Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – February 2023

<u>Proportion of infant neurodevelopment trials reporting a null finding: a systematic review</u> Megan Finch-Edmondson, Madison C B Paton, Ingrid Honan, et al. Pediatrics.

This study screened 1283 records and included 21 studies; of 18 superiority studies, >70% reported a null finding. This review identifies several features that may contribute to the high proportion of null findings such as selection and timing of the primary outcome measure, anticipated effect size, sample size and power, and statistical analysis methodology and rigor. The authors conclude by making several recommendations for future trials, including more sophisticated approaches to trial design, outcome assessment, and analysis.

Considering antiviral treatment to preserve hearing in congenital CMV

Tatiana M Lanzieri, Megan H Pesch, Scott D Grosse, et al. Pediatrics.

The American Academy of Pediatrics currently recommends either intravenous ganciclovir or oral valganciclovir for infants with moderate to severe symptomatic congenital CMV disease who can start treatment within the first month of life. Despite the American Academy of Pediatrics' recommendation, antiviral treatment in infants with asymptomatic congenital CMV without clinical findings has grown rapidly in the United States. This article reviews current evidence regarding whether improvements in hearing associated with antiviral treatment persist beyond early childhood, whether infants with symptomatic congenital CMV who have normal hearing and receive antiviral treatment are at lower risk of developing hearing loss, and whether antiviral medication results in hearing preservation in infants with asymptomatic congenital CMV

<u>Umbilical cord milking in nonvigorous infants: a cluster-randomized crossover trial</u> Anup C Katheria, Erin Clark, Bradley Yoder, et al. Am J Obstet Gynecol.

This was a pragmatic cluster-randomized crossover trial of infants born at 35 to 42 weeks' gestation in 10 medical centers in 3 countries between January 2019 and May 2021. The centers were randomized to umbilical cord milking or early cord clamping for approximately 1 year and then crossed over for an additional year or until the required number of consented subjects was reached. Infants were eligible if nonvigorous at birth (poor tone, pale color, or lack of breathing in the first 15 seconds after birth) and were assigned to umbilical cord milking or early cord clamping according to their birth hospital randomization assignment. Umbilical cord milking did not reduce neonatal intensive care unit admission for predefined criteria. However, infants in the umbilical cord milking arm had higher hemoglobin, received less delivery room cardiorespiratory support, had a lower incidence of moderate-to-severe hypoxic-ischemic encephalopathy, and received less therapeutic hypothermia.

<u>Neonatal hyperoxia induces activated pulmonary cellular states and sex-dependent</u> <u>transcriptomic changes in a model of experimental bronchopulmonary dysplasia</u> Sheng Xia, Lisandra Vila Ellis, Konner Winkley, et al. Am J Physiol Lung Cell Mol Physiol.

To investigate sex-dependent molecular and cellular programming involved in hyperoxia, these investigators surveyed the mouse lung using single cell RNA sequencing (scRNA-seq), and validated their findings in human neonatal lung cells in vitro. Hyperoxia-induced inflammation in alveolar type (AT) 2 cells gave rise to damage-associated transient progenitors (DATPs). It also induced a new subpopulation of AT1 cells with reduced expression of growth factors normally secreted by AT1 cells, but increased mitochondrial gene expression. Female alveolar epithelial cells had less EMT and pulmonary fibrosis signaling in hyperoxia. In the endothelium, expansion of Car4+ EC (Cap2) was seen in hyperoxia along with an emergent subpopulation of Cap2 with repressed VEGF signaling. This regenerative response was increased in females exposed to hyperoxia. These findings suggest that neonatal exposure to hyperoxia programs distinct sexspecific stem cell progenitor and cellular reparative responses that underpin lung remodeling in BPD.

<u>Comparative efficacy and safety of restrictive versus liberal transfusion thresholds in</u> <u>anemic preterm infants: a meta-analysis of 12 randomized controlled trials</u> Xiaoling Fu, Xingdan Zhao, Aihan Weng, et al. Ann Hematol.

