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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – September 2024

<u>Comparative safety of in utero exposure to buprenorphine combined with naloxone vs buprenorphine</u> <u>alone</u>

Loreen Straub, Brian T Bateman, Sonia Hernández-Díaz, et al. JAMA

This population-based cohort study included Medicaid-insured beneficiaries in the US from 2000 to 2018 who received 3369 pregnant individuals exposed to buprenorphine with naloxone during the first trimester and 5326 exposed to buprenorphine alone or who switched from the combination to buprenorphine alone by the end of the first trimester. When comparing buprenorphine combined with naloxone with buprenorphine alone, a lower risk for neonatal abstinence syndrome (absolute risk, 37.4% vs 55.8%; weighted relative risk, 0.77 [95% CI, 0.70-0.84]) and a modestly lower risk for neonatal intensive care unit admission (absolute risk, 30.6% vs 34.9%; weighted relative risk, 0.91 [95% CI, 0.85-0.98]) and small for gestational age (absolute risk, 10.0% vs 12.4%; weighted relative risk, 0.86 [95% CI, 0.75-0.98]) was observed. No differences were observed with respect to major congenital malformations, low birth weight, preterm birth, respiratory symptoms, or cesarean delivery. For the outcomes assessed, compared with buprenorphine alone, buprenorphine with naloxone during pregnancy appears to be a safe treatment option, and in some cases more favorable for neonatal and maternal outcomes.

Uterus transplant in women with absolute uterine-factor infertility

Giuliano Testa, Greg J McKenna, Anji Wall, et al. JAMA.

This case series included 20 participants with uterine-factor infertility and at least 1 functioning ovary who underwent uterus transplant in a large US tertiary care center between 2016 and 2019. Of 20 participants (median age, 30 years [range, 20-36]; 2 Asian, 1 Black, and 16 White), 14 (70%) had a successful uterus allograft; all 14 recipients gave birth to at least 1 live-born infant. Eleven of 20 recipients had at least 1 complication. Maternal and/or obstetrical complications occurred in 50% of the successful pregnancies, with the most common being gestational hypertension (2 [14%]), cervical insufficiency (2 [14%]), and preterm labor (2 [14%]). Among the 16 live-born infants, there were no congenital malformations.

Fingolimod, a sphingosine-1-phosphate receptor modulator prevents neonatal bronchopulmonary dysplasia and subsequent airway remodeling in a murine model Tara Sudhadevi, Akanksha Annadi, Prathima Basa, et al. *J Appl Physiol (1985)*

Neonatal bronchopulmonary dysplasia (BPD) is associated with alveolar simplification and airway remodeling. In this study, the authors investigated the role of fingolimod or FTY720, a known S1PR1 modulator approved for treatment of multiple sclerosis in the treatment of BPD. Fingolimod promotes degradation of S1PR1 by preventing its recycling thus serving as the equivalent of an inhibitor. Exposure of neonatal mice to hyperoxia enhanced the expression of S1PR1 in both airways and alveoli as compared to normoxia. This increased expression of S1PR1 in the airways persisted into adulthood accompanied by airway remodeling and airway hyperreactivity (AHR) post neonatal hyperoxia. Intranasal fingolimod at a much lower dose compared to intraperitoneal route of administration during neonatal hyperoxia improved alveolarization in neonates and reduced airway remodeling and AHR in adult mice associated with improved lung function. An increase in S1PR1 expression in the airways was associated with an increase in the expression of enzyme lysyl oxidase (LOX) in the airways following hyperoxia which was suppressed by fingolimod.

Transamniotic Fetal Immunotherapy (TRAFIT) with secretory IgA: a potential novel ancillary strategy for the prevention of necrotizing enterocolitis

Ashlyn E Whitlock, Kamila Moskowitzova, Ina Kycia, et al. Fetal Diagn Ther.

