Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – March 2024

Childhood outcomes after maternal antenatal sildenafil treatment for severe early-onset fetal growth restriction: a randomized trial (STRIDER NZAus)

Christopher J D McKinlay, Chad Anderson, Jeanie L Y Cheong, et al. J Perinatol.

This study is a follow-up at 2.5 years of children from the STRIDER NZAus Trial (N = 112) in which women with singleton pregnancies affected by severe early fetal growth restriction were randomized to receive sildenafil citrate or placebo until 32 weeks. The authors found that there was no difference between groups in survival without neurosensory impairment (cerebral palsy, deafness, blindness, cognitive delay (Bayley III cognition or language score >1 SD below mean) or motor delay: 30/56[54%] vs. 34/56[61%]; aOR = 0.74, 95%CI: 0.31, 1.77). However, children exposed to sildenafil appeared to be more likely to have cognitive delay (13/45[29%] vs. 4/40[10%]; aOR = 3.71, 95% CI: 1.01, 13.63) but less likely to have emotional-behavioural difficulties (2/43[5%] vs. 8/38[21%]; aOR = 0.19, 95%CI: 0.03, 1.00).

Early feeding for the prevention of neonatal hypoglycaemia: a systematic review and meta-analysis. Lily F Roberts, Jane E Harding, Caroline A Crowther, et al. Neonatology.

This meta-analysis included a total of 175,392 participants from 19 studies, of which two were RCTs, 14 cohort studies, two cross-sectional studies, and one a case-control study. Most studies (13/19) were conducted in low- or lower-middle-income countries. Early feeding may be associated with reduced neonatal hypoglycemia (four cohort studies, 744 infants, odds ratio [OR] 0.19 (95% CI: 0.10-0.35), p<0.00001, I squared = 44%) and slightly reduced duration of initial hospital stay (one cohort study, 1,673 infants, mean difference: -0.20 days [95% CI: -0.31 to -0.09], p = 0.0003), but the evidence is very uncertain. One RCT found early feeding had little or no effect on the risk of neonatal mortality, but three cohort studies found early feeding may be associated with reduced risk (136,468 infants, OR 0.51 [95% CI: 0.37-0.72]; low certainty evidence; p<0.0001; I squared = 54%). The authors concluded that early feeding may reduce the incidence of neonatal hypoglycemia, but the evidence is very uncertain.

Oral administration of bone marrow-derived mesenchymal stem cells attenuates intestinal injury in necrotizing enterocolitis Yeong Seok Lee, Yong Hoon Jun, Juyoung Lee, et al. *Clin Exp Pediatr.*

This study aimed to determine the optimal dose of intraperitoneally administered bone marrowderived mesenchymal stem cells (BM-MSCs) and investigate the therapeutic potential of orally administered BM-MSCs in necrotizing enterocolitis (NEC). On day 3, the neonatal mice were randomly divided into control, negative control, and BM-MSC-treated groups. High-dose (1x106 cells) or low-dose (1x105 cells) BM-MSCs were administered intraperitoneally 1 or 3 times between days 6 and 8 to treat the NEC. The orally administered group received a low dose of BM-MSCs on day 6. Tissue injury, apoptosis, and inflammatory marker levels were significantly reduced after BM-MSC administration. Oral administration was as effective as intraperitoneal administration, even at a low dose (1x105 cells) of BM-MSCs. The efficacy of high (1x106 cells) or multiple divided doses of BM-MSCs did not differ from that of low-dose treatment. The oral administration of BM-MSCs is a promising treatment option for NEC in infants. Further human studies of BM-MSCs are necessary to determine the optimal dose required to achieve safe and effective outcomes.

Evaluating the safety and efficacy of erythropoietin therapy for neonatal hypoxicischemic encephalopathy: a systematic review and meta-analysis Shayan Marsia, Danisha Kumar, Hamna Raheel, et al. *Pediatr Neurol.*

Multiple studies have linked the use of Erythropoietin (EPO) for hypoxic-ischemia encephalopathy (HIE), either as a monotherapy or in conjunction with therapeutic hypothermia (TH), with improved neonatal outcomes including death and neurodisability. However, there is also evidence in the literature that raises concerns about its efficacy and safety for the treatment of neonatal encephalopathy (NE). Seven studies with 903 infants with the diagnosis of NE were included in our meta-analysis. EPO did not reduce the risk of death or neurodisability (risk ratio 0.68 [95% confidence interval [CI]: 0.43 to 1.09]) (P = 0.11). Similarly, the risk of cerebral palsy was not reduced by the administration of EPO (risk ratio 0.68 [95% CI: 0.33 to 1.40]) (P = 0.30). The results do not support the use of EPO for the treatment of neonatal encephalopathy.