This meta-analysis aimed to compare the efficacy and safety of these restrictive vs. liberal thresholds for anemic preterm infants. Twelve RCTs with 4380 preterm infants were included. Liberal transfusion threshold significantly increased the level of hemoglobin after transfusion (mean difference (MD): -10.03; 95% confidence interval (CI): -15.98 to -4.08; p=0.001; I(2)=94%) and hematocrit (MD: -3.62; 95%CI: -6.78 to -0.46; p=0.02; I(2)=80%) compared with restrictive transfusion. Infants' age at first transfusion in restrictive transfusion group was higher than that of infants in liberal transfusion group (MD: 5.08; 95%CI: 2.27 to7.89; p=0.004; I(2)=54%); however, restrictive transfusion was associated with more time on supplemental oxygen (MD: 3.56; 95%CI: 1.93 to 5.18; p&It;0.001; I(2)=62%) and ventilator or CPAP (MD: 3.31; 95%CI: 1.42 to 5.20; p=0.006; I(2)=75%). Evidence with substantial heterogeneity indicates that liberal and restrictive transfusion thresholds are effective and safe blood cell transfusion strategies in anemic preterm infants, but the liberal strategy may be more effective in shortening the length of necessary respiratory support.

<u>A prospective, longitudinal, case–control study to evaluate the neurodevelopment of children from birth</u> to adolescence exposed to COVID-19 in utero

Rachel A Hill, Atul Malhotra, Vathana Sackett, et al. BMC Pediatr.

This paper outlines the designs and methodology for a prospective, case-controlled study aimed to investigate the long-term impacts of SARS-CoV2 exposure on children exposed in utero. Women infected with SARS-CoV-2 during pregnancy are being recruited from two centers in Melbourne, Australia and Londrina, Brazil. Cases are matched 2:1 with women who gave birth in the same month of delivery, are of similar age but did not contract SARS-CoV-2 during their pregnancy. The study aims to collect developmental data at various time-points from birth to 15 years of life as well as biospecimens.

<u>Cerebral regional tissue Oxygen Saturation to Guide Oxygen Delivery in preterm neonates during</u> <u>immediate transition after birth (COSGOD III): multicentre randomised phase 3 clinical trial.</u> Gerhard Pichler, Katharina Goeral, Marlene Hammerl, et al. BMJ.

This multicenter randomized controlled phase 3 trial assessed whether monitoring of cerebral tissue oxygen saturation using near infrared spectroscopy in addition to routine monitoring combined with defined treatment guidelines during immediate transition and resuscitation increases survival without

cerebral injury of premature infants & <32 weeks' gestation compared with standard care alone. Neonates were randomly assigned to either standard care or standard care plus monitoring of cerebral oxygen saturation with a dedicated treatment guideline during immediate transition (first 15 minutes after birth) and resuscitation. The primary outcome was a composite of survival without cerebral injury. In the near infrared spectroscopy, delivery room Fio2 was titrated based on cerebral regional tissue oxygen saturation (crSO2) in addition to SpO2. 607 infants (304 and 303, respectively) were included in the final analysis. The incidence of delivery room interventions within the first 15 minutes after birth did not differ between the groups except for a significantly higher number of neonates receiving intravenous fluids in the near infrared spectroscopy group (12 (4.0%) v 2 (0.7%), P=0.007; table 2). CrSO2 values at each minute during the first 15 minutes after birth did not differ between the groups. FiO2 was slightly higher in the near infrared spectroscopy group than control group in the first minutes after birth, and SpO2 values during the first 15 minutes after birth were similar in both groups. Overall, 252 (82.9%) out of 304 neonates in the near infrared spectroscopy group survived without cerebral injury compared with 238 (78.5%) out of 303 in the control group (relative risk 1.06, 95% confidence interval 0.98 to 1.14). Monitoring of cerebral tissue oxygen saturation in combination with dedicated interventions in preterm neonates (<32 weeks' gestation) during immediate transition and resuscitation after birth did not result in substantially higher survival without cerebral injury compared with standard care alone.