Secretory immunoglobulin-A (SIgA) binds bacteria enhancing mucosal immunity. Higher levels of intestinal bacteria bound by SIgA are protective against necrotizing enterocolitis. The authors sought to determine whether SIgA administered via TRAFIT could functionally bind intestinal bacteria postnatally. Fetuses (n=38) from four dams underwent intra-amniotic injections of human SIgA. SIgA-bacterial complexes were identified in all samples at all time points showing significantly higher positive human-SIgA events than unstained controls (p=0.03-0.05). The proportion of bacteria bound by IgA decreased daily, from 45.6% to 29.9% bound at 4 to 6 days post-TRAFIT, respectively (overall p=0.05). Transamniotic fetal immunotherapy with secretory-IgA leads to functionally IgA-bound bacteria into the postnatal period and may be a novel strategy for enhancing early mucosal immunity, potentially protecting the neonate against necrotizing enterocolitis.

Maternal obesity and risk of sudden unexpected infant death

Darren Tanner, Jan-Marino Ramirez, William B Weeks, et al. JAMA Pediatr

This is a retrospective cohort study that used data from the CDC and Prevention National Center for Health Statistics from 2015 to 2019 to determine whether maternal obesity is a risk factor for SUID and the proportion of SUID cases attributable to maternal obesity. Live births for infants >28 weeks' gestation was included and SUID defined as deaths occurring 7 days to 1 year after birth. Compared with mothers of normal BMI, infants born to mothers with obesity had a higher SUID risk that increased with increasing obesity severity (Class III obesity, BMI >40, at the highest risk). This data suggests a possible risk for SUID; however, the specific causal mechanism is unknown. Therefore, further research into the mechanism is warranted.

<u>Neonatal hypoglycemia and neurocognitive function at school age: a prospective cohort study</u> Xingyu Wei, Nike Franke, Jane M Alsweiler, et al. *J Pediatr*.

This is a prospective cohort study from the pre-hPOD study that assessed relationship between transient neonatal hypoglycemia in at-risk infants and neurocognitive function at 6-7 years of corrected age. Hypoglycemia was defined as ≥1 consecutive blood glucose concentration <47 mg/dl (2.6 mmol/L), severe as <36 mg/dl (2.0 mmol/L), mild as 36 to <47 mg/dL (2.0 to <2.6 mmol/L), brief as 1-2 episodes, and recurrent as ≥3 episodes. The primary outcome was neurocognitive impairment, defined as >1 SD below the mean in >1 NIH Toolbox tests. Secondary outcomes included cognitive, motor, language, emotional-behavioral, and visual perceptual development. No significant differences seen for neurocognitive impairment. However, infants who had severe or recurrent hypoglycemia had worse visual motion perception and increased risk of emotional-behavioral difficulty at 6-7 years of age.

The relation between low-grade fever during prolonged rupture of membranes (>12 hours) at term and infectious outcomes: a retrospective cohort study

Raneen Abu Shqara, Yara Nakhleh Francis, Lior Lowenstein, et al. Am J Obstet Gynecol.

This retrospective study assesses the relationship between intrapartum low-grade fever (37.5°C−37.9°C) and primary outcomes of postpartum endometritis and neonatal intensive care unit admission rates. The secondary neonatal outcomes were early-onset sepsis, 5-minute Apgar score of <7, umbilical artery cord pH<7.2 and pH<7.05, neonatal intensive care unit admission length of stay, and respiratory distress. The data were analyzed according to rupture of membranes 12 to 18 hours and rupture of membranes ≥18 hours. In women with rupture of membranes ≥18 hours, intrapartum ampicillin was administered, and chorioamniotic membrane swabs were obtained. A multivariate logistic regression model was used to control for multiple variables. The study included 687 women with rupture of membranes 12 to 18 hours and 1109 with rupture of membranes ≥18 hours. In both latency groups, the rates were higher for cesarean delivery, endometritis, surgical site infections, umbilical cord pH<7.2, neonatal intensive care unit admission, and sepsis workup among those with low-grade fever than among those with normal body temperature. Among women with low-grade fever, the positive likelihood ratio for NICU admission was 3.2 (95% confidence interval, 2.0–5.3). This study suggests that after adjusting for common causes of intrapartum low grade fever, in the setting of prolonged rupture of membranes it increases risk of adverse maternal and neonatal outcomes.

