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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – September 2020

Increased peak end-expiratory pressure in ventilated preterm lambs changes cerebral microvascular perfusion: direct synchrotron microangiography assessment
Inocencio IM, Tran NT, Nakamura S, et al. J Appl Physiol.

Because the precise effects of high PEEP on cerebral hemodynamics in the preterm brain is unknown, the authors sought to assess the effect of PEEP on brain microvessels in the preterm lambs using synchrotron radiation microangiography. They found that increasing PEEP from 5 to 10 increased the diameter of small cerebral vessels, but decreased diameter of larger cerebral vessels. Higher PEEP also increased the cerebral contrast transit time and carotid blood flow in at least half the animals. These results show that higher PEEP alter cerebral hemodynamics by prolonging blood flow transit and engorging small microvessels, effects which may be due to the increased intrathoracic pressure.

Association of routine infant vaccinations with antibody levels among preterm infants
D M Rouers E, Bruijning-Verhagen P, van Gageldonk P, et al. *JAMA.*

The authors sought to evaluate the immunogenicity of routine vaccinations in preterm infants. 296 preterm infants from 8 hospitals in the Netherlands were compared with 66 healthy term infants who had been enrolled in a previous study. The Dutch vaccine schedule includes a DTaP-IPV-Hib-HepB combo at 2, 3, 4, and 11 months and PCV10 at 2, 4, and 11 months. IgG antibody concentrations were measured before the 1st vaccine, after the 4-month dose, and after the 11-month booster. Protective IgG levels varied among the vaccines after the 4-month dose, but 95% of preterm infants had protective IgG levels after the booster dose for all vaccines except HIB at 88%. Most antibody levels among the preterm infants were lower than those in the term group. The authors conclude that while vaccine response is lower in preterm infants than in term infants, preterm infants achieve protective levels of antibodies for all routine vaccines except HIB.

Hydrocortisone and bronchopulmonary dysplasia: variables associated with response in premature infants
Clauss C, Thomas S, Khodak I, et al. *J Perinatol.*

This study is a retrospective review to determine the efficacy of hydrocortisone to facilitate improvement in respiratory status in 48 preterm infants born ≤32 weeks. Patients older than 10 days of age received hydrocortisone 5mg/kg divided q8hrs x5 days (25mg/kg/course, glucocorticoid equivalent to dexamethasone 0.89mg/kg) followed by a variable taper at the discretion of the physician. Among the 40 patients on mechanical ventilation, 20 were successfully extubated and remained extubated >10 days. Among 8 patients on non-invasive ventilation, 1 was weaned to room air. 67% of patients had a reduction in FiO2 ≥10% and/or successful extubation. There were no bowel perforations, and the

serious bacterial infection rate was similar to the unit baseline rate. The authors conclude that hydrocortisone effectively improves respiratory status for preterm infants with developing BPD without major short-term complications.

Introduction of less invasive surfactant administration (LISA), impact on diagnostic and therapeutic procedures in early life: a historical cohort study
Bugter IAL, Janssen LCE, Dieleman J, et al. *BMC Pediatr.*

This is a pre-post study comparing NICU care practices after starting LISA. Infants (<32week GA) who received LISA (n=169; 2014-2017) were compared to infants who received surfactant after intubation (n=155; controls; 2012-2014). LISA patients received a higher total surfactant dose (208 vs.160 mg/kg; $p < 0.001$), required more frequent redosing (32.5% vs. 21.3%; $p = 0.023$), but needed less mechanical ventilation (35.5% vs. 76.8%; $p < 0.001$) compared to control group. LISA patients also received fewer x-rays, blood gases, less inotropic drugs, blood transfusions and shorter duration of early antibiotics. The authors conclude that this study emphasizes the beneficial effects of LISA.

