Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – June 2023

The role of rhIGF-1/BP3 in the prevention of pulmonary hypertension in bronchopulmonary dysplasia and its underlying mechanism
Sehua Qu, Lianqiang Shan, Xin Chen, et al. BMC Pulm Med

This study aimed to determine whether postnatal treatment with recombinant human IGF-1 (rhIGF-1)/binding peptide 3 (BP3) ameliorates lung injury and prevents pulmonary hypertension (PH) in bronchopulmonary dysplasia (BPD) models. The authors used two models of BPD in this study: one model that was associated with chorioamnionitis (CA), stimulated by intraamniotic fluid and exposure to lipopolysaccharide (LPS), whereas the other was exposed to postnatal hyperoxia. Newborn rats were treated with rhIGF-1/BP3 (0.2 mg/Kg/d) or saline via intraperitoneal injection. LPS and hyperoxia treatment increased lung injury and pulmonary fibrosis, enhanced right ventricular hypertrophy (RVH) and total respiratory resistance, and decreased radial alveolar counts (RAC), pulmonary vascular density and pulmonary compliance in young mice (all p < 0.01). Simultaneously, LPS and hyperoxia induced an increase in epithelial-mesenchymal transition (EMT) in airway epithelial cells. However, rhIGF-1/BP3 treatment reduced lung injury and pulmonary fibrosis, decreased RVH and total respiratory resistance, and enhanced RAC, pulmonary vascular density and pulmonary compliance, as well as inhibited EMT in airway epithelial cells in LPS and hyperoxia treated mice.

<u>Transfusion of adult, but not neonatal, platelets promotes monocyte trafficking in</u> neonatal mice

Preeti Maurya, Sara K Ture, Chen Li, et al. Arterioscler Thromb Vasc Biol.

Platelet transfusions are sometimes given to thrombocytopenic neonates with the hope of reducing the bleeding risk, however, there are little clinical data to support this practice, and platelet transfusions may increase the bleeding risk or lead to adverse complications. The authors focused on the effects of adult versus neonatal platelets on monocyte immune functions that may have an impact on neonatal immune function and transfusion complications. Adult and neonatal platelets had differential immune molecule expression, including Selp. Monocytes incubated with adult or neonatal mouse platelets had similar inflammatory (Ly6C(hi)) but different trafficking phenotypes, as defined by CCR2 and CCR5 mRNA and surface expression. Blocking P-sel (P-selectin) interactions with its PSGL-1 (P-sel glycoprotein ligand-1) receptor on monocytes limited the adult platelet-induced monocyte trafficking phenotype, as well as adult platelet-induced monocyte migration in vitro. Similar results were seen in vivo. The transfusion of adult platelets to neonatal mice was associated with an acute inflammatory and trafficking monocyte phenotype that was platelet P-sel dependent and may have an impact on complications associated with neonatal platelet transfusions.

Bilirubin levels in neonates ≥35 weeks of gestation receiving delayed cord clamping for an extended time-an observational study

Maria Wilander, Johan Sandblom, Li Thies-Lagergren, et al. J Pediatr.

This retrospective, observational study included 557 neonates born vaginally at \geq 35 0/7 weeks gestation with a recorded time to cord clamping and at least one recorded bilirubin. The authors found no association between time to cord clamping and hyperbilirubinemia (β = -0.05, P = .07). Need for phototherapy was marginally greater in neonates with shorter time to cord clamping (via updated Bhutani nomogram). The authors concluded that bilirubin levels were not correlated to time to cord clamping and that cord clamping beyond two minutes can be performed without additional monitoring for jaundice.

Exhaled volatile organic compounds for early prediction of bronchopulmonary dysplasia in infants born preterm

Michelle Romijn, Anton H van Kaam, Dominic Fenn, et al. J Pediatr.

This study collected exhaled breath from infants born <30 weeks' gestation at days 3 and 7 of life. These samples were used to model and validate a volatile organic compound (VOC) prediction model for moderate or severe BPD at 36 weeks postmenstrual age. Of 117 infants, thirty-three percent developed moderate or severe BPD. The VOC model showed a c-statistic of 0.89 (95% CI 0.80-0.97) and 0.92 (95% CI 0.84-0.99) for the prediction of BPD at days 3 and 7, respectively. In addition, the authors found that adding the VOC profiles to the existing NICHD clinical BPD prediction model improved its discriminative performance.