<u>NIV-NAVA versus non-invasive respiratory support in preterm neonates: a meta-analysis of randomized</u> controlled trials

Milena R Tomé, Eduardo A de S Orlandin, Mariana T Zinher, et al. J Perinatol.

The authors sought to analyze the clinical and physiological outcomes of NIV-NAVA in preterm infants compared with other non-invasive respiratory support. To this end, they conducted a meta-analysis of RCTs and randomized crossover studies comparing NIV-NAVA to other non-invasive strategies in preterm neonates. They found that NIV-NAVA was superior to other non-invasive support in maximum EAdi, asynchrony index, and peak inspiratory pressure. However, they found no significant differences in the incidences of intubation, reintubation, or bronchopulmonary dysplasia. They concluded that NIV-NAVA was associated with improvements in maximum Edi, asynchrony index, and peak inspiratory pressure relative to other non-invasive respiratory strategies, without significant differences in clinical outcomes between groups.

<u>Comparison of current to past outcomes in congenital diaphragmatic hernia using MRI observed-to-</u> <u>expected total fetal lung volume</u>

Michelle J Yang, Tanner S Ellsworth, Paula J Woodward, et al. J Perinatol.

Fetal Centers use imaging studies to predict congenital diaphragmatic hernia (CDH) prognosis and the need for fetal therapy. Given improving CDH survival, the authors hypothesized that current fetal imaging severity predictions no longer reflect true outcomes and fail to justify the risks of fetal therapy. To test this hypothesis, the authors analyzed their single-center contemporary data in a left-sided CDH cohort (n = 58) by prognostic criteria determined by MRI observed-to-expected total fetal lung volumes: severe <25%, moderate 25-35%, and mild >35%. They compared contemporary survival to prior studies and the TOTAL trials. They found that current fetal imaging criteria are overly pessimistic and may lead to unwarranted fetal intervention. Fetal therapies remain experimental. Future studies will require updated prognostic criteria

OTHER NOTEWORTHY PUBLICATIONS – September 2024

Pediatrics

Trends in HIE and Use of Hypothermia in California: Opportunities for Improvement <u>https://pubmed.ncbi.nlm.nih.gov/39193616/</u> Variability of care practices for extremely early deliveries <u>https://pubmed.ncbi.nlm.nih.gov/39129496/</u> Cooling for hypoxic ischemic encephalopathy: from evidence to practice <u>https://pubmed.ncbi.nlm.nih.gov/39193625/</u> Four important questions about between-hospital differences in care at <25 weeks' gestation <u>https://pubmed.ncbi.nlm.nih.gov/39129508/</u> Phototherapy to prevent severe neonatal hyperbilirubinemia in the newborn infant 35 or more weeks of

gestation: technical report

https://pubmed.ncbi.nlm.nih.gov/39183672/

Reducing failed extubations in preterm infants via standardization and real-time decision support https://pubmed.ncbi.nlm.nih.gov/39118595/

Prevention of NICU admission hypothermia in moderate- and late-preterm infants https://pubmed.ncbi.nlm.nih.gov/39169849/

Journal of Pediatrics

Establishing neonate-specific prognostic markers in acute liver failure: admission alpha fetoprotein and novel neonatal acute liver failure scores predict patient outcomes

https://pubmed.ncbi.nlm.nih.gov/38692563/

Change in volumes and location of preterm white matter injury over a period of 15 years https://pubmed.ncbi.nlm.nih.gov/38754774/

Associations of abnormal maternal glucose regulation in pregnancy with offspring adiposity, insulin resistance, and adipokine markers during childhood and adolescence

https://pubmed.ncbi.nlm.nih.gov/38759779/

Stage iii chorioamnionitis is associated with reduced risk of severe retinopathy of prematurity https://pubmed.ncbi.nlm.nih.gov/38703992/

Outcomes of neonates born with symptomatic tetralogy of fallot and absent ductus arteriosus https://pubmed.ncbi.nlm.nih.gov/38815742/