The utility of serial echocardiography parameters in management of newborns with congenital diaphragmatic hernia (CDH) and predictors of mortality

Roopali Soni, Naharmal Soni, Aravanan Chakkarapani, et al. Pediatr Cardiol.

Ventricular dysfunction may be found in 40% of newborns with CDH, and is not only a predictor of disease severity, but also mortality and need for ECMO. In this retrospective study the authors sought to assess the utility of serial echocardiography in the management of 42 newborns with CDH and their survival outcomes. Markers of elevated pulmonary pressures and cardiac function were useful in guiding therapy. Serial timed functional echocardiography (f-Echo) monitoring allows targeted therapy of patients with CDH. Birth weight, initial severity of pulmonary hypertension and postoperative RSS and VIS may be useful in predicting mortality.

<u>Development of a bedside tool to predict the diagnosis of cerebral palsy in term-born neonates</u> Amira Rouabhi, Nafisa Husein, Deborah Dewey, et al. JAMA Pediatr.

Cerebral palsy (CP) is the most common abnormality of motor development and causes lifelong impairment. Early diagnosis and therapy can improve outcomes, but early identification of infants at risk remains challenging. In this case-controlled study using data from the Canadian Cerebral Palsy Registry, the authors sought to develop a CP prognostic tool that can be applied to all term neonates to identify those at increased risk of developing CP. They found that a prognostic model using 12 clinical variables improved the prediction of CP compared with clinical presentation with encephalopathy. This tool can be applied to all term newborns to help select infants for closer surveillance or further diagnostic tests, which could improve outcomes through early intervention.

Postnatal CMV infection and antiviral treatment in extremely premature infants: a 12-year retrospective analysis

Rok Košiček, Borut Kristan, Vanja Erčulj, et al. Pediatr Infect Dis J.

This is a single center retrospective study to assess the treatment outcomes of postnatal CMV infection. Infants <29 weeks gestational age were included. CMV infected infants were compared to uninfected infants (control). Within the CMV infected infants, the two subgroups were those treated with ganciclovir and/or valganciclovir (CMVPT group) or no treatment (CMVPNT group). The primary outcomes assessed were length of stay, death before discharge and hearing impairment, cognitive and motor development as assessed by the Denver Developmental Screening Test II, and neurologic impairment at the corrected age of 1.5-2 years. The study found that the associations between antiviral treatment of postnatal CMV infection and better treatment outcomes were nonsignificant.

Association between periviable delivery and new onset of or exacerbation of existing mental health disorders

Ann M Bruno, Joshua J Horns, Amanda A Allshouse, et al. Obstet Gynecol.

This is a retrospective cohort study to evaluate whether there is an association between periviable delivery and new onset of or exacerbation of existing mental health disorders within 12 months postpartum. The study included individuals with liveborn singleton neonates delivered at periviable period of 22 0/7 to 25 6/7 weeks gestation. The primary outcome was a mental health morbidity composite of one or more of the following: ED encounter a/w depression, anxiety, psychosis, posttraumatic stress disorder, adjustment disorder, self-harm, or suicide; new psychotropic medication prescription; new behavioral therapy; and inpatient psychiatry admission in the 12 months postdelivery. The study found that individuals with periviable delivery were more likely to have a chronic health condition, to have undergone cesarean delivery, and to have experienced severe maternal morbidity. The highest-risk period was the first 90 days. Overall, periviable delivery was associated with a modestly increased risk of mental health morbidity in the 12 months postpartum.