<u>Early nitric oxide is not associated with improved outcomes in congenital diaphragmatic hernia</u> Caroline Y Noh, Valerie Y Chock, Shazia Bhombal, et al. *Pediatr Res.*

Inhaled nitric oxide (iNO) is widely used for the management of infants with congenital diaphragmatic hernia (CDH); however, evidence of benefit is limited. This multicenter cohort study used data from the Congenital Diaphragmatic Hernia Study Group between 2015 and 2020. The impact of early iNO use in the first 3 days of life prior to ECLS use on mortality or ECLS use was explored. Of the 1777 infants, 863 (48.6%) infants received early iNO treatment. Infants receiving iNO had lower birth weight, larger defect size, more severe pulmonary hypertension, and abnormal ventricular size and function. The use of iNO in the first 3 days of life prior to ECLS was not associated with a reduction in mortality or ECLS use. The widespread use of iNO in this vulnerable population requires reconsideration.

<u>Transfer timing and the length of medication weaning for neonatal opioid withdrawal syndrome</u> Amanda L Botticello, Yu-Lun Chen, Melissa G Smith, et al. *Hosp Pediatr*.

Many infants with neonatal opioid withdrawal syndrome (NOWS) from prenatal exposure to opioids require transfer to a pediatric inpatient unit for medication weaning. In this single-site retrospective cohort study, the authors sought to assess the difference in the duration of medication weaning between infants transferred by day of life (DOL) 14 versus later (DOL 15 and after) to a tertiary care setting for pharmacological and nonpharmacological management of NOWS. They found that delayed treatment prolongs NOWS symptoms and increases the burden on the health care system. Earlier referral from NICUs to pediatric inpatient units with environmental supports could reduce prolonged medication exposure and length of hospitalization for infants diagnosed with NOWS.

Short-course empiric antibiotic therapy for possible early-onset sepsis in the NICU

Pablo J Sánchez, Pavel Prusakov, Concepción de Alba Romero, et al. J Perinatol.

This is a retrospective study that assessed the safety of 24 hours antibiotic therapy (2 doses of ampicillin every 12 hours and a single dose of gentamicin with a TIME-OUT set at 24 hours in the EMR) for early onset sepsis. The study included all newborns evaluated for possible early-onset sepsis at &It;72 hours of age. The safety endpoints assessed were re-initiation of antibiotics within 7 days after discontinuation of the initial course, positive blood or CSF culture in the 7 days after antibiotic discontinuation, and sepsis- related mortality. The 24-hour rule-out group were less likely to have antibiotics re-initiated with no difference in the safety endpoints.

Antiseizure medication at discharge in infants with hypoxic-ischaemic encephalopathy: an observational study

Elizabeth K Sewell, Seetha Shankaran, Scott A McDonald, et al. Arch Dis Child Fetal Neonatal Ed.

This is a retrospective study that assessed the practice of continuing of antiseizure medication (ASM) at discharge and assessed if the continuing of ASM is associated with death or disability in infants with HIE and seizure. The patient population is from the NICHD network trials. Continuation of ASM at discharge varies substantially among centers - 61% were continued on ASMs at discharge (range 13%-100%). The risk of death or moderate-to-severe disability was greater for infants continued on ASM at discharge, compared with those infants discharged without ASM (44% vs 28%, adjusted OR 2.14; 95% CI 1.13 to 4.05).

Eat, sleep, console approach or usual care for neonatal opioid withdrawal

Leslie W Young, Songthip T Ounpraseuth, Stephanie L Merhar, et al. N Engl J Med.

In this cluster-randomized, controlled trial at 26 U.S. hospitals, a total of 1305 infants were enrolled. In an intention-to-treat analysis that included 837 infants who met the trial definition for medical readiness for discharge, the number of days from birth until readiness for hospital discharge was 8.2 in the Eat, Sleep, Console group and 14.9 in the usual-care group (adjusted mean difference, 6.7 days; 95% confidence interval [CI], 4.7 to 8.8), for a rate ratio of 0.55 (95% CI, 0.46 to 0.65; P<0.001). The incidence of adverse outcomes was similar in the two groups.

OTHER NOTEWORTHY PUBLICATIONS – June, 2023

COVID-19

Confirmed SARS-CoV-2 infection in Scottish neonates 2020–2022: a national, population-based cohort study

https://pubmed.ncbi.nlm.nih.gov/36609412/

Critical care among newborns with and without a COVID-19 diagnosis, May 2020–February 2022 https://pubmed.ncbi.nlm.nih.gov/37117394/

Detection of SARS-CoV-2 IgA and IgG in human milk and breastfeeding infant stool 6 months after maternal COVID-19 vaccination

https://pubmed.ncbi.nlm.nih.gov/37117394/

Clinical outcomes of COVID-19 in newborns and infants: A multicenter experience of 576 cases https://pubmed.ncbi.nlm.nih.gov/36854119/

