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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – February 2025

Neurological outcomes and associated perinatal factors in infants born between 22 and 25 weeks with active care

Yu Ariyoshi, Takayuki Iriyama, Takahiro Seyama, et al. *J Perinatol*

In this single-center retrospective study the authors sought to elucidate the outcomes of periviable infants receiving active care (AC) and explore perinatal factors associated with neurodevelopmental outcomes. Fifty-seven infants born at 22-25 weeks of gestation were included in the study. A developmental quotient (DQ) ≥ 85 at corrected 18 months was judged as normal. The survival rates at discharge were 83%, 86%, 93%, and 93% at 22, 23, 24, and 25 gestational weeks, respectively. The overall percentage of normal DQ was 26/47 (55%). Acidemia in the arterial blood gas measured within 6 h after birth was identified as a factor significantly associated with subnormal DQ. The authors conclude that high survival rates and favorable neurodevelopmental outcomes may be achieved by AC in periviable infants. Moreover, impaired neurodevelopmental outcomes may be associated with early postnatal acidemia following initial resuscitation.

Outcomes after intranasal human milk therapy in preterm infants with intraventricular hemorrhage

Alessia Gallipoli, Sharon Unger, Amr El Shahed, et al. *J Perinatol*

Intraventricular hemorrhage (IVH) is a common cause of brain injury in preterm infants. Fresh human milk (HM) contains stem cells (SCs) that could potentially be delivered via intranasal HM (IHM). In this IHM pilot study, the authors described outcomes. Infants <33 weeks gestation with IVH were given IHM until maximum 28 days of age. Short-term neurologic outcomes and follow-up testing were compared to historic HM-fed infants. Longitudinal outcomes were plotted using linear mixed models. Weighted G-computation quantified treatment effects. Propensity score models calculated inverse probability weights for IVH grade, gestational age, and sex. 37 infants (35.1% grade 3-4 IVH) were compared to 191 historic controls (17.8% grade 3-4 IVH). Post-hemorrhagic ventricular dilatation was common (25.7% IHM patients). Most weighted outcomes, although not

significant, favored IHM at 4-12 and 18 months corrected age. The authors conclude that this phase 1 study suggests powered trials of IHM for brain injury are needed.

Early-onset sepsis as an early predictor for retinopathy of prematurity: a meta-analysis
Salma El Emrani, Lotte E van der Meeren, Esther J S Jansen, et al. *Am J Perinatol*.
This meta-analysis included 17 studies that reported incidence of proven EOS (positive blood or CSF culture) in neonates with ROP. Primary outcomes assessed were any stage ROP and severe ROP (> stage 3, type I, aggressive [posterior] ROP, plus disease or requiring treatment). Proven EOS showed no significant association with any stage ROP (odds ratio [OR] = 1.90; 95% confidence interval [CI]: 0.96-3.79, p = 0.067). However, neonates with proven EOS had 2.2-fold increased risk of severe ROP (OR = 2.21; 95% CI: 1.68–2.90). Although further research is needed as to exact mechanism, this may be due to the stimulating effect of EOS on inflammatory mediators. In addition, increased cytokine levels in the first 3 days of age may be a factor for severe ROP.

Longitudinal analysis of amplitude-integrated electroencephalography for outcome prediction in infants with hypoxic-ischemic encephalopathy: a validation study
Mathies Rondagh, Linda S de Vries, Andrea van Steenis, et al. *J Pediatr*
This is a validation study using a scoring tool (HOPE calculator) based on amplitude EEG (aEEG) findings of background pattern, sleep-wake cycling, and seizure activity over the first 84 hours of life at 6-hour intervals. The tool was used to predict favorable or adverse 2-year neurodevelopmental outcome in infants with HIE undergoing therapeutic hypothermia, and to evaluate the predictive value for outcome at 5-8 years of age. The model showed an AUC of 0.90 (95% CI, 0.83-0.95) at 2 years and 0.83 (95% CI, 0.73-0.92) at 5-8 years. This tool may be useful for clinicians who utilizes aEEG in their practice to help guide discussions with parents.