Advice to clinicians from expectant parents at extreme prematurity: a multimethod study Anne Sullivan, Bonnie Arzuaga, Donna Luff, et al. *Pediatrics*.

In this study, the authors aimed to determine empirical, parent-derived recommendations and advice for clinicians counseling on extreme prematurity. Pregnant women (and their partners) admitted at 22 0/7 to 25 6/7 weeks' estimated gestation participated in postantenatal counseling semi-structured interviews or questionnaires to explore parental preferences in the counseling process, including advice to clinicians. Parental recommendations related to compassionately engaging, supporting, and communicating with families, as well as aligning teams and following up. The authors present an empirical parent-derived, family-centered, and practical approach for clinicians counseling on extreme prematurity. Future studies should include a more diverse patient population and assess the impact of these recommendations on the counseling process and outcomes.

Disparities in racial, ethnic, and payer groups for pediatric safety events in US hospitals Kavita Parikh, Matt Hall, Joel S Tieder, et al. *Pediatrics*.

The authors analyzed a national sample of hospitalizations to identify disparities in safety events. In this population-based, retrospective cohort study of the 2019 Kids' Inpatient Database, independent variables were race, ethnicity, and payer. Outcomes were Agency for Healthcare Research and Quality pediatric safety indicators (PDIs). Risk-adjusted odds ratios were calculated using white and private payer reference groups. Differences by payer were evaluated by stratifying race and ethnicity. Compared with white patients, Black and Hispanic patients had significantly greater odds in 5 of 7 PDIs. Compared with privately insured patients, Medicaid-covered patients had significantly greater odds in 4 of 7 PDIs. Stratified analyses demonstrated persistent disparities by race and ethnicity, even among privately insured children. Disparities in safety events were identified for Black and Hispanic children, indicating a need for targeted interventions to improve patient safety in the hospital.

<u>Outcomes by disease onset, sex, and intervention in neonates with SIP and surgical NEC</u> Parvesh Mohan Garg, Katheryn Lett, Md Abu Yusuf Ansari, et al. *Pediatr Res.*

This is a retrospective single-center study to identify outcomes among a cohort of infants for surgical NEC and spontaneous intestinal perforation (SIP) categorized by the age of onset, interventions, and sex. Infants with NEC/SIP onset >20 days had significantly lower odds of small bowel involvement and higher necrosis than onset <10 days. Initial laparotomy was associated with more bowel loss, small and large intestine involvement, and ileocecal valve resection than initial PD therapy. Females underwent fewer small bowel resections but had higher surgical morbidity than males. This study brings to light a possible developmental pattern for risk of intestinal injury depending on the gestational age and age of disease onset.

The effect of oropharyngeal mother's milk on nutritional outcomes in preterm infants: a randomized controlled trial

Fatemeh Kelich, Mojtaba Qanbari Qalehsari, Ali Zabihi, et al. BMC Pediatr.

This is an RCT that assessed infants receiving breastmilk (BM; intervention) versus sterile water (placebo) at 48 to 72 hours after birth for infants born between 25 to 31 weeks gestational age. The intervention was to administer 1ml of BM or sterile water using an insulin syringe every 2 hours and the intervention ended if the infant was able to receive this volume for three consecutive meals. The study results showed that the time to start enteral nutrition in the intervention group was lower than in the control group (P = 0.012). Also, the mean volume of milk received by mouth at the time of discharge were higher in the intervention group and the length of stay was lower in the intervention group.

<u>RSV prefusion f protein–based maternal vaccine – preterm birth and other outcomes</u> Ilse Dieussaert, Joon Hyung Kim, Sabine Luik, et al. *N Engl J Med.*

This is a phase 3 trial involving pregnant women 18 to 49 years of age to assess the efficacy and safety of a candidate RSV prefusion F protein—based maternal vaccine (RSVPreF3-Mat). The women were randomly assigned in a 2:1 ratio to receive RSVPreF3-Mat or placebo between 24 weeks 0 days and 34 weeks 0 days of gestation. The primary outcomes were any or severe medically assessed RSV-associated lower respiratory tract disease in infants from birth to 6 months of age and safety in infants from birth to 12 months of age. The target enrollment was not reached because enrollment was stopped early. A total of 3426 infants in the vaccine group

and 1711 infants in the placebo group were followed from birth to 6 months of age; vaccine efficacy ranged between 65.5% to 69.0%. Preterm birth occurred in 6.8% of the infants (237 of 3494) in the vaccine group and in 4.9% of those (86 of 1739) in the placebo group (relative risk, 1.37; 95% confidence interval [CI], 1.08 to 1.74; P=0.01). The results of this trial, in which enrollment was stopped early because of safety concerns, suggest that the risks of any and severe medically assessed RSV-associated lower respiratory tract disease among infants were lower with the candidate maternal RSV vaccine than with placebo but that the risk of preterm birth was higher with the candidate vaccine.