Sepsis huddles in the neonatal intensive care unit: a retrospective cohort study of late-onset infection recognition and severity assessment

https://pubmed.ncbi.nlm.nih.gov/38815749/

Neonatal hypoglycemia and neurocognitive function at school age: a prospective cohort study https://pubmed.ncbi.nlm.nih.gov/38815750/

Pediatric Research

No new articles

Archives of Disease in Childhood - Fetal & Neonatal Edition

Data collection in neonatal retrieval medicine: a platform for research and improvement https://pubmed.ncbi.nlm.nih.gov/38777562/

Tracking national neonatal transport activity and metrics using the UK Neonatal Transport Group dataset 2012–2021: a narrative review

https://pubmed.ncbi.nlm.nih.gov/38272658/

Neonatal high-frequency oscillatory ventilation: where are we now?

https://pubmed.ncbi.nlm.nih.gov/37726160/

Does extremely early expression of colostrum after very preterm birth improve mother's own milk quantity? A cohort study

https://pubmed.ncbi.nlm.nih.gov/38442953/

Hydrocortisone in very preterm neonates for BPD prevention: meta-analysis and effect size modifiers https://pubmed.ncbi.nlm.nih.gov/38237961/

Variations in neonatal mortality of preterm infants with intraparenchymal haemorrhage in Europe: the EPICE cohort

https://pubmed.ncbi.nlm.nih.gov/38272659/

Early parenteral nutrition is associated with improved growth in very low birth weight infants: a retrospective study

https://pubmed.ncbi.nlm.nih.gov/38212106/

Does ECG monitoring affect resuscitation for neonates with pulseless electrical activity in the delivery room? A simulated, pilot, crossover randomised trial

https://pubmed.ncbi.nlm.nih.gov/38237962/

Newborn face mask ventilation training using a standardised intervention and respiratory function monitor: a before and after manikin study

https://pubmed.ncbi.nlm.nih.gov/38272657/

Neurosensory, cognitive and academic outcomes at 8 years in children born 22–23 weeks' gestation compared with more mature births

https://pubmed.ncbi.nlm.nih.gov/38395594/

Neurodevelopment at age 5.5 years according to Ages & Stages Questionnaire at 2 years' corrected age in children born preterm: the EPIPAGE-2 cohort study

https://pubmed.ncbi.nlm.nih.gov/38290830/

Comparison of two different oxygen saturation target ranges for automated oxygen control in preterm infants: a randomised cross-over trial

https://pubmed.ncbi.nlm.nih.gov/38316547/

Randomised study of a new inline respiratory function monitor (Juno) to improve mask seal and delivered ventilation with neonatal manikins

https://pubmed.ncbi.nlm.nih.gov/38336472/

Place of birth and postnatal transfers in infants with congenital diaphragmatic hernia in England and Wales: a descriptive observational cohort study

https://pubmed.ncbi.nlm.nih.gov/38316546/

Using the providers' perspective on video review of neonatal procedures to create a roadmap: a qualitative study

https://pubmed.ncbi.nlm.nih.gov/38326027/

Extended CPAP or low-flow nasal cannula for intermittent hypoxaemia in preterm infants: a 24-hour randomised clinical trial

https://pubmed.ncbi.nlm.nih.gov/38365446/

Effect of gestational age on cerebral lesions in neonatal encephalopathy

https://pubmed.ncbi.nlm.nih.gov/38418209/

Journal of Perinatology

The spectrum of pneumonia among intubated neonates in the neonatal intensive care unit https://pubmed.ncbi.nlm.nih.gov/38698211/

Does the evidence support in utero influences on later health and disease? A systematic review of highly cited Barker studies on developmental origins

https://pubmed.ncbi.nlm.nih.gov/38337020/

Safety of bubble nasal intermittent positive pressure ventilation (NIPPV) versus bubble nasal continuous positive airway pressure (NCPAP) in preterm infants with respiratory distress

https://pubmed.ncbi.nlm.nih.gov/38361002/

Lung ultrasound score for prediction of surfactant administration in preterm infants with respiratory failure

https://pubmed.ncbi.nlm.nih.gov/39122885/

Implementation of a standardized lung ultrasound protocol for respiratory distress in a neonatal intensive care unit: an observational study