The temporal relationship between the coronavirus disease 2019 (COVID-19) pandemic and preterm birth

https://pubmed.ncbi.nlm.nih.gov/37141586/

Pediatrics

Severe neonatal interstitial lung disease caused by a rare surfactant protein C mutation https://www.ncbi.nlm.nih.gov/pubmed/37232099

Journal of Pediatrics

Guilt and regret experienced by parents of children born extremely preterm

https://pubmed.ncbi.nlm.nih.gov/36463935

Bilirubin levels in neonates ≥35 weeks of gestation receiving delayed cord clamping for an extended time—an observational study

https://pubmed.ncbi.nlm.nih.gov/36646247

Fractionated bilirubin among 252 892 Utah newborns with and without biliary atresia: a 15-year historical birth cohort study

https://pubmed.ncbi.nlm.nih.gov/36731714

Variable association of physiologic changes with electrographic seizure-like events in infants born preterm

https://pubmed.ncbi.nlm.nih.gov/36801212

Glycemia and neonatal encephalopathy: outcomes in the LyTONEPAL (long-term outcome of neonatal hypoxic encephalopathy in the era of neuroprotective treatment with hypothermia) cohort https://pubmed.ncbi.nlm.nih.gov/36828343

Are parent discharge readiness scores effective for patients with congenital heart disease after cardiac surgery?

https://pubmed.ncbi.nlm.nih.gov/36841508

Trends in delayed diagnosis of critical congenital heart defects in an era of enhanced screening, 2004-2018

https://pubmed.ncbi.nlm.nih.gov/36858148

Exhaled volatile organic compounds for early prediction of bronchopulmonary dysplasia in infants born preterm

https://pubmed.ncbi.nlm.nih.gov/36868304

Newborns with a congenital heart defect and diastolic steal have an altered cerebral arterial doppler profile

https://pubmed.ncbi.nlm.nih.gov/36868306

Neurodevelopmental outcomes at two years' corrected age of very preterm infants after implementation of a post-discharge responsive parenting intervention program (TOP Program) https://pubmed.ncbi.nlm.nih.gov/36889631

Effect of presenting survival information as text or pictograph during periviable birth counseling: a randomized, controlled trial

https://pubmed.ncbi.nlm.nih.gov/36894129

Hemodynamic changes with umbilical cord milking in nonvigorous newborns: a randomized cluster cross-over trial

https://pubmed.ncbi.nlm.nih.gov/36914049

Platelet transfusions in a multi-neonatal intensive care unit health care organization before and after publication of the PlaNeT-2 clinical trial

https://pubmed.ncbi.nlm.nih.gov/36933765

Pediatric Research

Management of infants with congenital diaphragmatic hernia and pulmonary hypertension—one size does not fit all

https://pubmed.ncbi.nlm.nih.gov/36864283/

High-frequency ventilation in preterm infants and neonates

https://pubmed.ncbi.nlm.nih.gov/35136198/

Neuroprotective therapies in the NICU in term infants: present and future

https://pubmed.ncbi.nlm.nih.gov/36195634/

PDA, a ringside view

https://pubmed.ncbi.nlm.nih.gov/36289314/

Models of bilirubin neurological damage: lessons learned and new challenges

https://pubmed.ncbi.nlm.nih.gov/36302856/

Effects of systemic anticoagulation in a murine model of compensatory lung growth

https://pubmed.ncbi.nlm.nih.gov/36195630/

Bile acids profile and redox status in healthy infants

https://pubmed.ncbi.nlm.nih.gov/36272998/

Transcriptional regulation of NRF1 on metabotropic glutamate receptors in a neonatal hypoxic-ischemic encephalopathy rat model

https://pubmed.ncbi.nlm.nih.gov/36280709/

The reduced number of nephrons with shortening renal tubules in mouse postnatal adverse environment

https://pubmed.ncbi.nlm.nih.gov/36302857/

Preterm birth alters the feeding-induced activation of Akt signaling in the muscle of neonatal piglets https://pubmed.ncbi.nlm.nih.gov/36402914/

Early nitric oxide is not associated with improved outcomes in congenital diaphragmatic hernia https://pubmed.ncbi.nlm.nih.gov/36725908/

Cardiorespiratory signature of neonatal sepsis: development and validation of prediction models in 3 NICUs

https://pubmed.ncbi.nlm.nih.gov/36593281/

Early infancy growth, body composition and type of feeding in late and moderate preterms https://pubmed.ncbi.nlm.nih.gov/36183005/

Perfused boundary region as biomarker for endothelial integrity in former preterms in adolescence https://pubmed.ncbi.nlm.nih.gov/36183004/