Effect of early vs late inguinal hernia repair on serious adverse event rates in preterm infants: a randomized clinical trial

HIP Trial Investigators; Martin L Blakely, Andrea Krzyzaniak, Melvin S Dassinger, et al. JAMA.

A multicenter randomized clinical trial randomizing preterm infants with inguinal hernia diagnosed during initial hospitalization to early or late repair. In the early repair strategy, infants underwent inguinal hernia repair before neonatal intensive care unit discharge. In the late repair strategy, hernia repair was planned after discharge from the neonatal intensive care unit and when the infants were older than 55 weeks' postmenstrual age. The primary outcome was occurrence of any prespecified serious adverse event during the 10-month observation period (determined by a blinded adjudication committee). The secondary outcomes included the total number of days in the hospital during the 10-month observation period. 338 infants were randomized (172 in the early and 166 in the late repair group), 320 underwent operative repair; the mean gestational age at birth was 26.6 weeks; the mean postnatal age at enrollment was 12 weeks. 44 (28%) in the early repair group vs 27 (18%) in the late repair group had at least 1 serious adverse event (risk difference, -7.9% [95% credible interval, -16.9% to 0%]. The median number of days in the hospital during the 10-month observation period was 19.0 days (IQR, 9.8 to 35.0 days) in the early repair group vs 16.0 days (IQR, 7.0 to 38.0 days) in the late repair group. The results of this trials suggests that among preterm infants with inguinal hernia, the late repair strategy resulted in fewer infants having at least 1 serious adverse event.

OTHER NOTEWORTHY PUBLICATIONS – March 2024

COVID-19

Maternal COVID-19 vaccination and prevention of symptomatic infection in infants <u>https://pubmed.ncbi.nlm.nih.gov/38332733/</u> Remdesivir for COVID-19 in hospitalized children: a phase 2/3 study <u>https://pubmed.ncbi.nlm.nih.gov/38332740/</u> High cardiac troponin levels in infants with Acute SARS-CoV-2 Infection: a prospective comparative study <u>https://pubmed.ncbi.nlm.nih.gov/38135032/</u> In utero exposure to maternal COVID-19 vaccination and offspring neurodevelopment at 12 and 18 months https://pubmed.ncbi.nlm.nih.gov/28252445/

https://pubmed.ncbi.nlm.nih.gov/38252445/

Pediatrics

Characteristics of sudden unexpected infant deaths on shared and nonshared sleep surfaces https://pubmed.ncbi.nlm.nih.gov/38374785/

Respiratory syncytial virus-associated hospitalizations among children <5 years old: 2016 to 2020 https://pubmed.ncbi.nlm.nih.gov/38298053/

A qualitative study of resident advocacy work

https://pubmed.ncbi.nlm.nih.gov/38361480/

Parental and newborn rights in resuscitation decisions: the risk of governmental overreach https://pubmed.ncbi.nlm.nih.gov/38298085/

Missing outcome data in recent perinatal and neonatal clinical trials

https://pubmed.ncbi.nlm.nih.gov/38389453/

Survival of infants with severe congenital kidney disease after ECMO and kidney support therapy https://pubmed.ncbi.nlm.nih.gov/38303642/

Journal of Pediatrics

Improving neonatal patient outcomes using simulation-based education https://pubmed.ncbi.nlm.nih.gov/38096976/

Diuretic tolerance to repeated-dose furosemide in infants born very preterm with bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/37918519/

Neonatal hypoxic-ischemic encephalopathy spectrum: severity-stratified analysis of neuroimaging modalities and association with neurodevelopmental outcomes

https://pubmed.ncbi.nlm.nih.gov/38061422/

Shape of pulmonary artery doppler flow profile and right ventricular hemodynamics in neonates <u>https://pubmed.ncbi.nlm.nih.gov/38052293/</u>