OTHER NOTEWORTHY ARTICLES – February, 2023

COVID-19

Undetected fetal growth restriction during the coronavirus disease 2019 (COVID-19) pandemic <u>https://pubmed.ncbi.nlm.nih.gov/36649315</u>

Maternal mRNA COVID-19 vaccination during pregnancy and delta or omicron infection or hospital admission in infants: test negative design study

https://pubmed.ncbi.nlm.nih.gov/36754426/

Protecting breastfeeding during the COVID-19 pandemic

https://pubmed.ncbi.nlm.nih.gov/32693415/

Maternal and newborn hospital outcomes of perinatal SARS-CoV-2 infection: a national registry https://publications.aap.org/pediatrics/article/151/2/e2022059595/190431/

Reducing MRSA infection in a new NICU during the COVID-19 pandemic <u>https://pubmed.ncbi.nlm.nih.gov/36625072</u>

Pediatrics

Maternal-and-newborn-hospital-outcomes-of racial inequity in high-risk infant follow-up among extremely low birth weight infants

https://pubmed.ncbi.nlm.nih.gov/36594226

Fever, absolute neutrophil count, procalcitonin, and the AAP febrile infant guidelines https://pubmed.ncbi.nlm.nih.gov/36597701

Considering antiviral treatment to preserve hearing in congenital CMV

https://pubmed.ncbi.nlm.nih.gov/36695050

Prevalence and predictors of breastfeeding duration of 24 or more months

https://pubmed.ncbi.nlm.nih.gov/36625074

Proportion of infant neurodevelopment trials reporting a null finding: a systematic review 2022 International consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations: summary from the basic life support; advanced life support; pediatric life support; neonatal life support; education, implementation, and teams; and first aid task forces

https://pubmed.ncbi.nlm.nih.gov/36325925

Recommended guideline for uniform reporting of neonatal resuscitation: the neonatal utstein style <u>https://pubmed.ncbi.nlm.nih.gov/36632729</u>

Propranolol therapy for congenital chylothorax

https://pubmed.ncbi.nlm.nih.gov/36651059

Journal of Pediatrics

No new articles

Pediatric Research

No new content

Archives of Disease in Childhood - Fetal & Neonatal Edition

Caffeine to prevent intermittent hypoxaemia in late preterm infants: randomised controlled dosage trial <u>https://www.ncbi.nlm.nih.gov/pubmed/36038256</u>

Early-onset neonatal sepsis in the Paris area: a population-based surveillance study from 2019 to 2021 <u>https://www.ncbi.nlm.nih.gov/pubmed/35902218</u>

Outcome at 4.5 years after dextrose gel treatment of hypoglycaemia: follow-up of the Sugar Babies randomised trial

https://www.ncbi.nlm.nih.gov/pubmed/35940872

Low dose paracetamol for management of patent ductus arteriosus in very preterm infants: a randomised non-inferiority trial

https://www.ncbi.nlm.nih.gov/pubmed/35940873

Automatic oxygen control for reducing extremes of oxygen saturation: a randomised controlled trial <u>https://www.ncbi.nlm.nih.gov/pubmed/35999043</u>

Bronchopulmonary dysplasia and neurobehavioural outcomes at birth and 2 years in infants born before 30 weeks

https://www.ncbi.nlm.nih.gov/pubmed/35999044

Growth trajectory during the first 1000 days and later overweight in very preterm infants https://www.ncbi.nlm.nih.gov/pubmed/36008103

Laryngeal mask airway versus face mask ventilation or intubation for neonatal resuscitation in low-and-

middle-income countries: a systematic review and meta-analysis

https://www.ncbi.nlm.nih.gov/pubmed/36520676

Sociodemographic risk factors, parental stress and social support in the neonatal intensive care unit <u>https://www.ncbi.nlm.nih.gov/pubmed/36805477</u>

Lung volume changes during apnoeas in preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/36038255

Immunoreactive trypsinogen in healthy newborns and infants with cystic fibrosis

https://www.ncbi.nlm.nih.gov/pubmed/36351789

Management of pneumothorax in neonatal retrieval: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/36167779