Outcomes of neonates with tracheostomy secondary to bronchopulmonary dysplasia
Upadhyay K, Vallarino DA and Talati AJ. *BMC Pediatr.*

This single center retrospective study describes 24-month survival and outcomes of infants requiring tracheostomy secondary to BPD. The study included 41 babies from 2011 to 2016 with a median gestational age of 26wks (25–27 IQR), mean birthweight of 731 g (±245 SD). Median age of tracheostomy placement was 168 days (108–197 IQR), and median PMA 48 wks (40–56 IQR). The results showed that about 80% of infants with severe BPD and tracheostomy survived to discharge and 66% (27/41) had a composite outcome of death, ventilator dependency and/or poor neurodevelopmental outcome at 2 years. Later postmenstrual age at admission to level 4 NICU was associated with a worse outcome

Drainage, irrigation and fibrinolytic therapy (DRIFT) for posthaemorrhagic ventricular dilatation: 10-year follow-up of a randomized controlled trial
Luyt K, Jary SL, Lea CL, et al. *Arch Dis Child Fetal Neonatal Ed.*

This 4 center-study evaluated 52 infants who were available to follow-up at 10 years of age and were randomized to receive drainage, irrigation, and fibrinolytic therapy (DRIFT) for post-hemorrhagic hydrocephalus (n=28) versus standard treatment (n=24). The authors found that the mean cognitive quotient score was 69.3 (SD=30.1) in the DRIFT group and 53.7 (SD=35.7) in the standard treatment group (adjusted p=0.01) and survival without severe cognitive disability was 66% in the DRIFT group and 35% in the standard treatment group (unadjusted p=0.019; adjusted p=0.003).

Prophylactic hydrocortisone in extremely preterm infants and brain MRI abnormality
Alison M, Tilea B, Toumazi A, et al. *Arch Dis Child Fetal Neonatal Ed.*

This study included 229 infants who received either placebo or hydrocortisone in the PREMILOC trial and had MRIs suitable for Kidokoro scoring completed at term equivalent. The authors found that the distribution of the Kidokoro white matter subscore and moderate-to-severe brain lesions was not significantly different between the two groups. Bronchopulmonary dysplasia at 36 weeks postmenstrual age, however, significantly predicted white matter damage (adjusted OR (95% CI) 2.70 (1.03 to 7.14), p=0.04) and global brain damage (adjusted OR (95% CI) 2.18 (1.19 to 3.99), p=0.01).

Cerebral oxygenation in preterm infants with necrotizing enterocolitis
Howarth C, Banerjee J, Leung T, et al. *Pediatrics.*

The authors examined whether cerebral oxygenation differs in infants who develop NEC compared to those who do not. Weekly cerebral oximetry measurements were performed on 48 infants <30 weeks' gestation, allowing measurement of cerebral tissue oxygenation index from the first week of life to 36 weeks postconceptional age. Seven infants who developed NEC had significantly lower cerebral tissue oxygenation index than those who did not even when adjusted for confounders, including gestational age, birth weight, patent ductus arteriosus, enteral feeds, sex, ethnicity, and hemoglobin. Infants with NEC had significantly lower cerebral tissue oxygenation in comparison with those who did not develop NEC, a novel finding which could explain their worse neurodevelopmental outcome.

Higher- or usual-volume feedings in infants born very preterm: a randomized clinical trial
Travers CP, Wang T, Salas AA, et al. *J Pediatr.*

This was a randomized clinical trial in 224 infants with a birth weight 1001-2500 g and <32 weeks of gestation, where the authors whether higher volume feeds would increase their growth velocity. Infants were randomized to either higher-volume (180-200 mL/kg/d) or usual-volume (140-160 mL/kg/d) feedings once they reached a volume of ≥120 mL/kg/d. At study completion the authors noted significantly increased growth velocity, increase in all measurements-weight, length, arm and head circumference in the higher volume feeing group, without any increase in common NICU morbidities such as BPD,PDA and NEC.

Neonatal hypoglycemia after initiation of late preterm antenatal corticosteroids
Uquillas KR, Lee RH, Sardesai S, et al. *J Perinatol.*

This retrospective cohort study of >200 late preterm deliveries evaluated neonatal outcomes between pregnancies treated with and without corticosteroids. The major finding was an increase in incidence of neonatal hypoglycemia, with a significantly lower mean initial glucose level as well as glucose nadir in late preterm neonates born to women given corticosteroids. Neonates admitted to the NICU due to hypoglycemia were more likely to be exposed to antenatal corticosteroids.