Time to reaching target cooling temperature and 2-year outcomes in infants with hypoxic-ischemic encephalopathy

https://pubmed.ncbi.nlm.nih.gov/38006967/

Perioperative brain injury in relation to early neurodevelopment among children with severe congenital heart disease: results from a European collaboration

https://pubmed.ncbi.nlm.nih.gov/37995930/

Normative magnetic resonance imaging data increase the sensitivity to brain volume abnormalities in the classification of fetal alcohol spectrum disorder

https://pubmed.ncbi.nlm.nih.gov/38065282/

Clinical decision support for improved neonatal care: the development of a machine learning model for the prediction of late-onset sepsis and necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/38065281/

Unbound bilirubin and acute bilirubin encephalopathy in infants born late preterm and term with significant hyperbilirubinemia

https://pubmed.ncbi.nlm.nih.gov/38135027/

Feasibility and safety of sildenafil to repair brain injury secondary to birth asphyxia (sane-01): a randomized, double-blind, placebo-controlled phase ib clinical trial

https://pubmed.ncbi.nlm.nih.gov/38142044/

A dyadic framework of care for opioid-exposed birthing persons and their infants and children <u>https://pubmed.ncbi.nlm.nih.gov/38142930/</u>

Variations in site-specific costs for infants born extremely preterm in Canadian neonatal intensive care units

https://pubmed.ncbi.nlm.nih.gov/38096975/

Secular trends in patent ductus arteriosus management in infants born preterm in the national institute of child health and human development neonatal research network

https://pubmed.ncbi.nlm.nih.gov/38135028/

Annular erythema of infancy

https://pubmed.ncbi.nlm.nih.gov/38008213/

Pediatric Research

COHESION: a core outcome set for the treatment of neonatal encephalopathy https://pubmed.ncbi.nlm.nih.gov/38135724/

Postnatal steroids as lung protective and anti-inflammatory in preterm lambs exposed to antenatal inflammation

https://pubmed.ncbi.nlm.nih.gov/38066248/

Congenital diaphragmatic hernia: phosphodiesterase-5 and Arginase inhibitors prevent pulmonary vascular hypoplasia in rat lungs

https://pubmed.ncbi.nlm.nih.gov/36418485/

Age-related cytokine imbalance in the thymus in sudden infant death syndrome (SIDS) <u>https://pubmed.ncbi.nlm.nih.gov/37679518/</u>

Reduction of renal interstitial fibrosis by targeting Tie2 in vascular endothelial cells https://pubmed.ncbi.nlm.nih.gov/38012310/

Comparison of platelet proteomic profiles between children and adults reveals origins of functional differences

https://pubmed.ncbi.nlm.nih.gov/37872237/

Total liquid ventilation in an ovine model of extreme prematurity: a randomized study https://pubmed.ncbi.nlm.nih.gov/37833531/

Chest compressions superimposed with sustained inflations during cardiopulmonary resuscitation in asphyxiated pediatric piglets

https://pubmed.ncbi.nlm.nih.gov/36932182/

Outcomes by disease onset, sex, and intervention in neonates with SIP and surgical NEC https://pubmed.ncbi.nlm.nih.gov/37488302/

Combining lung ultrasound and oscillatory mechanics for assessing lung disease in very preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/37857847/</u>

Early, low-dose hydrocortisone and near-term brain connectivity in extremely preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/38030826/</u>

Maturation of cardioventilatory physiological trajectories in extremely preterm infants https://pubmed.ncbi.nlm.nih.gov/37857848/

Language performance and brain volumes, asymmetry, and cortical thickness in children born extremely preterm

https://pubmed.ncbi.nlm.nih.gov/37923870/

Long-term motor activity, cardiopulmonary performance and quality of life in abdominal wall defect patients

https://pubmed.ncbi.nlm.nih.gov/38052863/

Maternal singing sustains preterm hospitalized newborns' autonomic nervous system maturation: an RCT

https://pubmed.ncbi.nlm.nih.gov/38057574/

Assessment trial of the effect of enteral insulin on the preterm infant intestinal microbiota <u>https://pubmed.ncbi.nlm.nih.gov/38086952/</u>

Predicting the effectiveness of drugs used for treating cardiovascular conditions in newborn infants <u>https://pubmed.ncbi.nlm.nih.gov/38092963/</u>

Maternal periconceptional folic acid supplementation and risk for fetal congenital genitourinary system defects

https://pubmed.ncbi.nlm.nih.gov/37709853/

Maternal depression and child development at 3 years of age: a longitudinal study in a Brazilian child development promotion program

https://pubmed.ncbi.nlm.nih.gov/37952057/

Archives of Disease in Childhood - Fetal & Neonatal Edition

No new content

Journal of Perinatology

Arch watch: current approaches and opportunities for improvement <u>https://pubmed.ncbi.nlm.nih.gov/38129600</u>