Cell-based therapies in preclinical models of necrotizing enterocolitis: a systematic review and meta-analysis
Camille Maltais-Bilodeau, Ewa Henckel, Marc-Olivier Deguise, et al. *Stem Cells Transl Med*
Cell therapies, including mesenchymal stromal cells (MSCs), may be a promising treatment given their anti-inflammatory and regenerative potential. We assessed the effect of MSCs and other cell therapies (not classified as MSCs) on incidence, severity, and mortality in preclinical models of necrotizing enterocolitis (NEC). A reduction in the incidence of NEC (odds ratio [OR] 0.32, 95% CI [0.17, 0.62]), severe NEC (OR 0.30, 95% CI [0.18, 0.50]), and mortality (OR 0.30, 95% CI [0.16, 0.55]) was noted with MSCs treatment, seemingly more pronounced for ISCT-defined (ISCT+) MSCs. Amniotic fluid stem cells, neural stem cells, and placenta stem cells also showed a reduction in these measures. Given their accessibility (ie, umbilical cord) and proven safety profile in extremely preterm infants, our analysis provides a foundation for considering MSCs as promising candidate that requires further evaluation for the treatment of NEC.

The association between red blood cell transfusion timing and the development of retinopathy of prematurity: Application of the two-phase theory

Salma El Emrani, Lizanne A Derks, Angela M Tjiam, et al. *Acta Ophthalmol*

The aim of this study was to determine the association between the timing and amount of RBC transfusions and the development and severity of ROP. Primary outcomes were any stage ROP and severe ROP based on maximum staging. Phase I of ROP was defined as </=32.0 weeks postmenstrual age and phase II as >32.0 weeks postmenstrual age. Multivariate analysis showed independent associations with severe ROP for RBC transfusion (OR 5.1; 95% CI 1.8-14.3), number of RBC transfusions (OR 1.2; 95% CI 1.1-1.3), RBC transfusion in phase I (OR 2.5; 95% CI 1.2-5.3), number of RBC transfusions in
phase I (OR 1.2; 95% CI 1.0-1.3), RBC transfusion in phase II (OR 4.1; 95% CI 2.7-6.3) and number of RBC transfusions in phase II (OR 1.9; 95% CI 1.5-2.4). Based on maximum ROP staging, RBC transfusions in phases I and II are both associated with a high risk of severe ROP. A randomized controlled trial is urgently needed to determine the potential effect of RBC transfusions in phase II on ROP progression.

Preterm birth frequency and associated outcomes from the MATISSE (Maternal Immunization Study for Safety and Efficacy) maternal trial of the bivalent respiratory syncytial virus prefusion F protein vaccine

Shabir A Madhi, Beate Kampmann, Eric A F Simões, et al. *Obstet Gynecol*.

This randomized, double-blind trial included 7,386 pregnant participants who received RSVpreF (n=3,698) or placebo (n=3,688) and 7,305 infants. Most children in both groups were born full term (more than 93%) with normal birth weight (95% or higher). Infant outcomes, including rates of low birth weight and neonatal hospitalization, were favorable and comparable between groups. Preterm birth rates were 5.7% in the RSVpreF arm and 4.7% in the placebo arm (relative risk [RR] 1.20, 95% CI, 0.98-1.46); most were late preterm. Infant outcomes, including rates of low birth weight and neonatal hospitalization, were comparable between groups. Twenty-two newborn or infant deaths occurred during the study (RSVpreF n=8, placebo n=14). The authors concluded that In this study of maternal RSVpreF vaccination, there was no clinically significant increase in preterm birth, low birth weight, or neonatal hospitalization.