Use of ventilation/perfusion mismatch to guide individualised CPAP level selection in preterm infants: a feasibility trial

https://www.ncbi.nlm.nih.gov/pubmed/36104165

Views of parents, adults born preterm and professionals on linkage of real-world data of preterm babies <u>https://www.ncbi.nlm.nih.gov/pubmed/36261144</u>

Journal of Perinatology

Chorionicity and neurodevelopmental outcomes in twin pregnancy: a systematic review and metaanalysis <u>https://www.ncbi.nlm.nih.gov/pubmed/36333420</u>

Perinatal and neonatal outcomes for fetoscopic laser ablation for the treatment of twin twin transfusion syndrome at a single center

https://www.ncbi.nlm.nih.gov/pubmed/36473930

Association of placental histology and neonatal hematologic outcomes https://www.ncbi.nlm.nih.gov/pubmed/36585507 Arterial pressure is not reflective of right ventricular function in neonates with hypoxic ischemic encephalopathy treated with therapeutic hypothermia

https://www.ncbi.nlm.nih.gov/pubmed/36460796

The use of milrinone in neonates with persistent pulmonary hypertension of the newborn - a randomised controlled trial pilot study (MINT 1)

https://www.ncbi.nlm.nih.gov/pubmed/36385642

The biventricular contribution to chronic pulmonary hypertension of the extremely premature infant https://www.ncbi.nlm.nih.gov/pubmed/36008520

Hospital variation in neonatal echocardiography among very preterm infants at US children's hospitals <u>https://www.ncbi.nlm.nih.gov/pubmed/36163416</u>

Cardiac morphology in neonates with fetal growth restriction

https://www.ncbi.nlm.nih.gov/pubmed/36284207

Cannulation approach and mortality in neonatal ECMO

https://www.ncbi.nlm.nih.gov/pubmed/36076033

The dilemma of feeding during the treatment of patent ductus arteriosus with oral ibuprofen in preterm infants ≤30 weeks of gestation—a randomized controlled trial

https://www.ncbi.nlm.nih.gov/pubmed/36604581

Prediction of extubation failure among low birthweight neonates using machine learning <u>https://www.ncbi.nlm.nih.gov/pubmed/36611107</u>

A tiny baby intubation team improves endotracheal intubation success rate but decreases residents' training opportunities

https://www.ncbi.nlm.nih.gov/pubmed/36309565

Transcutaneous bilirubin levels in extremely preterm infants less than 30 weeks gestation <u>https://www.ncbi.nlm.nih.gov/pubmed/35931798</u>

Fresh frozen plasma and cryoprecipitate: Can we safely reduce their use in the NICU? <u>https://www.ncbi.nlm.nih.gov/pubmed/35789197</u>

Neonatology

No new articles

American Journal of Perinatology

General versus regional anesthesia and neonatal data: a propensity-score-matched study https://pubmed.ncbi.nlm.nih.gov/36181759/

Glucose testing in an index pregnancy and outcomes in a subsequent pregnancy: implications for screening and a novel risk calculator

https://pubmed.ncbi.nlm.nih.gov/36427509/

Reading aloud with infants in the neonatal intensive care unit: a unit-based program to enhance language enrichment and support early foundational relationships

https://pubmed.ncbi.nlm.nih.gov/34100273/

A randomized controlled trial on the effect of standardized video education on prenatal genetic testing choices: uptake of genetic testing

https://pubmed.ncbi.nlm.nih.gov/33878774/

The association between the number of vacuum pop-offs and adverse neonatal outcomes https://pubmed.ncbi.nlm.nih.gov/33940648/

Unexpected term neonatal intensive care unit admissions and a potential role for centralized remote fetal monitoring

https://pubmed.ncbi.nlm.nih.gov/33882588/

Comparison of maternal and neonatal subspecialty care provision by hospital <u>https://pubmed.ncbi.nlm.nih.gov/33878766/</u>