Prenatally-diagnosed renal failure: an ethical framework for decision-making <u>https://pubmed.ncbi.nlm.nih.gov/37735209</u>

Organization of care of infants with congenital diaphragmatic hernia—Building a high-functioning CDH program

https://pubmed.ncbi.nlm.nih.gov/37798339

The impact of a care bundle with an emphasis on hemodynamic assessment on the short-term outcomes in neonates with congenital diaphragmatic hernia

https://pubmed.ncbi.nlm.nih.gov/37935830

Oxygen saturation index: an adjunct for oxygenation index in congenital diaphragmatic hernia <u>https://pubmed.ncbi.nlm.nih.gov/38071241</u>

Maternal and neonatal factors associated with cesarean delivery in a cohort of pregnancies complicated by prenatally diagnosed congenital heart disease

https://pubmed.ncbi.nlm.nih.gov/37580511

What drives outcomes in infants of mothers with congenital heart disease? A mediation analysis <u>https://pubmed.ncbi.nlm.nih.gov/37857810</u>

A new algorithm DEtectS critical Congenital Heart Disease at different altitudes: ANDES-CHD study <u>https://pubmed.ncbi.nlm.nih.gov/38308011</u>

Clinical and echocardiography predictors of response to first-line acetaminophen treatment in preterm infants with hemodynamically significant patent ductus arteriosus

https://pubmed.ncbi.nlm.nih.gov/38297179

Evaluation of the association between patent ductus arteriosus approach and neurodevelopment in extremely preterm infants

https://pubmed.ncbi.nlm.nih.gov/38278962

Childhood outcomes after maternal antenatal sildenafil treatment for severe early-onset fetal growth restriction: a randomized trial (STRIDER NZAus)

https://pubmed.ncbi.nlm.nih.gov/38057497

Experiences and preferences for learning about neonatal research: insights from parent interviews <u>https://pubmed.ncbi.nlm.nih.gov/38001157</u>

Parental perspectives on a trial using waived informed consent at birth

https://pubmed.ncbi.nlm.nih.gov/38129598

Parent and grandparent neonatal intensive care unit visitation for preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/37573462</u>

Recurrent neonatal acute kidney injury: incidence, predictors, and outcomes in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/37932405

Renal tissue oxygenation and development of AKI in preterm neonates born < 32 weeks' gestational age in the first week of age

https://pubmed.ncbi.nlm.nih.gov/38233582

Characteristics of very low birthweight infants who have cortisol measurements taken and associations with neonatal acute kidney injury

https://pubmed.ncbi.nlm.nih.gov/37838797

Moving the neonatal nephrology field forward: results from the Pediatric Academic Society Neonatal Nephrology Focus Group

https://pubmed.ncbi.nlm.nih.gov/37978216

Fetal ductal constriction in the third trimester of pregnancy: a prevalence study https://pubmed.ncbi.nlm.nih.gov/38042943

A quality improvement initiative to reduce the time to initial maternal visit in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/37474754

Quality improvement initiative to impact Golden Hour timeliness using a dedicated delivery team https://pubmed.ncbi.nlm.nih.gov/37474753

Establishing a neonatology consultation program: extending care beyond the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/38001156

Neonatology

Newborns and children in war and terror

https://pubmed.ncbi.nlm.nih.gov/38086337

Early feeding for the prevention of neonatal hypoglycaemia: a systematic review and meta-analysis <u>https://pubmed.ncbi.nlm.nih.gov/38194933</u>

Cardiac agents during neonatal cardiopulmonary resuscitation

https://pubmed.ncbi.nlm.nih.gov/38228124

The impact of maternal and perinatal factors on the neonatal electrocardiogram

https://pubmed.ncbi.nlm.nih.gov/38071965

Neurodevelopmental outcomes prediction in newborns with seizures caused by KCNQ2 gene defects https://pubmed.ncbi.nlm.nih.gov/38043515

Intrauterine detection of ureaplasma species after vaginal colonization in pregnancy and neonatal outcome

https://pubmed.ncbi.nlm.nih.gov/38052191

Total hydrocortisone dosage in the neonatal period may be related to low developmental quotient in extremely low birth weight infants: a retrospective cohort study

https://pubmed.ncbi.nlm.nih.gov/38043512

The utility of urinary NGAL as an alternative for serum creatinine to detect acute kidney injury in infants exposed to nephrotoxic medications in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/38151013

Relationship between brain function and microstructural brain maturation in preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/38052194</u>