Efficacy, Safety, and Immunogenicity of the MATISSE (Maternal Immunization Study for Safety and Efficacy) Maternal Respiratory Syncytial Virus Prefusion F Protein Vaccine Trial

Eric A F Simões, Barbara A Pahud, Shabir A Madhi, et al. *Obstet Gynecol*.

https://pubmed.ncbi.nlm.nih.gov/39746212

This randomized, double-blinded, placebo-controlled trial included healthy pregnant participants aged 49 years or younger at 24-36 weeks of gestation who were randomized (1:1) to receive a single RSVpreF 120 micrograms or placebo dose (n=7420). Vaccine efficacy, as defined as protection against newborn and infant severe RSV-associated medically attended lower respiratory tract illness, was 82.4% (95% CI, 57.5-93.9) and 70.0% (95% CI, 50.6-82.5) within 90 and 180 days of birth, respectively. RSVpreF also resulted in highly efficient transfer of maternal antibodies to their

newborns across subgroups (by gestational age at delivery and at vaccination, number of days from vaccination to delivery, country, maternal age). The authors concluded RSVpreF induces robust immune responses in pregnant individuals, with corresponding high RSV-neutralizing titers in their newborns.

OTHER NOTEWORTHY PUBLICATIONS – February 2025

Pediatrics

Parental and medical classification of neurodevelopment in children born preterm
https://pubmed.ncbi.nlm.nih.gov/39786567/
Late-onset sepsis among extremely preterm infants during the COVID-19 pandemic
https://pubmed.ncbi.nlm.nih.gov/39842471/
Early and long-term adverse outcomes of in utero Zika exposure
https://pubmed.ncbi.nlm.nih.gov/39814049/
Categorizing hospitals by neonatal and pediatric diagnoses treated
https://pubmed.ncbi.nlm.nih.gov/39778595/
Predictors and outcomes of extubation failure in preterm neonates: a systematic review
https://pubmed.ncbi.nlm.nih.gov/39814054/
Advances in the treatment of neonatal coarctation of the aorta
https://pubmed.ncbi.nlm.nih.gov/39761814/
Opportunities to address safe infant sleep and breastfeeding
https://pubmed.ncbi.nlm.nih.gov/39799960/

Journal of Pediatrics

Neonatal morbidities, neurodevelopmental impairments, and positive health among children surviving birth before 32 weeks of gestation
https://pubmed.ncbi.nlm.nih.gov/39481800/
Social determinants of health and timing of tracheostomy for severe bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/39454720/
Randomized comparison trial of rehabilitation very early for infants with congenital hemiplegia
https://pubmed.ncbi.nlm.nih.gov/39477009/
Longitudinal analysis of amplitude-integrated electroencephalography for outcome prediction in infants with hypoxic-ischemic encephalopathy: a validation study
https://pubmed.ncbi.nlm.nih.gov/39551094/
Assessing early severity of hypoxic-ischemic encephalopathy: the role of electroencephalogram background in addition to Sarnat exam
https://pubmed.ncbi.nlm.nih.gov/39557386/
Trajectory of postnatal oxygen requirement in extremely preterm infants

Pediatric Research

No new articles

Archives of Disease in Childhood - Fetal & Neonatal Edition

Intrapartum antibiotic prophylaxis for group B Streptococcus: what exactly is adequate?
https://pubmed.ncbi.nlm.nih.gov/39663145/

Use of CFTR modulators in pregnancy: new information for neonatal, paediatrics and midwifery teams
https://pubmed.ncbi.nlm.nih.gov/39288989/

Most major bleeds in preterm infants occur in the absence of severe thrombocytopenia: an observational cohort study
https://pubmed.ncbi.nlm.nih.gov/39009429/

Timing and dosage of intrapartum prophylactic penicillin for preventing early-onset group B streptococcal disease: assessing maternal and umbilical cord blood concentration
https://pubmed.ncbi.nlm.nih.gov/38729749/

Cost of operating a human milk bank in the UK: a microcosting analysis
https://pubmed.ncbi.nlm.nih.gov/39326931/

Implications of right aortic arch prenatal diagnosis: the multicentric nationwide ARCADE cohort
https://pubmed.ncbi.nlm.nih.gov/38964845/

Growth and respiratory status at 3 years of age after moderate preterm, late preterm and early term births: the Japan Environment and Children's Study
https://pubmed.ncbi.nlm.nih.gov/38981646/

Antibiotic use among extremely low birth-weight infants from 2009 to 2021: a retrospective observational study
https://pubmed.ncbi.nlm.nih.gov/39033026/