Serum brain injury biomarkers are gestationally and post-natally regulated in non-brain injured neonates

https://pubmed.ncbi.nlm.nih.gov/34923579/

Preterm newborns exposed to early-onset preeclampsia have altered postnatal Tumor Necrosis Factor-related apoptosis-inducing ligand trends versus controls

https://pubmed.ncbi.nlm.nih.gov/36195627/

Cannabis use during lactation may alter the composition of human breast milk

https://pubmed.ncbi.nlm.nih.gov/36195631/

Cut-off values of serum interleukin-6 for culture-confirmed sepsis in neonates

https://pubmed.ncbi.nlm.nih.gov/36216867/

Risk factors for unfavorable outcome at discharge of newborns with hypoxic-ischemic encephalopathy in the era of hypothermia

https://pubmed.ncbi.nlm.nih.gov/36272997/

Age-related skull fracture patterns in infants after low-height falls

https://pubmed.ncbi.nlm.nih.gov/36289313/

Bronchopulmonary dysplasia is not related to neurofilament light for neuroaxonal damage in preterm infants

https://pubmed.ncbi.nlm.nih.gov/36344694/

Higher blood pressure in adolescent boys after very preterm birth and fetal growth restriction https://pubmed.ncbi.nlm.nih.gov/36344695/

Effects of human milk on body composition and growth in very low birthweight infants

https://pubmed.ncbi.nlm.nih.gov/36357574/

Early-life gut microbiota and attention deficit hyperactivity disorder in preadolescents https://pubmed.ncbi.nlm.nih.gov/35440767/

Vaccination in children with congenital heart disease: an observational study in a Beijing hospital https://pubmed.ncbi.nlm.nih.gov/36307525/

Evolving antibiotic resistance in Group B Streptococci causing invasive infant disease: 1970–2021 https://pubmed.ncbi.nlm.nih.gov/36352262/

Large-scale brain network dynamics in very preterm children and relationship with socio-emotional outcomes: an exploratory study

https://pubmed.ncbi.nlm.nih.gov/36329223/

Early skin-to-skin contact and risk of late-onset-sepsis in very and extremely preterm infants https://pubmed.ncbi.nlm.nih.gov/36376509/

<u>Archives of Disease in Childhood - Fetal & Neonatal Edition</u>

Thresholds for surfactant use in preterm neonates: a network meta-analysis

https://pubmed.ncbi.nlm.nih.gov/36600484/

National PReCePT Programme: a before-and-after evaluation of the implementation of a national quality improvement programme to increase the uptake of magnesium sulfate in preterm deliveries https://pubmed.ncbi.nlm.nih.gov/36617442/

Emotional journey of Asian mothers of premature infants who received pasteurised donor human milk: a qualitative study

https://pubmed.ncbi.nlm.nih.gov/36564162/

Birth order and morbidity and mortality to hospital discharge among inborn very low-birthweight, very preterm twin infants admitted to neonatal intensive care: a retrospective cohort study https://pubmed.ncbi.nlm.nih.gov/36585246/

Survey of transfusion practices in preterm infants in Europe

https://pubmed.ncbi.nlm.nih.gov/36653173/

Effect of systemic hydrocortisone in ventilated preterm infants on parent-reported behavioural outcomes at 2 years' corrected age: follow-up of a randomised clinical trial https://pubmed.ncbi.nlm.nih.gov/36593110/

Low dose or very low dose phenylephrine and cyclopentolate microdrops for retinopathy of prematurity eye examinations (The Little Eye Drop Study): a randomised controlled non-inferiority trial https://pubmed.ncbi.nlm.nih.gov/36593111/

Association of nurse staffing and unit occupancy with mortality and morbidity among very preterm infants: a multicentre study

https://pubmed.ncbi.nlm.nih.gov/36609411/

Comparison of two automated oxygen controllers in oxygen targeting in preterm infants during admission: an observational study

https://pubmed.ncbi.nlm.nih.gov/36599676/

Variation in hospital morbidities in an Australian neonatal intensive care unit network

https://pubmed.ncbi.nlm.nih.gov/36593112/

Supporting all breaths versus supporting some breaths during synchronised mechanical ventilation in neonates: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/36631252/