Preterm formula, fortified or unfortified human milk for very preterm infants, the PREMFOOD study: a parallel randomised feasibility trial

https://pubmed.ncbi.nlm.nih.gov/38091960

Efficacy of levetiracetam as add-on therapy in the treatment of seizures in neonates

https://pubmed.ncbi.nlm.nih.gov/38113859

Association of low birth weight with the risk of childhood stunting in low- and middle-income countries: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/38198767

Intrauterine inflammation, excessive fetal growth and respiratory morbidities in moderate-to-late preterm neonates

https://pubmed.ncbi.nlm.nih.gov/38104557

Persistent hydrocephalus, shunt, and subglottic stenosis in a newborn with plasminogen deficiency due to delayed treatment with plasminogen concentrates: a case report https://pubmed.ncbi.nlm.nih.gov/38043518

American Journal of Perinatology

Long-term outcomes of multiple versus a single course of antenatal steroids: a systematic review https://pubmed.ncbi.nlm.nih.gov/36724821/

Effectiveness of 17-OHP for prevention of recurrent preterm birth: a retrospective cohort study <u>https://pubmed.ncbi.nlm.nih.gov/34972229/</u>

Role of near-infrared spectroscopy in monitoring the clinical course of asphyxiated neonates treated with hypothermia

https://pubmed.ncbi.nlm.nih.gov/34965589/

Respiratory complications in infants with retinopathy of prematurity (ROP) requiring laser photocoagulation

https://pubmed.ncbi.nlm.nih.gov/34891193/

Impact of prematurity on the buccal epithelial cells of the neonates via WNT/beta-catenin signaling pathway and apoptosis

https://pubmed.ncbi.nlm.nih.gov/34891194/

Human milk cessation in the NICU in infants with bronchopulmonary dysplasia <u>https://pubmed.ncbi.nlm.nih.gov/34753184/</u>

Factors associated with outpatient therapy utilization in extremely preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/34753183/</u>

Association of antenatal terbutaline and respiratory support requirements in preterm neonates <u>https://pubmed.ncbi.nlm.nih.gov/34768291/</u>

Brain growth evaluation assessed with transfontanellar (B-Great) ultrasound. old and new bedside markers to estimate cerebral growth in preterm infants: a pilot study

https://pubmed.ncbi.nlm.nih.gov/34814194/

Blood pressure goals: is cerebral saturation the new mean arterial pressure? https://pubmed.ncbi.nlm.nih.gov/34814195/

Positive direct antiglobulin test: is it a risk factor for significant hyperbilirubinemia in neonates with abo incompatibility?

https://pubmed.ncbi.nlm.nih.gov/34847590/

The 21st century cures act: perspectives of clinicians in a level-IV neonatal intensive care unit https://pubmed.ncbi.nlm.nih.gov/36130671/

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

No new content

Neoreviews

Ethical and legal issues surrounding genetic testing in the NICU https://pubmed.ncbi.nlm.nih.gov/38425196/

A practical guide to whole genome sequencing in the NICU https://pubmed.ncbi.nlm.nih.gov/38425198/ Parental experiences of genetic testing https://pubmed.ncbi.nlm.nih.gov/38425197/ Intracranial bleeding in a neonate https://pubmed.ncbi.nlm.nih.gov/38425201/ A neonate with recurrent extubation failure https://pubmed.ncbi.nlm.nih.gov/38425199/ Bradycardia and acidosis in a term newborn https://pubmed.ncbi.nlm.nih.gov/38425200/ Monochorionic monoamniotic twin pregnancy: shared but not equal https://pubmed.ncbi.nlm.nih.gov/38425203/ Preterm neonates with umbilical venous catheter and radiographic abnormalities overlying the liver https://pubmed.ncbi.nlm.nih.gov/38425204/ Duodenal atresia: prenatal diagnosis and postnatal management https://pubmed.ncbi.nlm.nih.gov/38425202/

JAMA Pediatrics

See COVID section

BMC Pediatrics

The effect of oropharyngeal mother's milk on nutritional outcomes in preterm infants: a randomized controlled trial

https://pubmed.ncbi.nlm.nih.gov/38439006/

Relationship between chorioamnionitis or funisitis and lung injury among preterm infants: meta-analysis involved 16 observational studies with 68,397 participants

https://pubmed.ncbi.nlm.nih.gov/38443865/

Health facility assessment of small and sick newborn care in low- and middle-income countries: systematic tool development and operationalisation with NEST360 and UNICEF

https://pubmed.ncbi.nlm.nih.gov/38454369/

Effect of early preventive supplementation with calcium and phosphorus on metabolic bone disease in premature infants

https://pubmed.ncbi.nlm.nih.gov/38459481/

The role of nutrition in analysis of risk factors and short-term outcomes for late-onset necrotizing enterocolitis among very preterm infants: a nationwide, multicenter study in China https://pubmed.ncbi.nlm.nih.gov/38459440/