Early hypophosphataemia and refeeding syndrome in extremely low birthweight babies and outcomes to 2 years of age: secondary cohort analysis from the ProVIDe trial
https://pubmed.ncbi.nlm.nih.gov/39122562/

Voices of experience: insights from Dutch parents on periviability guidelines and personalization
https://pubmed.ncbi.nlm.nih.gov/39153841/

Voices of experience: what Dutch parents teach us about values and intuition in periviable decisions
https://pubmed.ncbi.nlm.nih.gov/39153843/

Effects of a live versus heat-inactivated probiotic Bifidobacterium spp in preterm infants: a randomised clinical trial
https://pubmed.ncbi.nlm.nih.gov/39153842/

Predicting extubation failure in preterm infants using lung ultrasound: a diagnostic accuracy study
https://pubmed.ncbi.nlm.nih.gov/39160076/

Evaluating decision regret after extremely preterm birth
https://pubmed.ncbi.nlm.nih.gov/39164062/

Impact of targeted neonatal echocardiography consultations for critically sick preterm neonates
https://pubmed.ncbi.nlm.nih.gov/39227145/

Evaluating the efficacy of endotracheal and intranasal epinephrine administration in severely asphyxic bradycardic newborn lambs: a randomised preclinical study

https://pubmed.ncbi.nlm.nih.gov/39237256/
Effect of interface dead space on the time taken to achieve changes in set FiO2 during T-piece ventilation: is face mask the optimal interface for neonatal stabilisation?
https://pubmed.ncbi.nlm.nih.gov/39242185/
Epidemiology, microbiology and antibiotic treatment of bacterial and fungal meningitis among very preterm infants in China: a cross-sectional study
https://pubmed.ncbi.nlm.nih.gov/39299764/
Giant congenital melanocytic naevus in a neonate
https://pubmed.ncbi.nlm.nih.gov/39029945/

Journal of Perinatology

Administration time of caffeine in preterm infants: systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/38956314/
Subgaleal hemorrhage in neonates: a comprehensive review and summary recommendations
https://pubmed.ncbi.nlm.nih.gov/39284927/
Long-term neurodevelopmental outcomes at three years in preterm infants born before 29 Weeks gestation following Preterm Premature Rupture of Membranes (PPROM)
https://pubmed.ncbi.nlm.nih.gov/39349683/
Cerebral magnetic resonance spectroscopy – insights into preterm brain injury
https://pubmed.ncbi.nlm.nih.gov/39609610/
The impact of a multidisciplinary intervention to reduce severe retinopathy of prematurity in Kampala, Uganda
https://pubmed.ncbi.nlm.nih.gov/39080403/
Sclerothrapy of giant lymphatic malformation in neonates
https://pubmed.ncbi.nlm.nih.gov/39313546/
The number of blood transfusions received and the incidence and severity of chronic lung disease among NICU patients born >31 weeks gestation
https://pubmed.ncbi.nlm.nih.gov/39402132/
Bemiparin in neonatal thrombosis: therapeutic dosing and safety
https://pubmed.ncbi.nlm.nih.gov/39681735/
A prospective evaluation of tibial insertion sites for intraosseous needles to gain vascular access in Asian neonates
https://pubmed.ncbi.nlm.nih.gov/38844519/
Real-time ultrasound to assess the umbilical catheter position in neonates: a randomized, controlled trial
https://pubmed.ncbi.nlm.nih.gov/39379732/
Glottic opening detection using deep learning for neonatal intubation with video laryngoscopy
https://pubmed.ncbi.nlm.nih.gov/39537817/
Impact of virtual simulation vs. Video refresher training on NRP simulation performance: a randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/39198556/