Parents' Experiences of Communication in Neonatal Care (PEC): a neonatal survey refined for real-time parent feedback

https://pubmed.ncbi.nlm.nih.gov/36717224/

Antiseizure medication at discharge in infants with hypoxic-ischaemic encephalopathy: an observational study

https://pubmed.ncbi.nlm.nih.gov/36732048/

Journal of Perinatology

Retinopathy of prematurity: risk stratification by gestational age

https://pubmed.ncbi.nlm.nih.gov/36653668/

Identification of clinical factors associated with timing and duration of spontaneous regression of retinopathy of prematurity not requiring treatment

https://pubmed.ncbi.nlm.nih.gov/36973383/

Increased risk of bradycardia in vigorous infants receiving early as compared to delayed cord clamping at birth

https://pubmed.ncbi.nlm.nih.gov/36587054/

Abdominal Near Infrared Spectroscopy can be reliably used to measure splanchnic oxygenation changes in preterm infants

https://pubmed.ncbi.nlm.nih.gov/36496514/

Effectiveness of a care bundle for primary prevention of intraventricular hemorrhage in high-risk neonates: a Bayesian analysis

https://pubmed.ncbi.nlm.nih.gov/36309564/

Can tactile reactivity in preterm born infants be explained by an immature cortical response to tactile stimulation in the first year? A pilot study

https://pubmed.ncbi.nlm.nih.gov/36261619/

Holding a baby after stillbirth: the impact of fetal congenital and structural abnormalities

https://pubmed.ncbi.nlm.nih.gov/35931797/

Short-course empiric antibiotic therapy for possible early-onset sepsis in the NICU

https://pubmed.ncbi.nlm.nih.gov/36813903/

Use of an electronic medical record to optimize a neonatal sepsis score for mortality prediction https://pubmed.ncbi.nlm.nih.gov/36450852/

Predictors of antepartum maternal sepsis and effects on neonatal outcomes: a population-based cohort study

https://pubmed.ncbi.nlm.nih.gov/37217673/

Chorioamnionitis-exposure alters serum cytokine trends in premature neonates

https://pubmed.ncbi.nlm.nih.gov/36539561/

Placental abruption and neonatal anemia

https://pubmed.ncbi.nlm.nih.gov/36650233/

The association of regional perinatal risk factors and neonatal intensive care capacity for Military Health System-insured newborns

https://pubmed.ncbi.nlm.nih.gov/36792685/

NICUs in the US: levels of acuity, number of beds, and relationships to population factors

https://pubmed.ncbi.nlm.nih.gov/37208426/

A sepsis trigger tool reduces time to antibiotic administration in the NICU

https://pubmed.ncbi.nlm.nih.gov/36813901/

Does enteral zinc supplementation affect growth and neurodevelopment in preterm infants?

https://pubmed.ncbi.nlm.nih.gov/37202445/

Neonatology

No new content

American Journal of Perinatology

Mild hypoxic—ischemic encephalopathy: can neurophysiological monitoring predict unfavorable neurological outcome? A systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/34666398

Placental transfusion, timing of plastic wrap or bag placement, and preterm neonates

https://pubmed.ncbi.nlm.nih.gov/34255334

Parent-administered oral stimulation in preterm infants: a randomized, controlled, open-label pilot study

https://pubmed.ncbi.nlm.nih.gov/34182577

What facial features does the pediatrician look to decide that a newborn Is feeling pain?

https://pubmed.ncbi.nlm.nih.gov/34192767

The effect of neonatal sepsis on risk of autism diagnosis

https://pubmed.ncbi.nlm.nih.gov/34225371

Effects of kangaroo mother care on repeated procedural pain and cerebral oxygenation in preterm infants

https://pubmed.ncbi.nlm.nih.gov/34192768

Bereaved parents: insights for the antenatal consultation

https://pubmed.ncbi.nlm.nih.gov/34255335

Survey of quaternary neonatal management of posthemorrhagic hydrocephalus

https://pubmed.ncbi.nlm.nih.gov/34293803

Knowledge, attitudes, and perceptions about antibiotic stewardship programs among neonatology trainees

https://pubmed.ncbi.nlm.nih.gov/34282573

Parent preferences for neonatal intensive care unit physician attire: a cross-sectional study

https://pubmed.ncbi.nlm.nih.gov/34396496

Perspectives about environmental tobacco smoke exposure from mothers of premature infants https://pubmed.ncbi.nlm.nih.gov/34396497

Journal of Neonatal-Perinatal Medicine

No new articles

Maternal Health, Neonatology and Perinatology

What are the barriers preventing the screening and management of neonatal hypoglycaemia in low-resource settings, and how can they be overcome?

https://www.ncbi.nlm.nih.gov/pubmed/37259172

Neoreviews

Kernicterus on the spectrum

https://www.ncbi.nlm.nih.gov/pubmed/37258501

Diagnosing anemia in neonates: an evidence-based approach

https://www.ncbi.nlm.nih.gov/pubmed/37258503

Thrombosis in the neonatal intensive care unit

https://www.ncbi.nlm.nih.gov/pubmed/37258498

Red blood cell transfusion thresholds for anemia of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/37258497

JAMA Pediatrics

Life support system for the fetonate and the ethics of speculation https://pubmed.ncbi.nlm.nih.gov/37067812