Correlation analysis between the amniotic fluid contamination and clinical grading of neonatal hypoxic–ischemic encephalopathy and biomarkers of brain damage

https://pubmed.ncbi.nlm.nih.gov/38481189/

Values of serum intestinal fatty acid-binding protein, fecal calprotectin, and fecal human β -defensin 2 for predicting necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/38491401/

The footprint of SARS-COV-2 infection in neonatal late sepsis

https://pubmed.ncbi.nlm.nih.gov/38491449/

Postnatal care and acceptability of emollient therapy in very low birthweight infants in Harare,

Zimbabwe: a qualitative analysis

https://pubmed.ncbi.nlm.nih.gov/38493088/

Awareness and healthcare seeking behavior of neonatal danger signs, and predictor variables among

mothers/caregivers in four developing regional state of Ethiopia

https://pubmed.ncbi.nlm.nih.gov/38493094/

Aberrant SOX10 and RET expressions in patients with Hirschsprung disease https://pubmed.ncbi.nlm.nih.gov/38493096/

A review of the current policies and guidance regarding Apgar scoring and the detection of jaundice and cyanosis concerning Black, Asian and ethnic minority neonates

https://pubmed.ncbi.nlm.nih.gov/38515076/

Risk factors of necrotizing enterocolitis in twin preterm infants

https://pubmed.ncbi.nlm.nih.gov/38521896/

Umbilical cord blood cell characteristics in very preterm neonates for autologous cell therapy of preterm-associated complications

https://pubmed.ncbi.nlm.nih.gov/38528484/

Exploring the diagnostic value of ultrasound radiomics for neonatal respiratory distress syndrome https://pubmed.ncbi.nlm.nih.gov/38528506/

Incidence and development of validated mortality prediction model among asphyxiated neonates admitted to neonatal intensive care unit at Felege Hiwot Comprehensive Specialized Hospital, Bahir Dar, Northwest Ethiopia, 2021: retrospective follow-up study https://pubmed.ncbi.nlm.nih.gov/38539138/

Pediatric Critical Care Medicine

Neonatal chylothorax and early fluid overload after cardiac surgery: retrospective analysis of the neonatal and pediatric heart and renal outcomes network registry (2015–2018) <u>https://pubmed.ncbi.nlm.nih.gov/38088768/</u>

New England Journal of Medicine

RSV prefusion f protein–based maternal vaccine — preterm birth and other outcomes <u>https://www.ncbi.nlm.nih.gov/pubmed/38477988</u>

<u>Lancet</u>

No relevant articles

<u>JAMA</u>

Effect of early vs late inguinal hernia repair on serious adverse event rates in preterm infants: a randomized clinical trial https://www.ncbi.nlm.nih.gov/pubmed/38530261

<u>BMJ</u> No relevant article

Pediatric Infectious Disease Journal

No relevant articles

Pediatric Cardiology

Stress and coping factors affecting health-related quality of life in parents of children with congenital heart disease: an integrative review https://pubmed.ncbi.nlm.nih.gov/37466733/ Stage 1 and 2 palliation: comparing ductal stenting and aorto-pulmonary shunts in single ventricles with duct-dependent pulmonary blood flow

https://pubmed.ncbi.nlm.nih.gov/38265483/

Patterns of WISC-V performance in children with congenital heart disease

https://pubmed.ncbi.nlm.nih.gov/38214737/

Early clinical outcomes in infants with prenatally diagnosed perimembranous and muscular ventricular septal defects (VSDs)

https://pubmed.ncbi.nlm.nih.gov/38245581/

Nucleated red blood cell counts differentiate cardiac from respiratory causes of cyanosis at birth https://pubmed.ncbi.nlm.nih.gov/38308060/

Electrocardiographic characteristics in 438 neonates with atrial septal defects

https://pubmed.ncbi.nlm.nih.gov/37914855/

Prenatal diagnosis of ductus arteriosus anomalies: a single-center study

https://pubmed.ncbi.nlm.nih.gov/38099950/

Parental impressions and perspectives of efficacy in prenatal counseling for single ventricle congenital heart disease

https://pubmed.ncbi.nlm.nih.gov/38112807/

Association of early postoperative regional oxygen saturation measures and development of necrotizing enterocolitis in neonates following cardiac surgery

https://pubmed.ncbi.nlm.nih.gov/36752836/

Pediatric Neurology

Disruption of cerebellar granular layer as a consequence of germinal matrix intraventricular hemorrhage in extreme prematurity: an acute direct mechanism too?