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

Addressing ethical issues related to prenatal diagnostic procedures (PDF) <u>https://mhnpjournal.biomedcentral.com/counter/pdf/10.1186/s40748-023-00146-</u> <u>4.pdf?pdf=button%20sticky</u>

Neoreviews

History of neonatal resuscitation: from uncivilized to evidence-based practices https://pubmed.ncbi.nlm.nih.gov/36720687 Minimally invasive fetal surgery and the next frontier https://pubmed.ncbi.nlm.nih.gov/36720693 Surgical management of congenital lung malformations https://pubmed.ncbi.nlm.nih.gov/36720690 Abdominal surgical emergencies in neonates https://pubmed.ncbi.nlm.nih.gov/36720694 Respiratory failure in an infant with known congenital anomalies and novel genetic defect https://pubmed.ncbi.nlm.nih.gov/36720688 Pneumoperitoneum in a small-for-gestational age preterm infant https://pubmed.ncbi.nlm.nih.gov/36720695 A rare case of neonatal oral tumor https://pubmed.ncbi.nlm.nih.gov/36720689 A fungating mass in pregnancy: maternal management and neonatal implications https://pubmed.ncbi.nlm.nih.gov/36720691 Late preterm infant presenting with petechiae https://pubmed.ncbi.nlm.nih.gov/36720692 Two severely edematous infants with local area of drainage https://pubmed.ncbi.nlm.nih.gov/36720696

JAMA Pediatrics

New screening tool for term-born infants enables update to the clinical practice guideline for early diagnosis of cerebral palsy

https://pubmed.ncbi.nlm.nih.gov/36648935/

Obstetric and perinatal outcomes of singleton births following single- vs double-embryo transfer in Sweden

https://pubmed.ncbi.nlm.nih.gov/36469325/

Development of a bedside tool to predict the diagnosis of cerebral palsy in term-born neonates https://pubmed.ncbi.nlm.nih.gov/36648921/

BMC Pediatrics

The relationship between hematological indices as indicators of inflammation and 25-hydroxyvitamin D3 status in newborns

https://pubmed.ncbi.nlm.nih.gov/36804004/

Awareness and diagnosis for intra-abdominal hypertension (IAH) and abdominal compartment syndrome (ACS) in neonatal (NICU) and pediatric intensive care units (PICU) – a follow-up multicenter survey

https://pubmed.ncbi.nlm.nih.gov/36800953/

Survey on human milk feeding and enteral feeding practices for very-low-birth-weight infants in NICUs in China Neonatal Network

https://pubmed.ncbi.nlm.nih.gov/36765301/

Development a prediction model for identifying bacterial meningitis in young infants aged 29–90 days: a retrospective analysis

https://pubmed.ncbi.nlm.nih.gov/36759812/

A neonate with multiple hand flexor tendon ruptures due to methicillin-susceptible Staphylococcus aureus sepsis: a case report https://pubmed.ncbi.nlm.nih.gov/36759790/

Pediatric Critical Care Medicine

Timing of tracheostomy in critically ill infants and children with respiratory failure: a pediatric health information system study

https://pubmed.ncbi.nlm.nih.gov/36508241/

The use and impact of diaries in PICUS and neonatal ICUS: a scoping review https://pubmed.ncbi.nlm.nih.gov/36521187/

New England Journal of Medicine

No relevant articles

Lancet

Marketing of commercial milk formula: a system to capture parents, communities, science, and policy https://pubmed.ncbi.nlm.nih.gov/36764314/ Breastfeeding: crucially important, but increasingly challenged in a market-driven world https://pubmed.ncbi.nlm.nih.gov/36764313/ Congenital adrenal hyperplasia

https://pubmed.ncbi.nlm.nih.gov/36502822/

JAMA

No relevant articles

BMJ

Health and nutrition claims for infant formula: international cross sectional survey https://pubmed.ncbi.nlm.nih.gov/36792145/