Post-procedure pain in preterm neonates undergoing retinopathy of prematurity (ROP) screening: a prospective cohort study
https://pubmed.ncbi.nlm.nih.gov/39572692/
Neonatal autonomic regulation as a predictor of autism symptoms in very preterm infants
https://pubmed.ncbi.nlm.nih.gov/38553604/
Practice variation in therapeutic hypothermia for hypoxic ischemic encephalopathy among neonates with congenital heart disease in the United States
https://pubmed.ncbi.nlm.nih.gov/39578511/
Duration of hemolysis among infants with hemolytic disease of the fetus and newborn
https://pubmed.ncbi.nlm.nih.gov/39543241/
A high-tech wreck: HIPAA roadblocks to texting patients
https://pubmed.ncbi.nlm.nih.gov/39354212/
Increasing in-person medical interpreter utilization in the NICU through a bundle of interventions
https://pubmed.ncbi.nlm.nih.gov/38424233/
When HIPAA hurts: legal barriers to texting may reinforce healthcare disparities and disenfranchise vulnerable patients
https://pubmed.ncbi.nlm.nih.gov/39147791/
Aflibercept to treat retinopathy of prematurity: need for more research
https://pubmed.ncbi.nlm.nih.gov/38730278/
Alloimmunization to low and high prevalence blood group antigens: rare causes of hemolytic disease of the fetus and newborn
https://pubmed.ncbi.nlm.nih.gov/39645551/

Neonatology
Oxygenation of immature infants in the delivery room and beyond: a quest for future research
https://pubmed.ncbi.nlm.nih.gov/39701051/
Influence of early total enteral feeding in preterm infants with respiratory distress syndrome
https://pubmed.ncbi.nlm.nih.gov/39019022/
“Flux in the belly:” a history of infantile gastroenteritis
https://pubmed.ncbi.nlm.nih.gov/39321761/
Impact of early- and high-dose caffeine on the cerebellum development in newborn rats
https://pubmed.ncbi.nlm.nih.gov/39053436/
Diagnostic utility of preserved dried umbilical cord polymerase chain reaction in intrauterine herpes simplex virus infection: a case report and literature review
https://pubmed.ncbi.nlm.nih.gov/39137732/
Real-time ultrasound tip location reduces malposition and radiation exposure during umbilical venous catheter placement in neonates: a retrospective, observational study
https://pubmed.ncbi.nlm.nih.gov/38934171/
Effect of cerebral oximetry-guided treatment on brain injury in preterm infants as assessed by magnetic resonance imaging at term equivalent age: an ancillary Safeboosc-III study
https://pubmed.ncbi.nlm.nih.gov/38934161/

Less invasive surfactant administration in preterm infants in tertiary neonatal intensive care units in Germany: a survey
https://pubmed.ncbi.nlm.nih.gov/39019018/
Neonatal sequential organ failure assessment score predicts respiratory outcomes in preterm newborns with late-onset sepsis: a retrospective study
https://pubmed.ncbi.nlm.nih.gov/39500295/
Cord obstruction and delayed cord clamping do not affect gut function in neonatal piglets
https://pubmed.ncbi.nlm.nih.gov/38952138/
Magnetic resonance imaging assessment of pulmonary vascularity in preterm infants with bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/39074457/
The role of infant gut microbiota modulation by perinatal maternal probiotic intervention in atopic eczema risk reduction
https://pubmed.ncbi.nlm.nih.gov/39074448/
Association between congenital anomalies and late-onset bacterial infections in neonates admitted to neonatal intensive care units in Australia and New Zealand: a population-based cohort study
https://pubmed.ncbi.nlm.nih.gov/39299217/
Intermediate vs. high oxygen saturation targets in preterm infants: a national cohort study
https://pubmed.ncbi.nlm.nih.gov/39102804/
Neonatal adverse outcomes among hospital livebirths in Canada: a national retrospective study
https://pubmed.ncbi.nlm.nih.gov/39173602/
Neonatal linear immunoglobulin a bullous dermatosis: a critical case recovering after prompt recognition, intensive management, and breastfeeding interruption – a case report
https://pubmed.ncbi.nlm.nih.gov/39278203/