COVID-19

Severe acute respiratory syndrome coronavirus 2 (sars-cov-2) vertical transmission in neonates born to mothers with coronavirus disease 2019 (covid-19) pneumonia
https://www.ncbi.nlm.nih.gov/pmc/articles/pmc7219851/pdf/ong-publish-ahead-of-print-10.1097.aog.0000000000003926.pdf
Infant with SARS-COV-2 infection causing severe lung disease treated with remdesivir
https://pubmed.ncbi.nlm.nih.gov/32554811
Novel coronavirus infection in febrile infants aged 60 days and younger
https://pubmed.ncbi.nlm.nih.gov/32527752
The changing landscape of SARS-CoV-2: Implications for the maternal-infant dyad
https://pubmed.ncbi.nlm.nih.gov/32417802
Management of the mother-infant dyad with suspected or confirmed SARS-CoV-2 infection in a highly epidemic context
https://pubmed.ncbi.nlm.nih.gov/32444569
Urgent cesarean delivery following nonstress test in a patient with COVID-19 and pregestational diabetes
https://pubmed.ncbi.nlm.nih.gov/32873658
SARS-CoV-2 infection in infants less than 90 days old
https://pubmed.ncbi.nlm.nih.gov/32565095

Clinical Implications of SARS-CoV-2 Infection in the viable preterm period
https://pubmed.ncbi.nlm.nih.gov/32615621
Universal SARS-Cov-2 screening in women admitted for delivery in a large managed care organization
https://pubmed.ncbi.nlm.nih.gov/32620022

Pediatrics

Cerebral oxygenation in preterm infants with necrotizing enterocolitis
https://pubmed.ncbi.nlm.nih.gov/32848028
Diagnosis codes and case definitions for neonatal abstinence syndrome
https://pubmed.ncbi.nlm.nih.gov/32848030
Machine learning to predict serious bacterial infections in young febrile infants
https://pubmed.ncbi.nlm.nih.gov/32855349
Neonatal adiposity and childhood obesity
https://pubmed.ncbi.nlm.nih.gov/32796097
Severe maternal morbidity and infant mortality in Canada
https://pubmed.ncbi.nlm.nih.gov/32817396
Telehealth home monitoring and postcardiac surgery for congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/32817266
Trends in mortality and costs of pediatric extracorporeal life support
https://pubmed.ncbi.nlm.nih.gov/32801159
Can use of cerebral oxygenation predict developmental outcomes in preterm infants with NEC?
https://pubmed.ncbi.nlm.nih.gov/32848029
Helping babies breathe: from implementation to impact
https://pubmed.ncbi.nlm.nih.gov/32778538
Early postnatal discharge for infants: a meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32826340
Implementation of the helping babies breathe training program: a systematic review
https://pubmed.ncbi.nlm.nih.gov/32778541
Duration of resuscitation at birth, mortality, and neurodevelopment: a systematic review
https://pubmed.ncbi.nlm.nih.gov/32788267
Clinical management of staphylococcus aureus bacteremia in neonates, children, and adolescents
https://pubmed.ncbi.nlm.nih.gov/32759380
Enterovirus and Parechovirus coinfection in a sudden unexpected infant death
https://pubmed.ncbi.nlm.nih.gov/32817397

Journal of Pediatrics

The harms of carrier status identification: a cautionary warning against newborn sequencing
https://pubmed.ncbi.nlm.nih.gov/32417254
Experience with parent follow-up for communication outcomes after newborn screening identifies carrier status
https://pubmed.ncbi.nlm.nih.gov/32386871
Vulnerable child syndrome and newborn screening carrier results for cystic fibrosis or sickle cell
https://pubmed.ncbi.nlm.nih.gov/32826027
Association between transport risk index of physiologic stability in extremely premature infants and mortality or neurodevelopmental impairment at 18 to 24 months
https://pubmed.ncbi.nlm.nih.gov/32442448
The economic impact of donor milk in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/32682581
Higher- or usual-volume feedings in infants born very preterm: a randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/32464224
Evaluation of a vaccine-communication tool for physicians
https://pubmed.ncbi.nlm.nih.gov/32522526

Fetal growth restriction and hypertension in the offspring: mechanistic links and therapeutic directions
https://pubmed.ncbi.nlm.nih.gov/32450071
Randomized study of delayed cord clamping of 30 to 60 seconds in the larger infant born preterm
https://pubmed.ncbi.nlm.nih.gov/32651013
Report on birth settings in the US: maternal and neonatal outcomes
https://pubmed.ncbi.nlm.nih.gov/32826023