Association between early prostacyclin therapy and extracorporeal life support use in patients with congenital diaphragmatic hernia

https://pubmed.ncbi.nlm.nih.gov/37036717

Capacity for regulation of energy intake in infancy

https://pubmed.ncbi.nlm.nih.gov/37067796

Preterm birth, small for gestational age, and large for gestational age and the risk of atrial fibrillation up to middle age

https://pubmed.ncbi.nlm.nih.gov/37093612

Birth-based vs fetuses-at-risk approaches for assessing neonatal mortality rate by race

https://pubmed.ncbi.nlm.nih.gov/37093613

BMC Pediatrics

Infant feeding practices and parental perceptions during the 2022 United States infant formula shortage crisis

https://pubmed.ncbi.nlm.nih.gov/37355589/

A dual H-type tracheoesophageal fistula; why not being repaired simultaneously? A case report and review of literature

https://pubmed.ncbi.nlm.nih.gov/37337161/

Pain assessment tools for use in infants: a meta-review

https://pubmed.ncbi.nlm.nih.gov/37337167/

Association between Cesarean section and neurodevelopmental disorders in a Japanese birth cohort:

the Japan Environment and Children's Study

https://pubmed.ncbi.nlm.nih.gov/37331958/

Development of a blood proteins-based model for bronchopulmonary dysplasia prediction in premature infants

https://pubmed.ncbi.nlm.nih.gov/37330491/

Predictors of adverse short-term outcomes in late preterm infants

https://pubmed.ncbi.nlm.nih.gov/37328827/

Factors associated with acute kidney injury among preterm infants administered vancomycin: a retrospective cohort study

https://pubmed.ncbi.nlm.nih.gov/37328836/

Outcomes of patent foramen ovale greater than 3 mm at birth in extremely low birthweight infants https://pubmed.ncbi.nlm.nih.gov/37322472/

Epidemiology and risk factors for thrombosis in children and newborns: systematic evaluation and metaanalysis

https://pubmed.ncbi.nlm.nih.gov/37322473/

Case–control association study of congenital heart disease from a tertiary paediatric cardiac centre from North India

https://pubmed.ncbi.nlm.nih.gov/37322441/

An electrocardiographic score to predict pulmonary hypertension in children with atrial septal defect https://pubmed.ncbi.nlm.nih.gov/37301836/

Congenital hepatic hemangioma: an unusual case report of pulmonary hypertension

https://pubmed.ncbi.nlm.nih.gov/37286954/

Positivity rate, trend and associated risk factors of mother-to-child transmission of HIV among HIV-exposed infants

https://pubmed.ncbi.nlm.nih.gov/37280581/

Intracardiac thrombosis after congenital heart disease surgeries in neonates: a report of two cases https://pubmed.ncbi.nlm.nih.gov/37268877/

Prevalence of stunting and associated factors among neonates in Shebadino woreda, Sidama region South Ethiopia; a community-based cross-sectional study 2022

https://pubmed.ncbi.nlm.nih.gov/37264376/

Vitamin D metabolic pathway genes polymorphisms and vitamin D levels in association with neonatal hyperbilirubinemia in China: a single-center retrospective cohort study

https://pubmed.ncbi.nlm.nih.gov/37259065/

Preterm birth does not increase the risk of developmental dysplasia of the Hip: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/37246230/

A de novo ANK1 mutation in a childhood hereditary spherocytosis: a case report

https://pubmed.ncbi.nlm.nih.gov/37246216/

Management of complicated choledochal cyst in children: ultrasound-guided percutaneous external drainage and subsequent definitive operation

https://pubmed.ncbi.nlm.nih.gov/37237284/

Clinical characteristics and antibiotic resistance profile of invasive MRSA infections in newborn inpatients: a retrospective multicenter study from China

https://pubmed.ncbi.nlm.nih.gov/37231456/

Outcomes and prognostic factors of infantile acquired hydrocephalus: a single-center experience https://pubmed.ncbi.nlm.nih.gov/37226122/

Diagnosis of neonatal neurofibromatosis type 1: a case report and review of the literature https://pubmed.ncbi.nlm.nih.gov/37226143/

Efficacy analysis of oral dexamethasone in the treatment of infantile spasms and infantile spasms related Lennox–Gastaut syndrome

https://pubmed.ncbi.nlm.nih.gov/37217894/

Pediatric Critical Care Medicine

Analgesia and sedation at terminal extubation: a secondary analysis from death one hour after terminal extubation study data

https://pubmed.ncbi.nlm.nih.gov/36877028/

Where the rubber meets the road: lean methodology for improving daily multidisciplinary rounds https://pubmed.ncbi.nlm.nih.gov/37260340/