American Journal of Perinatology

The association between the social vulnerability index and adverse neonatal outcomes
https://pubmed.ncbi.nlm.nih.gov/39477223/
Pregnancy-related and neonatal outcomes during omicron variant-dominant COVID-19 pandemic among the black-dominant population
https://pubmed.ncbi.nlm.nih.gov/38889887/
Mental health support and screening for mood disorders for caregivers in the neonatal intensive care unit: is the call to arms being answered?
https://pubmed.ncbi.nlm.nih.gov/38925161/
Affordable implementation of a point-of-care ultrasound program in a large tertiary neonatal intensive care unit to assess umbilical venous catheter tips and aid central placement
https://pubmed.ncbi.nlm.nih.gov/38955218/
Are neonatal birth weights reduced in low-risk patients diagnosed with covid-19 during pregnancy?
https://pubmed.ncbi.nlm.nih.gov/38955216/

Sex-related differences in the severity of neonatal opioid withdrawal syndrome: a single-center, retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/39074806/
Utilizing fetal echocardiography to risk stratify and predict neonatal outcomes in fetuses diagnosed with congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/39074808/
Renal regional oxygen saturation and acute kidney injury in neonates with perinatal asphyxia
https://pubmed.ncbi.nlm.nih.gov/39029915/
Early-onset sepsis as an early predictor for retinopathy of prematurity: a meta-analysis
https://pubmed.ncbi.nlm.nih.gov/39029916/
Comparison of clinical endotracheal tube depths with standard estimates for the stabilization of infants with congenital diaphragmatic hernia
https://pubmed.ncbi.nlm.nih.gov/39038792/
Safety of skin-to-skin contact with umbilical venous catheter in preterm infants: a prospective study
http://pubmed.ncbi.nlm.nih.gov/39111740/

Journal of Neonatal-Perinatal Medicine

No new articles

Maternal Health, Neonatology and Perinatology

Safety of antenatal breastmilk expression from week 34 of pregnancy: a randomized controlled pilot study (The Express-MOM study)
https://pubmed.ncbi.nlm.nih.gov/39748396/
Charting a new course: advancing maternal and neonatal health through collaborative innovation
https://pubmed.ncbi.nlm.nih.gov/39894801/

Neoreviews

Decoding hearts: genetic insights and clinical strategies in congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/39889766/
Effects of assisted reproductive technology on genetics, obstetrics, and neonatal outcomes
https://pubmed.ncbi.nlm.nih.gov/39889767/
Applications of metabolomics and lipidomics in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/39889768/
Multicystic lobar lung lesion in a preterm neonate
https://pubmed.ncbi.nlm.nih.gov/39889772/
Term infant with apnea and seizure-like activity
https://pubmed.ncbi.nlm.nih.gov/39889770/
Managing fetal anemia: a case of parvovirus infection in pregnancy
https://pubmed.ncbi.nlm.nih.gov/39889769/
A late preterm neonate with a small chest

https://pubmed.ncbi.nlm.nih.gov/39889773/
Preterm infants with bronchopulmonary dysplasia and pulmonary hypertension
https://pubmed.ncbi.nlm.nih.gov/32521539/

JAMA Pediatrics

Occurrence and time of onset of intraventricular hemorrhage in preterm neonates a systematic review and meta-analysis of individual patient data
https://pubmed.ncbi.nlm.nih.gov/39786414/
Adverse obstetric outcomes in pregnancies with major fetal congenital heart defects
https://pubmed.ncbi.nlm.nih.gov/39680388/
Gestational exposure to nonsteroidal anti-inflammatory drugs and risk of chronic kidney disease in childhood https://pubmed.ncbi.nlm.nih.gov/39714827

BMC Pediatrics

Trends of neonatal sepsis and its etiology at Hawassa, Ethiopia: a five year retrospective cross-sectional study
https://pubmed.ncbi.nlm.nih.gov/40022032
Prevalence of perinatal asphyxia and its associated factors among live birth in Khartoum, Sudan: a hospital-based cross-sectional study
https://pubmed.ncbi.nlm.nih.gov/40016687
The effect of breast milk odor on infant pain and stress levels: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/40016687
Comparing the effect of Beractant (Beraksurf™) with that of Poractant Alfa (Curosurf®) on the need for intermittent positive pressure ventilation in neonatal respiratory distress syndrome by adopting a semi-parametric approach: re-analyzing data of a randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/40016687
Incidence and predictors of mortality among neonates admitted with birth asphyxia to neonatal intensive care units in Ethiopia: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/40001015
Intraventricular hemorrhage among very low birth weight infants in a South African cohort: a retrospective study of trends & short-term outcomes
https://pubmed.ncbi.nlm.nih.gov/40000982
Continuous non-contact monitoring of neonatal activity
https://pubmed.ncbi.nlm.nih.gov/39994574
Postnatal surgical complications in lower urinary tract obstruction following fetal vesico- amniotic shunting
https://pubmed.ncbi.nlm.nih.gov/39994551
Identification of bacterial pathogens and antimicrobial susceptibility of early-onset sepsis (EOS) among neonates in Palestinian hospitals: a retrospective observational study
https://pubmed.ncbi.nlm.nih.gov/39955515