Pediatric Research

Confounding biases in studies on early- versus late-caffeine in preterm infants: a systematic review
https://pubmed.ncbi.nlm.nih.gov/31931506
Review: How to introduce MSC-based therapy for the developing lung safely into clinical care?
https://pubmed.ncbi.nlm.nih.gov/31931507
Pediatric subspecialty workforce: undersupply or over-demand?
https://pubmed.ncbi.nlm.nih.gov/31958801
Commentary on the Don Ostrow Trieste Yellow Retreat 2019: a successful biennium, what next?
https://pubmed.ncbi.nlm.nih.gov/31954375
Probiotic from human breast milk, Lactobacillus fermentum, promotes growth in animal model of chronic malnutrition
https://pubmed.ncbi.nlm.nih.gov/32023624
Increased rates of vesicoureteral reflux in mice from deletion of Dicer in the peri-Wolffian duct stroma
https://pubmed.ncbi.nlm.nih.gov/32015493
Transcriptome analysis reveals dysregulation of genes involved in oxidative phosphorylation in a murine model of retinopathy of prematurity
https://pubmed.ncbi.nlm.nih.gov/32053824
A pilot study exploring interventions for physician distress in pediatric subspecialists
https://pubmed.ncbi.nlm.nih.gov/32054989
ELBW infants receive inadvertent sodium load above the recommended intake
https://pubmed.ncbi.nlm.nih.gov/32272484
Close Collaboration with Parents intervention improves family-centered care in different neonatal unit contexts: a pre–post study
https://pubmed.ncbi.nlm.nih.gov/32380505
Antibiotics in early life associate with specific gut microbiota signatures in a prospective longitudinal infant cohort
https://pubmed.ncbi.nlm.nih.gov/31954376
An experience with a bubble CPAP bundle: is chronic lung disease preventable?
https://pubmed.ncbi.nlm.nih.gov/31952073
Enquiring beneath the surface: can a gene expression assay shed light into the heterogeneity among newborns with neonatal encephalopathy?
https://pubmed.ncbi.nlm.nih.gov/31952072
Body composition and neuromotor development in the year after NICU discharge in premature infants
https://pubmed.ncbi.nlm.nih.gov/31926484
Preterm birth and the future risk of orthopedic fracture
https://pubmed.ncbi.nlm.nih.gov/31968355
Evaluating preterm care across Europe using the eNewborn European Network database
https://pubmed.ncbi.nlm.nih.gov/31972855

Archives of Disease in Childhood - Fetal & Neonatal Edition

Early cortical maturation predicts neurodevelopment in very preterm infants (PDF)
https://fn.bmj.com/content/fetalneonatal/105/5/460.full.pdf
Drainage, irrigation and fibrinolytic therapy (DRIFT) for posthaemorrhagic ventricular dilatation: 10-year follow-up of a randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/32623370
Faecal volatile organic compounds in preterm babies at risk of necrotizing enterocolitis: the DOVE study

https://pubmed.ncbi.nlm.nih.gov/31871055
Diffusion tensor imaging in neonatal encephalopathy: a systematic review
https://pubmed.ncbi.nlm.nih.gov/31822482
Propofol for endotracheal intubation in neonates: a dose-finding trial
https://pubmed.ncbi.nlm.nih.gov/31932363
Growth to early adulthood following extremely preterm birth: the EPICure study
https://pubmed.ncbi.nlm.nih.gov/31907276
Thyroid function in preterm infants and neurodevelopment at 2 years
https://pubmed.ncbi.nlm.nih.gov/32079615
Neurodevelopmental outcome descriptions in cohorts of extremely preterm children
https://pubmed.ncbi.nlm.nih.gov/31932362
Prophylactic hydrocortisone in extremely preterm infants and brain MRI abnormality
https://pubmed.ncbi.nlm.nih.gov/31980445
Bubble versus other continuous positive airway pressure forms: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/31969457
Impact of sociodemographic and clinical factors on offer and parental consent to postmortem following stillbirth or neonatal death: a UK population-based cohort study
https://pubmed.ncbi.nlm.nih.gov/31969458
Priorities for collaborative research using very preterm birth cohorts
https://pubmed.ncbi.nlm.nih.gov/32029530
Suboptimal heart rate assessment and airway management in infants receiving delivery room chest compressions: a quality assurance project
https://pubmed.ncbi.nlm.nih.gov/32029528
Basic principles of neonatal bubble CPAP: effects on CPAP delivery and imposed work of breathing when altering the original design
https://pubmed.ncbi.nlm.nih.gov/32047029
Developmental dysplasia of the hip in preterm breech infants
https://pubmed.ncbi.nlm.nih.gov/31900256
Does parental presence affect workload during neonatal resuscitation?
https://pubmed.ncbi.nlm.nih.gov/32561565
Cell therapy for the preterm infant: promise and practicalities
https://pubmed.ncbi.nlm.nih.gov/32253200
Images: Sternal cleft in a newborn
https://pubmed.ncbi.nlm.nih.gov/32269149
Images: Sprinkled water drops on the skin in newborns: congenital miliaria crystallina
https://pubmed.ncbi.nlm.nih.gov/32312743