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Resting-state functional magnetic resonance imaging network association with mortality, epilepsy, cognition, and motor two-year outcomes in suspected severe neonatal acute brain injury https://pubmed.ncbi.nlm.nih.gov/38198979/

Impact of a national follow-up program on the age at diagnosis for cerebral palsy https://pubmed.ncbi.nlm.nih.gov/38211417/

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Obstetrics and Gynecology

Late-preterm antenatal steroids for reduction of neonatal respiratory complications: a randomized controlled trial https://www.ncbi.nlm.nih.gov/pubmed/38330411

American Journal of Obstetrics & Gynecology

Prenatal vs postnatal diagnosis of 22q11.2 deletion syndrome: cardiac and noncardiac outcomes through 1 year of age https://pubmed.ncbi.nlm.nih.gov/37717890/

Hospital Pediatrics

Predicting serious bacterial infections among hypothermic infants in the emergency department https://pubmed.ncbi.nlm.nih.gov/38312010/

Performance of febrile infant decision tools on hypothermic infants evaluated for infection https://pubmed.ncbi.nlm.nih.gov/38312006/

The sensitivity and specificity of procalcitonin in diagnosing bacterial sepsis in neonates https://pubmed.ncbi.nlm.nih.gov/38415310/

BASIC SCIENCE SELECTIONS

Investigation of the miRNA-mRNA regulatory circuits and immune signatures associated with bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/38476468

In utero ventilation induces lung parenchymal and vascular alterations in extremely preterm fetal sheep

https://www.ncbi.nlm.nih.gov/pubmed/38252635

Postnatal steroids as lung protective and anti-inflammatory in preterm lambs exposed to antenatal inflammation

https://www.ncbi.nlm.nih.gov/pubmed/38066248

Glutaredoxin-1 modulates the NF-kappaB signaling pathway to activate inducible nitric oxide synthase in experimental necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/38496303

Evaluation of the protective and therapeutic effects of extra virgin olive oil rich in phenol in experimental model of neonatal necrotizing enterocolitis by clinical disease score,

inflammation, apoptosis, and oxidative stress markers

https://www.ncbi.nlm.nih.gov/pubmed/38493431

miR-375-3p targets YWHAB to attenuate intestine injury in neonatal necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/38431920

Oral administration of bone marrow-derived mesenchymal stem cells attenuates intestinal injury in necrotizing enterocolitis

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Oligodendrocyte progenitor cells' fate after neonatal asphyxia-Puzzling implications for the development of hypoxic-ischemic encephalopathy

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Role of mammalian target of rapamycin in the formation and progression of retinopathy of prematurity-like vascular abnormalities in neonatal rats https://www.ncbi.nlm.nih.gov/pubmed/37963514

ADDITIONAL JOURNAL SELECTIONS

Mitochondrial DNA mutations in extremely preterm infants with bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/38432533

Effects of bradycardia, hypoxemia and early intubation on bronchopulmonary dysplasia in very preterm infants: An observational study

https://www.ncbi.nlm.nih.gov/pubmed/38471331

Diuretics use in the management of bronchopulmonary dysplasia in preterm infants: A systematic review

https://www.ncbi.nlm.nih.gov/pubmed/38214373

Relationship between chorioamnionitis or funisitis and lung injury among preterm infants: meta-analysis involved 16 observational studies with 68,397 participants https://www.ncbi.nlm.nih.gov/pubmed/38443865

Hyponatremia as a marker for predicting surgical intervention in necrotizing enterocolitis: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/38064977

Primary anastomosis versus stoma for surgical necrotizing enterocolitis in us children's hospitals

https://www.ncbi.nlm.nih.gov/pubmed/38056356

Evaluating the safety and efficacy of erythropoietin therapy for neonatal hypoxicischemic encephalopathy: a systematic review and meta-analysis

https://www.ncbi.nlm.nih.gov/pubmed/38171084

Use of furosemide in preterm neonates with acute kidney injury is associated with increased mortality: results from the TINKER registry

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Oxygenation fluctuations associated with severe retinopathy of prematurity: insights from a multimodal deep learning approach

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Effectiveness of propranolol in preventing severe retinopathy of prematurity: a

comprehensive systematic review and meta-analysis

https://www.ncbi.nlm.nih.gov/pubmed/37979602