A randomized controlled study protocol of the TOBBI trial: the effect of a 6 weeks intervention with synbiotics on the recovery speed of the gut microbiota after antibiotic treatment in Dutch toddlers
https://pubmed.ncbi.nlm.nih.gov/39955511
Prevalence of β-lactam antibiotic resistance of Escherichia coli isolated from a neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/39905357

Pediatric Critical Care Medicine
No relevant articles

New England Journal of Medicine
Maternal anti-PF4 antibodies as cause of neonatal stroke
https://pubmed.ncbi.nlm.nih.gov/39938100

Lancet
No relevant articles

JAMA
Tenofovir and hepatitis B virus transmission during pregnancy: a randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/39540799
Oral glucose-lowering agents vs insulin for gestational diabetes: a randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/39761054

BMJ
FUTURE-AI: international consensus guideline for trustworthy and deployable artificial intelligence in healthcare
https://pubmed.ncbi.nlm.nih.gov/39909534

Pediatric Infectious Disease Journal
Factors associated with hospitalization, length of stay, and hospital expenditures for respiratory syncytial virus infection in Japanese infants and children according to palivizumab-indicated underlying conditions: the LIFE study
https://pubmed.ncbi.nlm.nih.gov/39259860
Continuous versus intermittent vancomycin infusions for coagulase-negative staphylococcus bacteremia in neonates: a propensity-matched cohort study
https://pubmed.ncbi.nlm.nih.gov/39259856
Neurodevelopmental outcomes in children vertically exposed to Chikungunya virus: a two years follow-up study
https://pubmed.ncbi.nlm.nih.gov/39264193

Pediatric Cardiology

Left ventricular dysfunction following repair of ventricular septal defects in infants
https://pubmed.ncbi.nlm.nih.gov/38236399/
Feeding practices in infants with hematochezia and necrotizing enterocolitis on acute care cardiology units
https://pubmed.ncbi.nlm.nih.gov/38355928/
Preoperative feeding fortification among infants with congenital heart disease is associated with higher growth velocity in the first 30 days post-repair and lower BMI percentile for age at 10 years: a retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/38451285/
Predictive scoring system for spontaneous closure of infant ventricular septal defect: the P-VSD score
https://pubmed.ncbi.nlm.nih.gov/38438790/
Impact of the fetal echocardiogram on maternal depression and well-being
https://pubmed.ncbi.nlm.nih.gov/38424310/
Incidence of fetal arrhythmia before and during the covid-19 pandemic: a single-center experience
https://pubmed.ncbi.nlm.nih.gov/38413418/

Pediatric Neurology
Utility of cranial ultrasound to investigate brain injury in hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/39642683/
Newborn screening for hurler syndrome facilitates early transplant and good outcomes
https://pubmed.ncbi.nlm.nih.gov/39642684/
Neonatal seizures and associated neurobehavioral profiles in preschool age children
https://pubmed.ncbi.nlm.nih.gov/39708432/