Journal of Perinatology
Review: Preterm birth and neonatal acute kidney injury: implications on adolescent and adult outcomes
https://pubmed.ncbi.nlm.nih.gov/32277164
Acute kidney injury, fluid balance and risks of intraventricular hemorrhage in premature infants
https://pubmed.ncbi.nlm.nih.gov/32066840
The impact of increased awareness of acute kidney injury in the Neonatal Intensive Care Unit on acute kidney injury incidence and reporting: results of a retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/32681064
A comparison of Triple I classification with neonatal early-onset sepsis calculator recommendations in neonates born to mothers with clinical chorioamnionitis
https://pubmed.ncbi.nlm.nih.gov/32678316
Can we improve early identification of neonatal late-onset sepsis? A validated prediction model
https://pubmed.ncbi.nlm.nih.gov/32203177
Impact of vaccination during pregnancy and staphylococci concentration on the presence of Bacillus cereus in raw human milk
https://pubmed.ncbi.nlm.nih.gov/31919400

Clinical impact of neonatal hypoglycemia screening in the well-baby care
https://pubmed.ncbi.nlm.nih.gov/32152490
Neonatal hypoglycemia after initiation of late preterm antenatal corticosteroids
https://pubmed.ncbi.nlm.nih.gov/32060360
Hydrocortisone and bronchopulmonary dysplasia: variables associated with response in premature infants
https://pubmed.ncbi.nlm.nih.gov/32382114
The effect of prolonged tracheal intubation on the association between patent ductus arteriosus and bronchopulmonary dysplasia (grades 2 and 3)
https://pubmed.ncbi.nlm.nih.gov/32669644
The effect of patent ductus arteriosus on coronary artery blood flow in premature infants: a prospective observational pilot study
https://pubmed.ncbi.nlm.nih.gov/32080335
Early postnatal cardiac follow-up of survivors of twin–twin transfusion syndrome treated with fetoscopic laser coagulation
https://pubmed.ncbi.nlm.nih.gov/32152494
Ventricular and total brain volumes in infants with congenital heart disease: a longitudinal study
https://pubmed.ncbi.nlm.nih.gov/32546829
Ten-year trends in infant neuroimaging from US Neonatal Intensive Care Units
https://pubmed.ncbi.nlm.nih.gov/32327710
Association of age of initiation and type of complementary foods with body mass index and weight-for-length at 12 months of age in preterm infants
https://pubmed.ncbi.nlm.nih.gov/32152493
Implications of continuity of care on infant caloric intake in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/32157220
Communication between neonatologists and parents when prognosis is uncertain
https://pubmed.ncbi.nlm.nih.gov/32382115
Improving communication with parents: the Neonatal Intensive Care Unit Empathy Workshop
https://pubmed.ncbi.nlm.nih.gov/32712622
Quality Improvement Article: Standardizing the approach to late onset sepsis in neonates through antimicrobial stewardship: a quality improvement initiative
https://pubmed.ncbi.nlm.nih.gov/31907396
Perspective: A review of approaches for resolving disputes between physicians and families on end-of-life care for newborns
https://pubmed.ncbi.nlm.nih.gov/32393828
Journal Club: Precision medicine in neonatal hemodynamics: need for prioritization of mechanism of illness and defining population of interest
https://pubmed.ncbi.nlm.nih.gov/32719495

Neonatology
No new articles

American Journal of Perinatology
Maternal amino acid profiles to distinguish constitutionally small versus growth-restricted fetuses defined by doppler ultrasound: a pilot study
https://pubmed.ncbi.nlm.nih.gov/32120425
Do calcium and potassium levels influence ductal patency in preterm infants?
https://pubmed.ncbi.nlm.nih.gov/31167236
Head circumference growth is enhanced by SMOF lipid in preterm neonates
https://pubmed.ncbi.nlm.nih.gov/31167235
Preventive effects of probiotic supplementation on neonatal hyperbilirubinemia caused by isoimmunization
https://pubmed.ncbi.nlm.nih.gov/31242512