Pediatric Infectious Disease Journal

Serratia infection epidemiology among very preterm infants in the neonatal intensive care unit https://pubmed.ncbi.nlm.nih.gov/36638403/

Postnatal CMV Infection and antiviral treatment in extremely premature infants: a 12-year retrospective analysis

https://pubmed.ncbi.nlm.nih.gov/36638404/

Pediatric Cardiology

What is known about critical congenital heart disease diagnosis and management experiences from the perspectives of family and healthcare providers? A systematic integrative literature review https://pubmed.ncbi.nlm.nih.gov/36125507/

Octreotide for acquired chylothorax in pediatric patients post-cardiothoracic surgery for congenital heart disease: a systematic review

https://pubmed.ncbi.nlm.nih.gov/36255468/

Pulmonary venous gradients in healthy controls and following the repair of total anomalous pulmonary venous return

https://pubmed.ncbi.nlm.nih.gov/35986764/

The utility of serial echocardiography parameters in management of newborns with congenital diaphragmatic hernia (CDH) and predictors of mortality

https://pubmed.ncbi.nlm.nih.gov/36163300/

Ectopic atrial tachycardia in infants following congenital heart disease surgery https://pubmed.ncbi.nlm.nih.gov/36495348/

Gabapentin can improve irritability and feeding tolerance in single ventricle interstage patients: a case series

https://pubmed.ncbi.nlm.nih.gov/36131139/

Pediatric Neurology

Paroxysmal tonic upgaze in a patient with congenital ataxia due to a de novo missense variant of CACNA1G

https://pubmed.ncbi.nlm.nih.gov/36508879/

Neonatal arterial ischemic stroke secondary to carotid artery dissection: a case report and systematic literature review

https://pubmed.ncbi.nlm.nih.gov/36502767/

The utility of simulation-based training in teaching frontline providers modified sarnat encephalopathy examination: a randomized controlled pilot trial https://pubmed.ncbi.nlm.nih.gov/36543025/

Obstetrics and Gynecology

Association between periviable delivery and new onset of or exacerbation of existing mental health disorders

https://pubmed.ncbi.nlm.nih.gov/36657144/

American Journal of Obstetrics & Gynecology

Updating the balance between benefits and harms of antenatal corticosteroids https://pubmed.ncbi.nlm.nih.gov/36396484/ Prenatal exome and genome sequencing for fetal structural abnormalities https://pubmed.ncbi.nlm.nih.gov/36027950/ Umbilical cord milking in nonvigorous infants: a cluster-randomized crossover trial https://pubmed.ncbi.nlm.nih.gov/35970202/ The cardiac-fetal-placental unit: fetal umbilical vein flow rate is linked to the maternal cardiac profile in fetal growth restriction https://pubmed.ncbi.nlm.nih.gov/35944606/ Associations between provider-assigned Apgar score and neonatal race https://pubmed.ncbi.nlm.nih.gov/35932875/ Placental delayed villous maturation is associated with fetal congenital heart disease https://pubmed.ncbi.nlm.nih.gov/35985515/

Hospital Pediatrics

Variation in NICU head CT utilization among U.S. children's hospitals <u>https://pubmed.ncbi.nlm.nih.gov/36617983/</u>

BASIC SCIENCE SELECTIONS

Screening inflammatory protein biomarkers on premature infants with necrotizing enterocolitis <u>https://www.ncbi.nlm.nih.gov/pubmed/36806964</u>