Operationalizing appropriate sepsis definitions in children worldwide: considerations for the pediatric sepsis definition taskforce

https://pubmed.ncbi.nlm.nih.gov/37097029/

New England Journal of Medicine

Eat, sleep, console approach or usual care for neonatal opioid withdrawal https://pubmed.ncbi.nlm.nih.gov/37125831/

Lancet

No relevant articles

JAMA

No relevant articles

BMJ

No relevant articles

Pediatric Infectious Disease Journal

See COVID section

Pediatric Cardiology

Safety and feasibility of skin-to-skin contact in the delivery room for high-risk cardiac neonates https://pubmed.ncbi.nlm.nih.gov/36971793

Triple antiarrhythmic therapy in newborns with refractory atrioventricular reentrant tachycardia https://pubmed.ncbi.nlm.nih.gov/37093256

Prenatal congenital heart disease—it takes a multidisciplinary village

https://pubmed.ncbi.nlm.nih.gov/37186174

The association between congenital heart disease and autism spectrum disorder: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/36964783

Initial counseling prior to palliation for hypoplastic left heart syndrome: 2021 vs 2011

https://pubmed.ncbi.nlm.nih.gov/37099209

The relationship between placental pathology and neurodevelopmental outcomes in complex congenital heart disease

https://pubmed.ncbi.nlm.nih.gov/36201029

The impact of neighborhood socioeconomic status, race and ethnicity, and language on prenatal diagnosis of CHD

https://pubmed.ncbi.nlm.nih.gov/36688983

Transfemoral perimembranous ventricular septal defect device closure in infants weighing ≤ 10 kg https://pubmed.ncbi.nlm.nih.gov/36698044

Pediatric Neurology

Recurrent infant botulism complicated by necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/37028265

Brain-oriented strategies for neuroprotection of asphyxiated newborns in the first hours of life https://pubmed.ncbi.nlm.nih.gov/36996760

Obstetrics and Gynecology

see COVID section

American Journal of Obstetrics & Gynecology

Pathophysiological interpretation of fetal heart rate tracings in clinical practice

https://pubmed.ncbi.nlm.nih.gov/37270259/

Optimizing the management of acute, prolonged decelerations and fetal bradycardia based on the understanding of fetal pathophysiology

https://pubmed.ncbi.nlm.nih.gov/37270260/

Remote patient monitoring for management of diabetes mellitus in pregnancy is associated with improved maternal and neonatal outcomes

https://pubmed.ncbi.nlm.nih.gov/36841348/

Examining recent trends in spontaneous and iatrogenic preterm birth across race and ethnicity in a large managed care population

https://pubmed.ncbi.nlm.nih.gov/36403861/

Fentanyl in the labor epidural impacts the results of intrapartum and postpartum maternal and neonatal toxicology tests

https://pubmed.ncbi.nlm.nih.gov/36427599/

Association of a large-for-gestational-age infant and maternal prediabetes mellitus and diabetes mellitus 10 to 14 years after delivery in the Hyperglycemia and Adverse Pregnancy Outcome Follow-up Study https://pubmed.ncbi.nlm.nih.gov/36848986/

Hospital Pediatrics

Communication experiences of caregivers using a language other than English on inpatient services https://pubmed.ncbi.nlm.nih.gov/37125497/

Resident communication with patients and families preferring languages other than English https://pubmed.ncbi.nlm.nih.gov/37125495/

The autonomy toolbox: a multicenter collaborative to promote resident autonomy https://pubmed.ncbi.nlm.nih.gov/37153964/

Transfer timing and the length of medication weaning for neonatal opioid withdrawal syndrome https://pubmed.ncbi.nlm.nih.gov/37183609/

Impact of a remote virtual reality curriculum pilot on clinician conflict communication skills https://pubmed.ncbi.nlm.nih.gov/37161716/

Preterm and term infants evaluated for sepsis: differences in management and clinical outcomes https://pubmed.ncbi.nlm.nih.gov/37222075/

Gaps in clinical care and research inclusion for families speaking languages other than english https://pubmed.ncbi.nlm.nih.gov/37125492/

NOWS or never: questioning the premise of inpatient NOWS care

https://pubmed.ncbi.nlm.nih.gov/37183612/

Autonomy is desired, entrustment is what matters

https://pubmed.ncbi.nlm.nih.gov/37153966/

BASIC SCIENCE SELECTIONS

Bovine milk-derived exosomes attenuate NLRP3 inflammasome and NF-kappaB signaling in the lung during neonatal necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/37268798

NAMPT inhibition relieves intestinal inflammation by regulating macrophage activation in experimental necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/37329710