https://pubmed.ncbi.nlm.nih.gov/38361003/

Characterizing continuous positive airway pressure (CPAP) Belly Syndrome in preterm infants in the neonatal intensive care unit (NICU)

https://pubmed.ncbi.nlm.nih.gov/38448640/

Respiratory outcomes of neonates born after previable premature rupture of membranes and treated with gentle ventilation

https://pubmed.ncbi.nlm.nih.gov/38822149/

Neonatal respiratory care practice among level III and IV NICUs in New England

https://pubmed.ncbi.nlm.nih.gov/38467745/

The association of the room air challenge with long-term outcomes in extremely preterm infants https://pubmed.ncbi.nlm.nih.gov/39095524/

Direct breastfeeding frequency of late preterm and term infants in the neonatal intensive care unit and availability of mother's own milk at six months of age. a retrospective cohort study

https://pubmed.ncbi.nlm.nih.gov/38678083/

Biomarker-based text messages to promote lactation success in mothers of critically III infants: a randomized controlled pilot study

https://pubmed.ncbi.nlm.nih.gov/38705950/

Human milk derived fortifiers are associated with glucose, phosphorus, and calcium derangements https://pubmed.ncbi.nlm.nih.gov/38658693/

Prenatal ultrasound markers for prediction of complex gastroschisis—single-center retrospective cohort study

https://pubmed.ncbi.nlm.nih.gov/38898181/

A multicenter matched-cohort analysis of gastroschisis outcomes in infants born before 32 weeks gestation

https://pubmed.ncbi.nlm.nih.gov/38744936/

Hydrops and congenital diaphragmatic hernia: reported incidence and postnatal outcomes. Analysis of the congenital diaphragmatic hernia study group registry

https://pubmed.ncbi.nlm.nih.gov/38816581/

Association between initial ventilation mode and hospital outcomes for severe congenital diaphragmatic hernia

https://pubmed.ncbi.nlm.nih.gov/38942929/

Reducing umbilical catheter migration rates by using a novel securement device

https://pubmed.ncbi.nlm.nih.gov/38521880/

Assessment of the clinical knowledge of ChatGPT-4 in neonatal-perinatal medicine: a comparative analysis with ChatGPT-3.5

https://pubmed.ncbi.nlm.nih.gov/38402349/

Agreement between intermittent glucose concentrations and continuous glucose monitoring in at-risk newborns

https://pubmed.ncbi.nlm.nih.gov/38374217/

Metabolic bone disease of prematurity screening and individualized enteral mineral supplementation in high-risk neonates: a quality improvement initiative

https://pubmed.ncbi.nlm.nih.gov/38321167/

Deciphering macronutrient information about human milk

https://pubmed.ncbi.nlm.nih.gov/38879586/

<u>Neonatology</u>

No new content

American Journal of Perinatology

Implicit bias and health disparities education in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/38190976/

Substantiating and adopting lung ultrasound scores to predict surfactant need in preterm neonates with respiratory distress syndrome within an institution

https://pubmed.ncbi.nlm.nih.gov/38346693/

Heart rate variability as a prognostic tool for gastroschisis infants in the neonatal intensive critical unit https://pubmed.ncbi.nlm.nih.gov/38216140/

Effect of antenatal magnesium sulfate exposure on patent ductus arteriosus in premature infants https://pubmed.ncbi.nlm.nih.gov/38320597/

Early echocardiographic predictors of eventual need for patent ductus arteriosus treatment: a retrospective study

https://pubmed.ncbi.nlm.nih.gov/38237629/

Single-center experience with therapeutic hypothermia for hypoxic–ischemic encephalopathy in infants with <36 weeks' gestation

https://pubmed.ncbi.nlm.nih.gov/38262469/

Validation of a costing algorithm and cost drivers for neonates admitted to the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/38262468/

The impact of the COVID-19 pandemic on respiratory syncytial virus infection in the neonatal period https://pubmed.ncbi.nlm.nih.gov/38272061/

Development of a prediction model for surgery or early mortality at the time of initial assessment for necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/38272063/