Preterm rabbit-derived Precision Cut Lung Slices as alternative model of bronchopulmonary dysplasia in preclinical study: a morphological fine-tuning approach

https://www.ncbi.nlm.nih.gov/pubmed/36436720

Sexual dimorphic vulnerability of respiratory control in a neonatal rodent model of fetal alcohol spectrum disorder

https://www.ncbi.nlm.nih.gov/pubmed/36842727

Therapeutic hypothermia demonstrates sex-dependent improvements in motor function in a rat model of neonatal hypoxic ischemic encephalopathy

https://www.ncbi.nlm.nih.gov/pubmed/36162642

Downregulation of TRIM27 alleviates hypoxic-ischemic encephalopathy through inhibiting inflammation and microglia cell activation by regulating STAT3/HMGB1 axis

https://www.ncbi.nlm.nih.gov/pubmed/36796734

Neonatal overnutrition, but not neonatal undernutrition, disrupts CCK-induced hypophagia and neuron activation of the nucleus of the solitary tract and paraventricular nucleus of hypothalamus of male Wistar rats

https://www.ncbi.nlm.nih.gov/pubmed/36813046

Neonatal hyperoxia induces activated pulmonary cellular states and sex-dependent transcriptomic changes in a model of experimental bronchopulmonary dysplasia https://www.ncbi.nlm.nih.gov/pubmed/36537711

ADDITIONAL JOURNAL SELECTIONS

Comparative efficacy and safety of restrictive versus liberal transfusion thresholds in anemic preterm infants: a meta-analysis of 12 randomized controlled trials

https://www.ncbi.nlm.nih.gov/pubmed/36542102

Capnometry during neonatal transport - mini review

https://www.ncbi.nlm.nih.gov/pubmed/36843232

Glucose-to-lactate ratio and neurodevelopment in infants with hypoxic-ischemic encephalopathy: an observational study

https://www.ncbi.nlm.nih.gov/pubmed/36484862

The dilemma of feeding during the treatment of patent ductus arteriosus with oral ibuprofen in preterm infants </=30 weeks of gestation-a randomized controlled trial

https://www.ncbi.nlm.nih.gov/pubmed/36604581

Considerations for practice in supporting parental bereavement in the neonatal intensive care unit-a systematic review

https://www.ncbi.nlm.nih.gov/pubmed/36846871

Safety of performing classical versus low transverse caesarean sections in extremely preterm and very preterm births: Maternal and neonatal complications

https://www.ncbi.nlm.nih.gov/pubmed/36789730

Comparison of lung ultrasound scores with clinical models for predicting bronchopulmonary dysplasia <u>https://www.ncbi.nlm.nih.gov/pubmed/36757494</u>

Effects of erythropoietin in neonates with hypoxic-ischemic encephalopathy receiving therapeutic hypothermia

https://www.ncbi.nlm.nih.gov/pubmed/36762934

Identification of genetic susceptibility in preterm newborns with bronchopulmonary dysplasia by wholeexome sequencing: BIVM gene may play a role

https://www.ncbi.nlm.nih.gov/pubmed/36757497

Late-onset sepsis mortality among preterm infants: beyond time to first antibiotics <u>https://www.ncbi.nlm.nih.gov/pubmed/36838360</u>

Accuracy of lung and diaphragm ultrasound in predicting successful extubation in extremely preterm infants: A prospective observational study

https://www.ncbi.nlm.nih.gov/pubmed/36324211

Two-year outcomes following a randomised platelet transfusion trial in preterm infants https://www.ncbi.nlm.nih.gov/pubmed/36810309

Association between gastrointestinal perforation and patent ductus arteriosus in extremely-low-birthweight infants: a retrospective study of our decade-long experience

https://www.ncbi.nlm.nih.gov/pubmed/36790636

Characteristics of babies with unstable clinical course screened for retinopathy of prematurity https://www.ncbi.nlm.nih.gov/pubmed/36462723

Physical activity levels, pulmonary function, and MRI in children born extremely preterm: A comparison between children with and without bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/36751721

Probiotics to prevent necrotizing enterocolitis and reduce mortality in neonates: A meta-analysis https://www.ncbi.nlm.nih.gov/pubmed/36827026