Effects of partially hydrolyzed formula on severity and outcomes of neonatal abstinence syndrome
https://pubmed.ncbi.nlm.nih.gov/31238343

Journal of Neonatal-Perinatal Medicine

Commentary – Exosomes: Realization of the great therapeutic potential of stem cells
https://pubmed.ncbi.nlm.nih.gov/32444568
Antenatal management and outcomes of pregnancies with congenital diaphragmatic hernia
https://pubmed.ncbi.nlm.nih.gov/31796690
Is the type of neuraxial anesthesia associated with adverse neonatal outcomes among patients with preeclampsia?
https://pubmed.ncbi.nlm.nih.gov/31771075
Middle cerebral artery doppler pulsatility index as a predictor of intrapartum meconium release in prolonged pregnancies
https://pubmed.ncbi.nlm.nih.gov/31771080
Assessing the clinical significance of echocardiograms in determining treatment of patent ductus arteriosus in neonates
https://pubmed.ncbi.nlm.nih.gov/32925117
Blood pressure ranges via non-invasive and invasive monitoring techniques in premature neonates using high resolution physiologic data
https://pubmed.ncbi.nlm.nih.gov/31771082
Use of extubation bundle including modified spontaneous breathing trial (SBT) to reduce the rate of reintubation, among preterm neonates ≤ 30 weeks
https://pubmed.ncbi.nlm.nih.gov/31744023
Management of abdominal distension in the preterm infant with noninvasive ventilation: Comparison of cenit versus 2x1 technique for the utilization of feeding tube
https://pubmed.ncbi.nlm.nih.gov/31929124
Single nucleotide polymorphisms in the dual specificity phosphatase genes and risk of necrotizing enterocolitis in premature infant
https://pubmed.ncbi.nlm.nih.gov/31985475
Prolonged intravenous immunoglobulin treatment in very low birth weight infants with late onset sepsis
https://pubmed.ncbi.nlm.nih.gov/31771081
Evaluation of suspected neonatal herpes simplex virus infection in preterm versus term newborns in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/32083595
Effect of environmental music on autonomic function in infants in intensive and growing care units
https://pubmed.ncbi.nlm.nih.gov/31771074
Kangaroo father care to reduce paternal stress levels: A prospective observational before-after study
https://pubmed.ncbi.nlm.nih.gov/32538877
Percutaneous retrieval of fractured intravascular catheters in premature infants
https://pubmed.ncbi.nlm.nih.gov/31771073
Brief report: Metabolic acidosis in newborn infants following maternal use of acetazolamide during pregnancy
https://pubmed.ncbi.nlm.nih.gov/31771084
In utero congenital chylothorax treatment with fetal thoracoamniotic shunt: Case report
https://pubmed.ncbi.nlm.nih.gov/31744022
Volvulus with intestinal malrotation hiding a near-total intestinal aganglionosis: Case report
https://pubmed.ncbi.nlm.nih.gov/31771072

Maternal Health, Neonatology and Perinatology

No new content

Neoreviews

Intestinal failure-associated liver disease in neonates
https://pubmed.ncbi.nlm.nih.gov/32873652
Challenges of microvillus inclusion disease in the NICU
https://pubmed.ncbi.nlm.nih.gov/32873653
Evaluation and management of common neonatal arrhythmias
https://pubmed.ncbi.nlm.nih.gov/32873654
Case 1: Infant with hypoglycemia and midline defects in heart failure
https://pubmed.ncbi.nlm.nih.gov/32873655
Case 2: Unusual cause of abdominal distention and abdominal wall erythema in a preterm infant
https://pubmed.ncbi.nlm.nih.gov/32873656
Case 3: An unusual rhythm in a 12-day-old infant
https://pubmed.ncbi.nlm.nih.gov/32873657
A2-week-old infant presenting with seizures
https://pubmed.ncbi.nlm.nih.gov/32873659
Fetal echocardiography in a pregnancy with planned home birth
https://pubmed.ncbi.nlm.nih.gov/32873660