Variability in practice and implementation of oxygen target saturation policies in united states' neonatal intensive care units

https://pubmed.ncbi.nlm.nih.gov/38373706/

Reference ranges for regional cerebral oxygen saturation with Masimo o3 after birth and differences with other devices

https://pubmed.ncbi.nlm.nih.gov/38272062/

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

Preterm birth, low birth weight, and their co-occurrence among women with preexisting chronic diseases prior to conception: a cross-sectional analysis of postpartum women in a low-resource setting in Ghana

https://pubmed.ncbi.nlm.nih.gov/39223642/

The effect of mode of delivery on postpartum comfort level and breastfeeding self-efficacy: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/39218893/

Neoreviews

The relationship between pediatric medical training and neonatal care in the delivery room and beyond https://pubmed.ncbi.nlm.nih.gov/39217130/

A practical, systematic approach to genetic diagnosis in a fetus or neonate with congenital anomalies https://pubmed.ncbi.nlm.nih.gov/39217133/

Neonatal resuscitation and delivery room care: a changing global landscape

https://pubmed.ncbi.nlm.nih.gov/39217135/

Using virtual reality-based simulation in neonatal resuscitation program training

https://pubmed.ncbi.nlm.nih.gov/39217132/

A term neonate with a renal mass

https://pubmed.ncbi.nlm.nih.gov/39217134/

Antenatal hydrops in a dysmorphic neonate: a combination of etiologies

https://pubmed.ncbi.nlm.nih.gov/39217131/

Hypercapnia and hypoventilation in a term newborn

https://pubmed.ncbi.nlm.nih.gov/39217129/

Term neonate with a scalp defect

https://pubmed.ncbi.nlm.nih.gov/39217137/

Prenatal diagnosis of a heterotaxy syndrome

https://pubmed.ncbi.nlm.nih.gov/39217136/

JAMA Pediatrics

Incidence of nonsynostotic plagiocephaly and developmental disorders

https://pubmed.ncbi.nlm.nih.gov/39037805/

Maternal obesity and risk of sudden unexpected infant death https://pubmed.ncbi.nlm.nih.gov/39073792/

Newborn screening and birth prevalence for spinal muscular atrophy in the us https://pubmed.ncbi.nlm.nih.gov/39008286/

BMC Pediatrics

Using cerebral regional oxygen saturation and amplitude-integrated electroencephalography in neonates on extracorporeal membrane oxygenation: preliminary experience from a single center https://www.ncbi.nlm.nih.gov/pubmed/39289675

Risk factors associated with anemia of prematurity requiring red blood cell transfusion in very low birth weight infants: a retrospective study

https://www.ncbi.nlm.nih.gov/pubmed/39350041

Postnatal weight loss and neurodevelopmental outcomes at age 3 years in extremely preterm infants: a cohort study

https://www.ncbi.nlm.nih.gov/pubmed/39343922

The role of endothelial frequency in the cerebral blood flow control during neonatal asphyxia: a retrospective longitudinal study

https://www.ncbi.nlm.nih.gov/pubmed/39342145

Association between early metabolic acidosis and bronchopulmonary dysplasia/death in preterm infants born at less than 28 weeks' gestation: an observational cohort study https://www.ncbi.nlm.nih.gov/pubmed/39342228

Pediatric Critical Care Medicine

Current epidemiology of vocal cord dysfunction after congenital heart surgery in young infants https://www.ncbi.nlm.nih.gov/pubmed/31246739

New England Journal of Medicine

Medication for gastroesophageal reflux disease in infants https://pubmed.ncbi.nlm.nih.gov/39259900

<u>Lancet</u>

Congenital syphilis in a 2-month-old infant during Japanese outbreak https://pubmed.ncbi.nlm.nih.gov/39244274

<u>JAMA</u>

Maternal prepregnancy obesity linked to sudden unexpected infant death <u>https://pubmed.ncbi.nlm.nih.gov/39073792</u> Comparative safety of in utero exposure to buprenorphine combined with naloxone vs buprenorphine alone

https://pubmed.ncbi.nlm.nih.gov/39133511

Uterus transplant in women with absolute uterine-factor infertility https://pubmed.ncbi.nlm.nih.gov/39145955 Prenatal RSV vaccine not tied to higher risk of preterm births https://pubmed.ncbi.nlm.nih.gov/39093559