High-mobility group box-1 peptide ameliorates bronchopulmonary dysplasia by suppressing inflammation and fibrosis in a mouse model

https://www.ncbi.nlm.nih.gov/pubmed/37329659

The role of rhIGF-1/BP3 in the prevention of pulmonary hypertension in

bronchopulmonary dysplasia and its underlying mechanism

https://www.ncbi.nlm.nih.gov/pubmed/37322452

Bone marrow stromal cell-secreted extracellular vesicles containing miR-34c-5p alleviate lung injury and inflammation in bronchopulmonary dysplasia through promotion of PTEN degradation by targeting OTUD3

https://www.ncbi.nlm.nih.gov/pubmed/37310728

Transfusion of adult, but not neonatal, platelets promotes monocyte trafficking in neonatal mice

https://www.ncbi.nlm.nih.gov/pubmed/36951062

Cells of the renin lineage promote kidney regeneration post-release of ureteral obstruction in neonatal mice

https://www.ncbi.nlm.nih.gov/pubmed/37309075

Effects of fresh bone marrow mononuclear cell therapy in rat model of retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/37334242

Use of liposome-encapsulated estetrol for treatment of neonatal hypoxic-ischemic encephalopathy

https://www.ncbi.nlm.nih.gov/pubmed/37061081

ADDITIONAL JOURNAL SELECTIONS

Hemodynamic performance evaluation of neonatal ECMO double lumen cannula using fluid-structure interaction

https://www.ncbi.nlm.nih.gov/pubmed/37039384

Acute kidney injury and early fluid load in a retrospective cohort of neonatal sepsis https://www.ncbi.nlm.nih.gov/pubmed/36525082

Effect on neonatal sepsis following immediate kangaroo mother care in a newborn intensive care unit: a post-hoc analysis of a multicentre, open-label, randomised controlled trial

https://www.ncbi.nlm.nih.gov/pubmed/37251633

Pulmonary hypertension in preterm infants with moderate-to-severe bronchopulmonary dysplasia (BPD)

https://www.ncbi.nlm.nih.gov/pubmed/37259611

The impact of maternal stress on the development of necrotizing enterocolitis: A comprehensive review

https://www.ncbi.nlm.nih.gov/pubmed/37316382

A pilot phase I trial of allogeneic umbilical cord tissue-derived mesenchymal stromal cells in neonates with hypoxic-ischemic encephalopathy

https://www.ncbi.nlm.nih.gov/pubmed/37285522

Acute kidney injury in neonatal hypoxic-ischemic encephalopathy patients treated with therapeutic hypothermia: incidence and risk factors

https://www.ncbi.nlm.nih.gov/pubmed/37343176

The influence of mediators on the relationship between antenatal opioid agonist exposure and the severity of neonatal opioid withdrawal syndrome

https://www.ncbi.nlm.nih.gov/pubmed/36905529

Longer duration of initial invasive mechanical ventilation is still a crucial risk factor for moderate-to-severe bronchopulmonary dysplasia in very preterm infants: a multicentrer prospective study

https://www.ncbi.nlm.nih.gov/pubmed/36604390

Systemic postnatal corticosteroid use for the prevention of bronchopulmonary dysplasia and its relationship to early neurodevelopment in extremely preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/36967444

Bronchopulmonary dysplasia and carbon dioxide retention

https://www.ncbi.nlm.nih.gov/pubmed/36951662

Modified lung ultrasound score for bronchopulmonary dysplasia predicts late respiratory outcomes in preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/37294069

Prediction of GutCheckNEC and its relation to severity of illness and measures of deterioration in necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/37339581

Hypermethylation of CTDSPL2 prior to necrotizing enterocolitis onset

https://www.ncbi.nlm.nih.gov/pubmed/37309586

Impact of an infant-driven feeding initiative on feeding outcomes in the preterm neonate

https://www.ncbi.nlm.nih.gov/pubmed/36084170

Effectiveness of early enteral feeding on health outcomes in preterm infants: an overview of systematic reviews

https://www.ncbi.nlm.nih.gov/pubmed/36253540

Associations of VEGF Polymorphisms With Retinopathy of Prematurity

https://www.ncbi.nlm.nih.gov/pubmed/37272765

A scoping review of neonatal opioid withdrawal and the infant gut microbiome: does human milk optimize infant outcomes?

https://www.ncbi.nlm.nih.gov/pubmed/36867674

Risk of feeding problems among infants with neonatal abstinence syndrome: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/34145169

Cefotaxime/sulbactam plus gentamicin as a potential carbapenem- and amikacin-sparing first-line combination for neonatal sepsis in high ESBL prevalence settings https://www.ncbi.nlm.nih.gov/pubmed/37283195