi.nlm.nih.gov/pubmed/31298683

Electronic fetal monitoring to prevent fetal brain injury: a ubiquitous yet flawed tool

https://www.ncbi.nlm.nih.gov/pubmed/31318396

Redefining the physician's role in cost-conscious care: the potential role of the electronic health record https://www.ncbi.nlm.nih.gov/pubmed/31298684

BMJ

Tips on preparing your medical CV

https://www.ncbi.nlm.nih.gov/pubmed/31366595

Pediatric Infectious Disease Journal

Use of Ceftazidime-Avibactam for the treatment of extensively drug-resistant or pan drug-resistant Klebsiella Pneumoniae in neonates and children <5 years of age

https://www.ncbi.nlm.nih.gov/pubmed/31135647

Strategic trials to define the best available treatment for neonatal and pediatric sepsis caused by Carbapenem-resistant organisms

https://www.ncbi.nlm.nih.gov/pubmed/31261359

Increasing diagnostic uncertainties in children with in utero HIV infection

https://www.ncbi.nlm.nih.gov/pubmed/31033913

In utero Efavirenz exposure and neurodevelopmental outcomes in HIV-exposed uninfected children in Botswana

https://www.ncbi.nlm.nih.gov/pubmed/30985518

First case report of intraventricular Tigecycline in a neonate with extensively drug-resistant Acinetobacter Baumannii ventriculitis

https://www.ncbi.nlm.nih.gov/pubmed/31033908

Epidemiology of serious bacterial infections in infants less than 90 days in a military health system cohort

https://www.ncbi.nlm.nih.gov/pubmed/31220044

Pediatric Cardiology

NT-proBNP as an early marker of diastolic ventricular dysfunction in very-low-birth-weight infants https://www.ncbi.nlm.nih.gov/pubmed/31175403

Feasibility of non-invasive fetal electrocardiographic interval measurement in the outpatient clinical setting

https://www.ncbi.nlm.nih.gov/pubmed/31172229

Development and evaluation of a new chest compression technique for cardiopulmonary resuscitation in infants

https://www.ncbi.nlm.nih.gov/pubmed/31218374

Procalcitonin concentration measured within the first days of cardiac surgery is predictive of postoperative infections in neonates: a case—control study

https://www.ncbi.nlm.nih.gov/pubmed/31312866

Fetal echocardiographic parameters and surgical outcomes in congenital left-sided cardiac lesions

https://www.ncbi.nlm.nih.gov/pubmed/31338561

Letter: electrocardiogram in newborns: beneficial or not?

https://www.ncbi.nlm.nih.gov/pubmed/31250047

Pediatric Neurology

Gabapentin use for hospitalized neonates

Obstetrics and Gynecology

Neonatal and maternal adverse outcomes among low-risk parous women at 39–41 weeks of gestation https://www.ncbi.nlm.nih.gov/pubmed/31306312

American Journal of Obstetrics & Gynecology

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