<u>BMJ</u>

The importance of the day of embryo transfer during in vitro fertilisation <u>https://pubmed.ncbi.nlm.nih.gov/39284612</u> Timing embryo transfers during assisted reproduction <u>https://pubmed.ncbi.nlm.nih.gov/39284597</u>

Pediatric Infectious Disease Journal

Diagnostic performance of machine learning-based models in neonatal sepsis: a systematic review https://pubmed.ncbi.nlm.nih.gov/39079037

Pediatric Cardiology

No new articles

Pediatric Neurology

Efficacy of oral trihexyphenidyl plus clonazepam versus trihexyphenidyl for the treatment of dystonia in children with dystonic cerebral palsy: an open-label randomized controlled trial https://pubmed.ncbi.nlm.nih.gov/38945037/

Obstetrics and Gynecology

Association between intrapartum nitrous oxide for labor analgesia and short-term neonatal outcomes <u>https://pubmed.ncbi.nlm.nih.gov/39146545</u>

American Journal of Obstetrics & Gynecology

Prenatal methamphetamine use increases risk of adverse maternal and neonatal outcomes https://www.ncbi.nlm.nih.gov/pubmed/38789069

The relation between low-grade fever during prolonged rupture of membranes (>12 hours) at term and infectious outcomes: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/38871240

A prospective safety and feasibility study of a novel device for preterm birth delay and prevention https://www.ncbi.nlm.nih.gov/pubmed/38761836

Hospital Pediatrics

Management and clinical outcomes of neonatal hypothermia in the newborn nursery https://www.ncbi.nlm.nih.gov/pubmed/39139145

BASIC SCIENCE SELECTIONS

Fingolimod, a sphingosine-1-phosphate receptor modulator prevents neonatal bronchopulmonary dysplasia and subsequent airway remodeling in a murine model

https://www.ncbi.nlm.nih.gov/pubmed/39262336

miR-3202 inhibits bronchopulmonary dysplasia-mediated apoptosis and oxidative stress in bronchial epithelial cells via targeting RAG1

https://www.ncbi.nlm.nih.gov/pubmed/39067173

Transamniotic Fetal Immunotherapy (TRAFIT) with secretory IgA: a potential novel ancillary strategy for the prevention of necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/39265555

Feeding cessation and antibiotics improve clinical symptoms and alleviate gut and systemic

inflammation in preterm pigs sensitive to necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/39241567

Vitamin E and GPX4 cooperatively protect treg cells from ferroptosis and alleviate intestinal inflammatory damage in necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/39137584

Macrophage alpha7nAChR alleviates the inflammation of neonatal necrotizing enterocolitis through mTOR/NLRP3/IL-1beta pathway

https://www.ncbi.nlm.nih.gov/pubmed/38996778

Exogenous autoinducer-2 alleviates intestinal damage in necrotizing enterocolitis via PAR2/MMP3 signaling pathway

https://www.ncbi.nlm.nih.gov/pubmed/38950458

Quantification of gut microbiome metabolites using chemical isotope derivatization strategy combined with LC-MS/MS: Application in neonatal hypoxic-ischemic encephalopathy rat model https://www.ncbi.nlm.nih.gov/pubmed/38908236

Other relevant articles

Flexible bronchoscopy in preterm infants with bronchopulmonary dysplasia: findings and complications in a matched control study <u>https://www.ncbi.nlm.nih.gov/pubmed/39245659</u>

A comprehensive consolidation of data on the relationship between surfactant protein-B (SFTPB) polymorphisms and susceptibility to bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/39245635

Lung ultrasound in early prediction of bronchopulmonary dysplasia in pre-term babies https://www.ncbi.nlm.nih.gov/pubmed/38907789

Does the Timing of Surgical Intervention Impact Outcomes in Necrotizing Enterocolitis? https://www.ncbi.nlm.nih.gov/pubmed/38794835