Obstetrics and Gynecology
Preterm birth frequency and associated outcomes from the MATISSE (Maternal Immunization Study for Safety and Efficacy) maternal trial of the bivalent respiratory syncytial virus prefusion F protein vaccine
https://pubmed.ncbi.nlm.nih.gov/39746206
Efficacy, safety, and immunogenicity of the MATISSE (Maternal Immunization Study for Safety and Efficacy) maternal respiratory syncytial virus prefusion F protein vaccine trial
https://pubmed.ncbi.nlm.nih.gov/39746212
Clinical validation of a prenatal cell-free DNA screening test for fetal RHD in a large U.S. cohort
https://pubmed.ncbi.nlm.nih.gov/39591628
Area poverty and adverse birth outcomes: an opportunity for quality improvement
https://pubmed.ncbi.nlm.nih.gov/39666974

American Journal of Obstetrics & Gynecology
Expectant management of preeclampsia with severe features diagnosed at less than 24 weeks
https://pubmed.ncbi.nlm.nih.gov/38697342

Hospital Pediatrics

Successful implementation of nirsevimab and factors influencing uptake in neonatal care
https://pubmed.ncbi.nlm.nih.gov/39568114
Improving newborn professional billing at a community hospital
https://pubmed.ncbi.nlm.nih.gov/39814055
Characterizing vitamin k refusal in term hospital-born infants in Minnesota, 2015-2019
https://pubmed.ncbi.nlm.nih.gov/39813165
Improving quality of care for neonatal hyperbilirubinemia admissions after birth hospitalization
https://pubmed.ncbi.nlm.nih.gov/3987010

Basic Science Selections

Novel therapeutic targets uncovered by genome-wide integrative analysis in bronchopulmonary dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/39988826
Cell-based therapies in preclinical models of necrotizing enterocolitis: a systematic review and meta-analysis
https://www.ncbi.nlm.nih.gov/pubmed/40036304
Bile acid receptor FXR promotes intestinal epithelial ferroptosis and subsequent ILC3 dysfunction in neonatal necrotizing enterocolitis
https://www.ncbi.nlm.nih.gov/pubmed/40023163
Thrombin-preconditioned mesenchymal stromal cell-derived extracellular vesicles attenuate experimental necrotizing enterocolitis
https://www.ncbi.nlm.nih.gov/pubmed/40022236
Glycyrrhizin alleviates brain injury in necrotizing enterocolitis model mice by suppressing HMGB1/TLR4 pathway
https://www.ncbi.nlm.nih.gov/pubmed/39970710
DS0384 Alleviates Necrotizing Enterocolitis: Secretes N-carbamyl glutamic Acid and Participates in Lipid Metabolism and Lipid Peroxidation Processes
https://www.ncbi.nlm.nih.gov/pubmed/39947675
N-Acetylcysteine alleviates necrotizing enterocolitis by depressing SESN2 Expression to inhibit ferroptosis in intestinal epithelial cells
https://www.ncbi.nlm.nih.gov/pubmed/39037665
Bone marrow mesenchymal stem cells alleviate neurological dysfunction by reducing autophagy damage via downregulation of SYNPO2 in neonatal hypoxic-ischemic encephalopathy rats
https://www.ncbi.nlm.nih.gov/pubmed/40000609
Treatment with BKI-1748 after Toxoplasma gondii systemic dissemination in experimentally infected pregnant sheep improves fetal and lamb mortality and morbidity and prevents congenital infection
https://www.ncbi.nlm.nih.gov/pubmed/39745365

Other noteworthy articles

Characterization of gut microbiota in very low birth weight infants with versus without bronchopulmonary dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/40017273

Impact of placental pathology on the risk of bronchopulmonary dysplasia in preterm infants: The role of gestational age and sex
https://www.ncbi.nlm.nih.gov/pubmed/40009187

Greater and earlier exposure of mother's own milk compared to donor human milk moderates' risk and severity of bronchopulmonary dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/39605248

Impact of dexmedetomidine during hypothermia on initiation of enteral feeding in newborns with hypoxic-ischemic encephalopathy
https://www.ncbi.nlm.nih.gov/pubmed/39973519

The association between red blood cell transfusion timing and the development of retinopathy of prematurity: Application of the two-phase theory https://www.ncbi.nlm.nih.gov/pubmed/40008492

Efficacy and safety of mydriatic microdrops for retinopathy of prematurity screening: the mymirops randomized clinical trial
https://www.ncbi.nlm.nih.gov/pubmed/39724200