JAMA Pediatrics

Ending the diagnostic odyssey—is whole-genome sequencing the answer?
https://pubmed.ncbi.nlm.nih.gov/32597967
Associations of maternal prenatal drug abuse with measures of newborn brain structure, tissue organization, and metabolite concentrations
https://pubmed.ncbi.nlm.nih.gov/32539126
Guidance for the conduct and reporting of clinical trials of breast milk substitutes
https://pubmed.ncbi.nlm.nih.gov/32391870
Association of prenatal opioid exposure with precentral gyrus volume in children
https://pubmed.ncbi.nlm.nih.gov/32511674

BMC Pediatrics

The risks of advancing parental age on neonatal morbidity and mortality are U- or J-shaped for both maternal and paternal ages (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02341-0
Clinical practice guideline on the prevention and management of neonatal extravasation injury: a before-and-after study design (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02346-9
Healthcare worker perceptions of the implementation context surrounding an infection prevention intervention in a Zambian neonatal intensive care unit (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02323-2
Introduction of less invasive surfactant administration (LISA), impact on diagnostic and therapeutic procedures in early life: a historical cohort study (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02325-0
Hematological reference intervals among full-term newborns in Ethiopia: a cross-sectional study (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02320-5
Outcomes of neonates with tracheostomy secondary to bronchopulmonary dysplasia (PDF)
https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02324-1

Pediatric Critical Care Medicine

Evaluation of bivalirudin as an alternative to heparin for systemic anticoagulation in pediatric extracorporeal membrane oxygenation
https://pubmed.ncbi.nlm.nih.gov/32404633
Rapid increase in clearance of phenobarbital in neonates on extracorporeal membrane oxygenation: a pilot retrospective population pharmacokinetic analysis

https://pubmed.ncbi.nlm.nih.gov/32639476
Skin-to-skin care is a safe and effective comfort measure for infants before and after neonatal cardiac surgery
https://pubmed.ncbi.nlm.nih.gov/32740179
Factors that contribute to cost differences based on ICU of admission in neonates undergoing congenital heart surgery: a novel decomposition analysis
https://pubmed.ncbi.nlm.nih.gov/32769705
Standardization of the perioperative management for neonates undergoing the Norwood operation for hypoplastic left heart syndrome and related heart defects
https://pubmed.ncbi.nlm.nih.gov/32701749

New England Journal of Medicine
Causal genetic variants in stillbirth (PDF)
https://www.nejm.org/doi/pdf/10.1056/nejmoa1908753?articletools=true
Editorial: Genomic insights into stillbirth (PDF)
https://www.nejm.org/doi/pdf/10.1056/nejme2016410?articletools=true

Lancet
No relevant content

JAMA
Association of routine infant vaccinations with antibody levels among preterm infants
https://www.ncbi.nlm.nih.gov/pubmed/32930758
Estimating risk ratios and risk differences alternatives to odds ratios
https://www.ncbi.nlm.nih.gov/pubmed/32930746

BMJ
Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis (PDF)
https://www.bmj.com/content/bmj/370/bmj.m3320.full.pdf

Pediatric Infectious Disease Journal
No relevant content

Pediatric Cardiology
No relevant content

Pediatric Neurology
Neuroprotection care bundle implementation to decrease acute brain injury in preterm infants
https://pubmed.ncbi.nlm.nih.gov/32473764
Brain magnetic resonance imaging in congenital cytomegalovirus with failed newborn hearing screen
https://pubmed.ncbi.nlm.nih.gov/32713673

Obstetrics and Gynecology
Neonatal and maternal composite adverse outcomes among low-risk nulliparous women compared with multiparous women at 39–41 weeks of gestation
https://www.ncbi.nlm.nih.gov/pubmed/32769638
Reproductive travel of intended parents for delivery of gestational carrier pregnancies
https://www.ncbi.nlm.nih.gov/pubmed/32769637

American Journal of Obstetrics & Gynecology

Research Letters: Added value of interleukin-1 blockade to hypothermia in the treatment of neonatal encephalopathy (PDF)
https://www.ajog.org/article/S0002-9378(20)30329-X/pdf

Research Letters: Is umbilicocerebral ratio better than cerebroplacental ratio for predicting adverse pregnancy and neonatal outcomes? (PDF)
https://www.ajog.org/article/S0002-9378(20)30434-8/pdf

Hospital Pediatrics

Time to positive blood and cerebrospinal fluid cultures in febrile infants ≤60 days of age
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